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Senate Hearings

Department of the Interior and Related Agencies Appropriations

H.R. 9029

90th CONGRESS, FIRST SESSION

Fiscal Year 1968

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Part 2—Pages 1333 through 2695

Thursday, March 9, 1967, through Tuesday, March 21, 1967

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

NINETIETH CONGRESS

FIRST SESSION

ON

H.R. 9029

MAKING APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES FOR THE FISCAL YEAR ENDING JUNE 30, 1968, AND FOR OTHER PURPOSES

PART 2

(PAGES 1333 THROUGH 2695)

(THURSDAY, MARCH 9, 1967, THROUGH TUESDAY, MARCH 21, 1967)

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SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

THURSDAY, MARCH 9, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:30 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden, and Senators Bible, Mundt, and Young.

HISTORICAL AND MEMORIAL COMMISSIONS

LEWIS AND CLARK TRAIL COMMISSION

SALARIES AND EXPENSES

STATEMENT OF EDWARD C. CRAFTS, EXECUTIVE OFFICER

JUSTIFICATION

Chairman HAYDEN. The subcommittee will be in order.

There will be placed in the record a justification statement for an appropriation of $35,000 for the Lewis and Clark Trail Commission in fiscal year 1968. This is $10,000 more than has been made available in either of the 2 previous years during which this Commission has existed.

(The information follows:)

Appropriation, 1965	0
Appropriation, 1966	$25, 000
Appropriation, 1967	25, 000
Budget estimate, 1968	35, 000

JUSTIFICATION

The estimate of $35,000 for 1968 covers the third full fiscal year of operations of the Commission which was established by Public Law 88–630, approved October 6, 1964. Subsequently in June of 1966, Public Law 89–475 was enacted which added the State of Illinois to the membership and also increased the appropriation authority for the operation of the Commission to a total of $35,000 annually.

The Commission was established for a five-year period to advise on and coordinate activities of Federal, State, and other public and private agencies and individuals interested in preserving and marking the route followed by the Lewis and Clark Expedition of 1804–06 from Saint Louis, Missouri, to the Pacific coast, to encourage conservation of the resources of this region, and to encourage public use of the recreation benefits therefrom. The Commission is also authorized to encourage the development of a suitable network of roads following the general route of the Lewis and Clark Trail with appropriate markers for such roads. This law supplements a resolution approved in 1963 expressing the sense of the Congress that the route traversed by these two explorers should be marked and kept available for the inspiration and enjoyment of the American people.

The Commission is composed of members on behalf of the 11 States involved; four members each from the House of Representatives and the Senate; four members to be appointed by the J. N. "Ding" Darling Foundation; and the Secretaries of the Interior; Agriculture; Defense; Health, Education and Welfare; and Commerce, or their designated representatives. The Director, Bureau of Outdoor Recreation was designated to serve on the Commission as the representative of the Secretary of the Interior.

The members of the Commission serve without compensation; however, upon approval of the Chairman they are entitled to reimbursement for travel, subsistence, and other necessary expenses incurred in the performance of their duties as members of the Commission.

During fiscal year 1967 the Lewis and Clark Trail Commission issued its interim report to the President and the Congress on its many activities. The report proposed additional actions to be taken by public and private agencies to protect the scenic resources along the Trail and enhance the available recreation facilities. The Commission will continue to work with the State Lewis and Clark Trail Committees and Federal and State agencies to further development of the Trail following the accepted Lewis and Clark Trail program.

The Commission has held two meetings in fiscal year 1967 and will hold a third in April of 1967 to discuss the implementation of the Commission's future program as outlined in the Commission's interim report to the President and the Congress.

The estimate for 1968 provides for staff assistance to the Commission and for allowable reimbursable expenses of the members in the continuation of their work in furthering the objectives and purposes of the Commission.

ITEMIZATION OF ESTIMATE

Lewis and Clark Trail Commission

	1966 actual	1967 estimate	1968 estimate
Obligations by objects:			
11.1 Personnel compensation	$8,007	$8,225	$8,488
12.0 Personnel benefits	590	610	640
21.0 Travel and transportation of persons	7,739	13,965	14,572
23.0 Rent, communications, and utilities	324	1,000	
24.0 Printing and reproduction	1,140	1,000	8,000
25.1 Other services	2,746		
25.2 Services of other agencies	3,680		3,000
26.0 Supplies and materials	41	200	300
31.0 Equipment	468		
Total obligations	24,735	25,000	35,000

PREPARED STATEMENT

Chairman HAYDEN. Mr. Crafts, would you please present your statement indicating the activities of the Commission during the past fiscal year and its plans for the coming year?

(The statement follows:)

The $35,000 for fiscal year 1968 will provide for the third full year of operations for this Commission, which was established by Public Law 88–630 for a five-year period. In June 1966, Public Law 89–475 was enacted to add the State of Illinois to the membership of the Commission and this also increased the appropriation authority from $25,000 to $35,000 annually.

The increase of $10,000 requested will provide $7,000 for printing and reproduction costs of which $5,000 will be used to finance the reprinting of the study report "The Lewis and Clark Trail—A Proposal for Development." Three thousand dollars of the increase will be used for preliminary work toward the making of a movie to be produced by Metro-Goldwyn-Mayer Studios.

The purpose of the Commission is to advise and coordinate activities of Federal agencies, States, and others interested in preserving, marking, and making available for public enjoyment as much as possible of the route followed by Lewis and Clark in 1804–06.

Five meetings have been held by the Commission since it was authorized. At the second meeting, in September of 1965, the Bureau of Outdoor Recreation presented to the Commission a report entitled "The Lewis and Clark Trail—A Proposal for Development." The Commission took action to implement the program proposed in the report.

In February 1966, the Commission considered reports from each State along the Trail and from certain Federal agencies concerning activities planned or accomplishments in implementing trail recommendations. The Commission also approved the official Lewis and Clark Trail symbol which will mark the designated highways along the route.

In July 1966, the Commission concurred in action taken by the 11 States to designate the highway routes within their borders generally following the route of the two explorers.

The fifth meeting was held in October 1966, at which time the Commission encouraged the States to assist in the preparation of a travel folder showing the location of the Lewis and Clark Trail and highways to promote the Commission's program. The Commission also adopted resolutions urging the States to make use of the Federal-Aid Highway program and the Highway Beautification Act to enhance development of the Lewis and Clark Trail highways.

Another meeting is scheduled for April 29–May 2, 1967, to discuss the implementation of the Commission's future program as outlined in the Commission's interim report to the President and the Congress which was released in December 1966.

1967 COMMISSION MEETINGS AND REPORT TO THE PRESIDENT

Mr. CRAFTS. Thank you. I will be happy to, Senator Hayden. The Lewis and Clark Trail Commission in the third year of its existence held three meetings, one in Portland, Oreg., one in Billings, Mont., and one in Leavenworth, Kans.

In accordance with the law establishing the Commission it was required to report to the President and to the Congress in October of last year. I have here a copy of the Commission's report which I would like to make available to the committee.

COMMISSION MEMBERSHIP AND SYMBOL MARKING TRAIL

The membership of the Commission is made up of representatives of both House and Senate and the Governors or their representatives of the 11 States involved and several of the executive agencies. The four Senators who are members are Senator Burdick, Senator Church, Senator Jordan and Senator Hansen. The basic accomplishment of the Commission was the inauguration of a symbol marking the Lewis and Clark Trail. It was successful in getting each State to establish its own Lewis and Clark committees. It adopted most of the recommendations that were in this report on the Lewis and Clark Trail that was prepared partly for the Commission.

It also stimulated considerable activity by the counties, the cities as well as the States and the Federal agencies. As a matter of fact, partly as a result of the Commission's activities, there was something in the neighborhood of nearly $5 million of the Federal, local and State money spent in the development of recreation facilities along the trail during the past year.

That summarizes what the Commission accomplished during the past year.

I would like to submit this report, entitled "The Lewis and Clark Trail—A Proposal for Development" not for inclusion in the record but for the committee's files. I will be glad to also make this report available to you, Senator Young.

Senator YOUNG. Who are the minority party representatives from the Senate?

Mr. Crafts. Senator Jordan and Senator Hansen.

This completes my statement on the Lewis and Clark Trail Commission, Senator Hayden, unless you have some questions.

REPRODUCTION OF REPORT AND MOTION PICTURE PREPARATION

Chairman Hayden. Why is an additional $10,000 needed?

Mr. Crafts. The $10,000 is requested basically for two reasons. This report entitled "The Lewis and Clark Trail—A Proposal for Development," of which there were 750 copies originally prepared has proven quite popular. The Commission would like to republish this report and update it. Of that $10,000, $7,000 is planned for this purpose. The $3,000 of the $10,000 is planned to initiate cooperation with "MGM" in the preparation of a motion picture commemorating the Lewis and Clark Trail and Expedition.

Chairman Hayden. You stated that you will spend $7,000 to update and reproduce the report. Of what will the updating consist?

Mr. Crafts. This will cover the printing of about 5,000 copies of this report, changed a little bit in format. It will be put in the form of a road atlas type of publication. In this report there are maps of the individual sections of the trail.

The Commission would like to put this out in a more utilitarian form and to make it more generally available.

SERVICES OF OTHER AGENCIES

Chairman Hayden. You are also intend to spend $3,000 for services of other agencies.

Which agencies are these and what are the services?

Mr. Crafts. The services are those that I referred to which would be to assemble from the States and the Federal agencies and any other sources, public or private, existing filmstrips or portions of film that are applicable to the Lewis and Clark trail, edit this material, cooperate with "M.G.M." in some script preparation, and give, in effect, technical service and cooperation with them in the development of a motion picture which would memorialize and commemorate the trail. This is what the Commission would like to do.

Senator Young. May I ask a question? What real advantage would there be in spending this $3,000 for a film? Isn't that beyond the objective of the Commission as laid out in the law?

Mr. Crafts. I don't think, Senator Young, that it is beyond the objective. This question of a motion picture was discussed by the Commission at at least two of its meetings. I think the record will show that the members of the Commission unanimously supported this idea.

The law which I have here in front of me is very broad.

It says—

> In order to supplement awareness of the Lewis and Clark expedition and appreciation of the great resources of the region—

and so on, to encourage desirable long-term conservation objectives, the Commission is authorized to review proposals prepared at the request of the Commission or other agencies to carry out the purposes of the act and make recommendations to agencies, other public and private agencies, and so forth and so on.

COMMEMORATING AND MEMORIALIZING THE TRAIL

Its basic purpose is to commemorate and memorialize the trail and promote local interest in the trail and in the expedition. I think the Commission felt that with the expenditure of a few thousand dollars it could induce "MGM" to do a really professional job on this, that this would receive very favorable response along the trail by the States and cities, and that this would be an informational device that would further the objectives of the act.

PAMPHLET PUBLICATION

Senator YOUNG. How many pamphlets do you expect for this $7,000 additional?

Mr. CRAFTS. We expect to get about 5,000. In addition it is our hope—and we would plan to so recommend—that this be made available for sale by the Government Printing Office.

Senator YOUNG. Do you have an added expense? They cost over a dollar apiece.

Mr. CRAFTS. Yes, this is quite expensive. There is no question about it. These maps in here are quite expensive.

Senator YOUNG. Mr. Chairman, I can't see the justification for spending that much money for a pamphlet. That is all.

THURSDAY, MARCH 9, 1967.

DEPARTMENT OF THE INTERIOR

BUREAU OF OUTDOOR RECREATION

STATEMENT OF EDWARD C. CRAFTS, DIRECTOR, ACCOMPANIED BY LAWRENCE N. STEVENS, ASSOCIATE DIRECTOR; WILLIAM C. DENT, ASSISTANT DIRECTOR; DANIEL M. OGDEN, JR., ASSISTANT DIRECTOR; HARRY W. RICE, ASSISTANT DIRECTOR; JOHN F. SHANKLIN, ASSISTANT DIRECTOR; A. HEATON UNDERHILL, ASSISTANT DIRECTOR; H. ROY ROUTT JR., BUDGET OFFICER; HARTHON L. BILL, ASSISTANT DIRECTOR; PHILIP O. STEWART, CHIEF OF LANDS; RITO NEGRON-RODRIGUEZ, CHIEF, BRANCH OF COORDINATION CONTROL; CHARLES E. WATSON, BUDGET OFFICER; M. M. NELSON, DEPUTY CHIEF; R. F. DROEGE, ASSOCIATE DEPUTY CHIEF; RUSSELL P. McROREY, DIRECTOR, DIVISION OF LAND ADJUSTMENT; RICHARD L. HARRIS, CHIEF, BRANCH OF ACQUISITION AND EXCHANGE; JOHN S. GOTTSCHALK, DIRECTOR; HARRY A. GOODWIN, CHIEF, OFFICE OF ENDANGERED SPECIES; GEORGE F. SPODEN, JR., DIVISION OF REALTY; KENNETH F. SIPPEL, CHIEF, DIVISION OF PROGRAM ANALYSIS; CARL V. FERMANICH, ACTING CHIEF, DIVISION OF WILDLIFE REFUGES; SIDNEY D. LARSON, DIRECTOR OF BUDGET, OFFICE OF THE SECRETARY

SALARIES AND EXPENSES

Chairman HAYDEN. Now we will take up the Bureau of Outdoor Recreation.

For fiscal year 1968 the Bureau of Outdoor Recreation proposes an appropriation of $4,240,000 for salaries and expenses. This is $330,000 more than was appropriated in the last fiscal year.

However, it is expected that $80,000 will be requested as a supplemental appropriation to cover increased pay costs. The justification for this estimate will be placed in the record.

(The justification follows:)

HIGHLIGHT STATEMENT

The budget estimates presented for fiscal year 1968 will finance operations of this Bureau conducted under authority of the Act of May 28, 1963 (Public Law 88-29) and the Federal Water Project Recreation Act (Public Law 89-72). Under this appropriation the Bureau is requesting a total of $4,240,000, an increase of $250,000 needed to finance new special area studies and to provide additional funds, for staff services the Bureau provides the President's Council and the Citizens' Advisory Committee on Recreation and Natural Beauty.

Programs of the Bureau relating to the Land and Water Conservation Fund Act are discussed in a separate section of this document.

There follows a table comparing fiscal year 1967 and 1968 estimates by subactivities:

	Fiscal years		Increase
	1967	1968	
Nationwide planning	$1,612,000	$1,612,000	----------
Water resources and special area studies	929,000	1,079,000	$150,000
Research and education	105,000	105,000	----------
Federal coordination	812,000	912,000	100,000
Technical assistance	532,000	532,000	----------
Total	3,990,000	4,240,000	250,000

The total funds requested for 1968 will provide for:

(1) The completion and publication of the first Nationwide Outdoor Recreation Plan as required by Public Law 88-29.

(2) The continuation of studies concerning the recreation potential of water resource project areas and major river basins.

(3) Studies of "special areas" of the Nation that have the potential for providing regional or national outdoor recreation opportunities—an increase of $150,000 is requested to conduct special studies of:

(*a*) The Connecticut River Valley, as a possible National Recreation Area (see page 14).

(*b*) American coastal and inland islands, including river islands, for possible outdoor recreation use (see page 14).

(4) A small research and education program designated to stimulate and coordinate outdoor recreation research will be continued.

(5) A Federal program review effort will be continued in furthernace of achieving better coordination among the Federal agencies having recreation and related programs.

(6) Increased services to the President's Council on Recreation and Natural Beauty which was established by Executive Order 11278, dated May 4, 1966, and which supersedes the former Recreation Advisory Council—an increase of $100,000 is requested to finance this expanded workload (see page 21), and support liaison services for the new Citizens' Advisory Committee on Recreation and Natural Beauty, also established by Executive Order 11278.

(7) Continuation of a technical assistance program to provide advice and assistance to States, Federal and local agencies and the private sector regarding outdoor recreation projects and problems.

All of these programs are designed to help meet the national needs for outdoor recreation opportunities and to improve the quality of the environment. In the past 25 years this Nation has experienced a tremendous population and economic growth which has led more people to spend more time out of doors. The rate of increase in visitations to outdoor recreation areas over the past decade has far exceeded the rate of the population growth, but recreation resources have not been developed proportionately. A primary objective is to balance recreation needs with supply of recreation resources and to provide recreation opportunities for future generations. The above mentioned programs will help achieve this objective.

Some of the significant accomplishments made during the past year are listed below:

(a) Developed a functional organizational unit, prepared issue papers and other materials relating to the President's Council on Recreation and Natural Beauty. Have provided staff services to the Citizens' Advisory Committee and have underway a Report to the Nation on Natural Beauty.

(b) Made substantial progress in accumulating data and materials for the Nationwide Plan. Conducted a nationwide household survey on peoples preferences for recreation by activities and developed an outline for the Nationwide Plan. Have developed operating procedures for pin-pointing policy matters, and for completing the plan within the time imposed by law.

(c) Instituted a field study of the Missouri River area from Fort Benton, Montana to Yankton, South Dakota for possible consideration as a National Recreation Area pursuant to a directive from the Senate Interior and Insular Affairs Committee.

(d) Participated in the Potomac Valley Study and contributed to the drafting of an interim report to the President made in January 1966. Also participated in the preparation of the report "Potomac Valley—A Model of Scenic and Recreation Values," which was issued in June 1966.

(e) Chaired an interagency committee which conducted field studies and issued a comprehensive report supporting a Nationwide System of Trails.

(f) Prepared a report on the protection and development of the scenic, historic recreation, and other resources of the Hudson River corridor. The Bureau is presently developing plans for carrying out the provisions of Public Law 89-605 which directs the Secretary of the Interior to negotiate with the States of New York and New Jersey for the purpose of entering into a compact relating to the preservation, restoration and development of the Hudson River Basin.

(g) Have underway preliminary field studies of the Connecticut River Valley as authorized by the Act of October 3, 1966, (80 Stat. 867).

(h) Have underway the development of a plan for inventorying all coastal and inland islands of the Nation to determine whether undeveloped portions are suitable for public protection and use for outdoor recreation.

(i) Reviewed and prepared comments on 180 reports from Federal water resources agencies to evaluate their recreational potential; participated in in the studies of 21 major river basins and a large number of individual water resources projects.

(j) Prepared extensive materials and background data for use at hearings before the Senate Committee on Interior and Insular Affairs relating to various wild rivers bills.

(k) In cooperation with the Departmental Library, the Bureau compiled a draft thesaurus of terms for indexing outdoor recreation literature looking to the publication of an index of outdoor recreation literature. Arrangements have been made with the Government of Canada for an exchange of comparable index material which will greatly expand coverage.

(l) Instituted contractual arrangements for a pilot study of the recreation importance of vacation homes in northern New England States, supervised the study and analyzed the results.

(m) Completed the first phase of a study of credit available for outdoor recreation. The main objective of the study is to determine whether there is sufficient private credit available and whether additional Federal assistance is needed.

(n) A study has been made and a draft report prepared on the segments of the fiscal year 1967 Federal budget which relate to outdoor recreation. The study disclosed by census divisions where imbalances in recreation resources exist and identified the census divisions where allocations of Federal funds appear to be needed.

(o) Provided numerous instances of technical assistance to States, Federal and local agencies, and the private sector.

(p) Inaugurated and published the first issues of "Outdoor Recreation Action," a technical assistance information publication designed to give widespread circulation on new techniques, new approaches and new sources of financing to assist those seeking solutions to similar problems. Additional issues are scheduled for 1967.

(q) Entered into a contractual arrangement with the National Association of Counties to develop community action guides for outdoor recreation. The objective is to present information designed to assist public officials, community leaders, business groups and others in making decisions regarding outdoor recreation projects and problems. This is a cost sharing contract.

(r) A technical assistance bulletin, "Outdoor Recreation Planning for the handicapped" was developed by the Bureau.

(s) In cooperation with the Science Information Exchange of the Smithsonian Institution, compiled and published a catalog of current recreation research.

Appropriation, 1966	$3, 398, 000
Pay cost supplemental	68, 000
Total appropriation, 1966	3, 466, 000
Transferred to "Operating expenses, Public Buildings Service," General Services Administration (building rent)	−2, 003
Total available, 1966	3, 463, 997
Appropriation, 1967	3, 910, 000
Pay cost supplemental	80, 000
Total appropriation, 1967	3, 990, 000

	Base for 1968	Increase, 1968	
SUMMARY OF INCREASES AND DECREASES, 1968			
Planning and research: To provide for studies of special areas of the Nation that have the potential for providing regional or national outdoor recreation opportunities	$253, 000	+$150, 000	+150, 000
Federal coordination: To finance increased services to the President's Council on Recreation and Natural Beauty, established by Executive Order 11278, and support liaison services for the new Citizens' Advisory Committee on Recreation and Natural Beauty, also established by Executive Order 11278	210, 000	+100, 000	+100, 000
Net increase, 1968			250, 000
Budget estimate, 1968			4, 240, 000

Analysis by activities

Activity	Fiscal year 1966, amount available	Fiscal year 1967		
		Total appropriation	Pay cost supplemental	Amount available
1. Planning and research	$2, 060, 084	$2, 596, 000	$50, 000	$2, 646, 000
2. Federal coordination	809, 005	793, 000	19, 000	812, 000
3. Technical assistance	503, 076	521, 000	11, 000	532, 000
Unobligated balance lapsing	91, 832			
Total	3, 463, 997	3, 910, 000	80, 000	3, 990, 000

Activity	Fiscal year 1966, amount available	Fiscal year 1967, amount available	Fiscal year 1968, estimate	Increase (+) or decrease (−) over 1967
1. Planning and research	$2, 060, 084	$2, 646, 000	$2, 796, 000	+$150, 000
2. Federal coordination	809, 005	812, 000	912, 000	+100, 000
3. Technical assistance	503, 076	532, 000	532, 000	
Unobligated balance lapsing	91, 832			
Total	3, 463, 997	3, 990, 000	4, 240, 000	250, 000

1. PLANNING AND RESEARCH

Analysis by subactivities

Subactivity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
(a) Nationwide planning	$1, 538, 482	$1, 612, 000	$1, 612, 000	
(b) Water resources and special area studies	438, 007	929, 000	1, 079, 000	+$150, 000
(c) Research and education	83, 595	105, 000	105, 000	
Total	2, 060, 084	2, 646, 000	2, 796, 000	+150, 000

(*a*) *Nationwide planning.*—F.Y. 1967, $1,612,000; F.Y. 1968, $1,612,000; "No change."

Plan of work.—In accordance with Public Law 88–29, the Bureau is developing a Nationwide Outdoor Recreation Plan to identify the outdoor recreation needs of the Nation and to recommend ways of meeting these needs. Funds for this subactivity in fiscal year 1968 will provide for the completion and publication of the first plan.

The Nationwide Outdoor Recreation Plan is intended fundamentally as a guide to sound public policy in outdoor recreation to insure that the variety of recreation opportunities desired by the American people will be available in the general locations they desire and in sufficient quantity and quality to serve them adequately within the range of available resources. Under the provisions of Public Law 88–29, all Federal agencies are to carry out their future outdoor recreation and related programs in general conformance with the Plan. The Plan will also provide a framework for regional, State, local, and private outdoor recreation programs.

The Plan will project outdoor recreation demand into the future to the years 1980 and 2000. It will also appraise the present and potential supply of outdoor recreation resources in terms of location, variety, quantity, and quality and will disclose imbalances between supply and demand. The Plan will be the most important and wide sweeping document concerning outdoor recreation that has ever been prepared.

Demand and supply data will be analyzed to establish outdoor recreation needs. Based upon these findings, the Plan will identify critical outdoor recreation problems and recommend actions to solve these problems. Particular emphasis and study will be given to:

1. The availability of outdoor recreation opportunities to all income groups,
2. The quality of the natural environment, particularly the country's rivers and streams and will encompass natural beauty as a significant aspect.
3. The needs of people in the densely populated urban areas for opportunities to enjoy and participate in outdoor recreation, and
4. The capabilities of public and private entities to meet the evergrowing outdoor recreation needs.

The first Plan, by statutory requirement, must be completed by May 1968. In fiscal year 1968, major emphasis will be given by the Bureau to the final preparation of the Plan and its publication. This will involve decisions on many major points. For example, the contents of the Plan will be determined, major policies and legislative proposals will be considered and dealt with, and specific attention will be given to the recommendations to be included in the Plan which will form a five-year action program.

In the latter part of fiscal year 1968, work will also begin on the development of the next five-year Plan which is due in 1973. Time will be devoted to the initiation of procedures for updating information on the supply of existing resources and on procedures for obtaining such data on Federal, State, local, and private recreation areas in detail not sufficiently available at the present time.

While working toward the second five-year Plan, consideration will be given to the development of new methods to study and identify public demand for outdoor recreation opportunities. Current planning tools will be improved and new techniques will be devised to identify current and future socioeconomic characteristics of people that affect demand. New methods of survey and analysis will be employed to improve understanding of the relationship of the supply of resources to public demand for use of resources so that current and future public needs can be accurately identified and ways and means found to meet these needs.

Status of program.—The Bureau has done a substantial amount of work in developing the Nationwide Outdoor Recreation Plan. Some of the substantive actions are listed:

(a) Obtained from Federal, State, county and city agencies an inventory and description of the recreation resources under their jurisdiction and have programed these data into automatic data processing equipment for retrieval and analysis.

(b) Completed by contract an inventory and description of the recreation resources of the private sector. These data also are stored in a data bank for retrieval as needed.

(c) Have completed, through the Bureau of the Census, a survey of 8,000 households to determine on a Nationwide sampling basis the participation rates and preferences by types of outdoor activities of the American people. This demand data is essential in determining the degree to which available recreation resources satisfy the overall needs.

In addition, many special analyses have been prepared and much attention has been given to the concepts, principles, and policy considerations bearing on the Plan. The significance and importance of the Plan is recognized by the Bureau. The Director of the Bureau has taken over the direction of this program personally and intends to spend a major part of his time toward the culmination of this project.

(*b*) *Water resources and special area studies.*—F.Y. 1967, $929,000; F.Y. 1968, $1,079,000; Increase, $150,000.

	1967	1968	Increase
Water resources studies	$676,000	$676,000	
Special area studies	253,000	403,000	$150,000
Total	929,000	1,079,000	150,000

Need for increase.—The Bureau's workload has increased to such an extent that it lacks financing to handle newly assigned studies. These new studies, in addition to the Missouri River Basin Study, involve:

1. The entire Connecticut River Valley through New Hampshire, Vermont, Massachusetts and Connecticut for possible designation as a National Recreation Area $75,000
2. An inventory and reconnaissance study of American coastal and inland islands which are still undeveloped to determine whether such areas should be recommended for public protection and recreation use $75,000

Plan of work.—The Bureau will be heavily involved in conducting broad water resources studies in major river basins and in the study and review of individual water resources projects. It will likewise be involved in the study of other significant or "special" areas that offer regional or national recreation potential. The Bureau's work plans for fiscal year 1968 are set forth in more detail below:

(a) *Plan of work—Water resources studies.*—The Bureau's activities in the field of Federal water resources planning and development stem primarily from:

1. The Federal Water Project Recreation Act of 1965 (Public Law 89-72).
2. The Bureau's Organic Act of 1963 (Public Law 88-29).

The Bureau of Outdoor Recreation has been required to assume heavy responsibilities under these Acts. In general, these responsibilities include for the Federal Water Project Recreation Act:

An investigation or review of each project area to determine its recreation potential and the preparation of a report thereon.

A determination as to the extent to which proposed recreation developments conform to and are in accord with the appropriate Statewide Comprehensive Plan developed pursuant to Section 5(d) of the Land and Water Conservation Fund Act of 1965.

Carrying out Federal coordinating responsibilities involving interagency coordination procedures, assessing the impact of providing recreation areas at water projects, and distinguishing between Federal and non-Federal responsibilities.

The Bureau conducts framework and detailed comprehensive river basin studies under the authority of its Organic Act of 1963 and as requested by the Water Resources Council. Such studies are designed to assure that outdoor recreation and protection of natural beauty are adequately considered in the basin plans. Insofar as Interior responsibilities are concerned, the studies are carried out in conformance with memoranda of understanding between this Bureau and the National Park Service and the Bureau of Sport Fisheries and Wildlife, and with guidelines mutually agreed upon by this Bureau, the Corps of Engineers, and the Bureau of Reclamation.

The work plans for fiscal year 1968 are as follows:

(a) The Bureau will participate in approximately 100 studies of individual water resources development projects proposed by the Bureau of Reclamation, the Corps of Engineers, Public Health Service, Bureau of Indian Affairs, and the Bureau of Land Management to evaluate their recreation aspects. The Bureau will determine the recreation supply, demand, and needs in the affected area; consider the preservation of natural or scenic resources; and assist the planning agency in the formulation of the recreation component of the project plan.

(b) The Bureau expects to review about 200 selected reports of Federal agencies responsible for constructing or licensing water resources development projects to determine whether or not full consideration has been given to opportunities which the project development may provide for meeting outdoor recreation needs and to determine the extent to which the proposed recreation and fish and wildlife aspects conform to and are in accord with the Nationwide and appropriate Statewide Outdoor Recreation Plans.

(c) In its comprehensive river basin studies, the Bureau will be engaged in 11 framework studies (Type 1)—Continuation of seven studies and starting four new studies, Great Basin, Great Lakes, Souris Red, and South Atlantic Gulf—These studies—framework studies (Type 1) are of broad scope designed to furnish a general appraisal of overall water and related land resource development needs and serve as a guide to further planning. Bureau tasks involve the inventorying of existing and potential recreation resources and facilities projections of demand for recreation opportunities, and the translation of unsatisfied demand into needs needs for resources and facilities.

Work will continue on nine detailed studies (Type 2). These studies comprise overall water and related land resource development similar to (Type 1) studies and in addition define and evaluate projects for which Federal authorization will be required to permit necessary construction to be initiated. Bureau tasks involve evaluation of the recreation use benefits and costs of selected projects and identification of other Federal and non-Federal actions which should be taken to complement or supplement the recreation values of the area.

A report on each study is prepared for submission to the lead agency, usually the Bureau of Reclamation or the Corps of Engineers

(b) *Plan of work—Special area studies.*—The Bureau will be involved in 1968 in conducting studies of special areas to determine whether they are suitable for outdoor recreation purposes whether they should be managed for public outdoor recreation purposes and if so to recommend the type of development that should be undertaken and the proper agency to administer the areas.

These special studies involve areas that appear worthy of consideration as National Recreation Areas as National Seashore Areas as additions to the proposed Wild Rivers System, as a part of the proposed Nationwide System of Trails, or in some instances as National Parks or monuments. They also involve the recreation or conservation values of excess military lands and other areas such as the Hudson, the Connecticut and Missouri River areas. These studies are undertaken upon request from various sources including the President, Secretary of the Interior, members of Congress, and in some instances through legislative mandate.

The workload under this program is difficult to project in a reliable manner because conditions and circumstances change rapidly. The current interest in natural beauty, in the island inventory, and in the Hudson, Connecticut and Missouri River studies could not have been foreseen clearly a year ago, yet these items have imposed a heavy workload on the Bureau.

Following are examples of the more important projects that will receive attention in fiscal year 1968.

American Islands Study.
Connecticut River Study—Possible National Recreation Area.
Wild or Scenic Rivers.
Nationwide System of Trails.
Hudson River Basin Study.

In addition, the Bureau expects to give attention to the following areas, many of which have received preliminary study.

Name	Probable area designation	State
Amistad	National recreation area	Texas.
Apostle Islands	National lakeshore	Wisconsin.
Big Thicket	National recreation area, monument, or park.	Texas.
Cape Kennedy (Cape Canaveral)	National recreation area	Florida.
Channel Islands	National recreation area or park	California.
Cumberland Island	National recreation area	Georgia.
Curecanti	do	Colorado.
Flaming Gorge	do	Utah and Wyoming.
Glen Canyon	do	Arizona and Utah.
Gulf Islands	National seashore	Mississippi and Florida.
Kauai	do	Hawaii.
Lincoln Homestead	National recreation area	Illinois.
North Cascades	do	Washington.
Ohio Canal	do	Ohio.
Olympic Park	National park (boundary adjustment).	Washington.
Paramore Island	National seashore	Virginia.
Potomac Valley Park	National park-recreation area	Virginia, Maryland, and West Virginia.
Raystown	National recreation area	Pennsylvania.
Redwoods	National park	California.
Sawtooth	National recreation area	Idaho.
Sleeping Bear Dunes	National lakeshore	Michigan.
Badlands	National recreation area	South Dakota.

AMERICAN ISLANDS STUDY

The development of the first Nationwide inventory of the recreation, scenic, natural, and historical values of America's Islands was directed by the President. The Bureau of Outdoor Recreation will conduct the study leading to the inventory.

All recent studies of public preferences in outdoor recreation have shown a strong attraction to locations near water for swimming, fishing, boating, other water sports, nature study, hiking, camping, picnicking and ordinary relaxing. By definition, islands offer ready access to these opportunities.

The study will determine which islands have been developed, which ones remain largely unspoiled, and which are already protected in local, State or National ownership. Primary attention will be given to islands having outstanding recreation qualities. In addition to the other features, the study will suggest conservation principles and guidelines to help State, local and private efforts to save islands from destruction of their unique advantages. A report will be prepared by the Bureau in time for consideration by the 91st Congress, early in 1969.

All 50 States plus Puerto Rico, the Virgin Islands and a number of Federal agencies with responsibilities for public lands and waters will be asked to suggest and describe islands offering the best possibilities for conservation.

Early action on compiling the inventory is necessary because rapid commercial development, unrestricted dredging, water pollution and similar incursions are threatening the survival of many islands in their present state. The scope of this study is of such magnitude that $75,000 will be needed to do an adequate job in fiscal year 1968.

CONNECTICUT RIVER STUDY

The Act of October 3, 1966 (80 Stat. 867) authorized the Secretary of Interior to study the feasibility and desirability of a Connecticut River National Recreation Area in the States of Connecticut, Massachusetts, Vermont and New Hampshire. The Bureau of Outdoor Recreation is charged with conducting the study. The Bureau will consult with interested Federal, State and local bodies and officials and will prepare a report on the study together with appropriate recommendations. The Act provides that a report shall be submitted to the President within two years after the date of the Act—or by October 1968.

The study will evaluate the recreation potential of the area and set forth the type of Federal programs that appear desirable to preserve and develop the recreation values of the area. The Act authorizes an appropriation of $100,000 for the study or such part of this amount as is needed.

In view of the other pressing workload on the Bureau and considering the area to be covered and the scope of the study, $75,000 will be required in fiscal year 1968.

MISSOURI RIVER STUDY

The Senate Committee on Interior and Insular Affairs on February 17, 1966, adopted the following resolution:

"*Resolved by the Committee on Interior and Insular Affairs of the United States Senate,* that the Secretary of the Interior be, and is hereby, requested to direct the Bureau of Outdoor Recreation to conduct a study of the Missouri River from Yankton, South Dakota, to Fort Benton, Montana, with a view to enhancing the recreation resources of this area by its possible designation as a National Recreation Area. The Bureau of Outdoor Recreation will cooperate, as appropriate, with other Federal and State agencies."

The study area involves a 600-mile stretch of the Missouri River encompassing varied topographic conditions. The area is so vast that it will require considerable time and manpower to conduct a physical review. Considerable field work has already been performed.

WILD OR SCENIC RIVERS

In view of the fact that the Wild Rivers bill passed the Senate by 71 to 1 and considering the widespread interest in the program, a wild or scenic river bill undoubtedly will be introduced in the 90th Congress. Several of the rivers named in the Senate-passed bill have not received detailed study. In order to provide sufficient information about these rivers, additional studies will have to be made. Studies will be needed on the following:

Cacapon—West Virginia.
Shenandoah—West Virginia.
Klamath—California.
Missouri River—from Yankton, South Dakota, to Fort Benton, Montana (covered by on-going study).
Skagit—Washington.
Flathead—Montana.
Hudson—New York.
Wolf—Wisconsin.
Buffalo—Tennessee.
Guadalupe—Texas.
Kern—California.
Mannistee—Michigan.
Niobrara—Nebraska.
Salt—Arizona.
Susquehanna—Pennsylvania and New York.
Yellowstone—Wyoming and Montana.
Pine Creek—Pennsylvania.

NATIONWIDE SYSTEM OF TRAILS

Secretary Udall recently announced that one of the major legislative proposals to be brought before the 90th Congress would be the Nationwide System of Trails. The Bureau will have the primary responsibility for studies of the following trails:

Appalachian Trail.
Chisholm.
Continental Divide.
Lewis and Clark.
Natchez Trace.
North Country.
Oregon.
Pacific Crest.
Potomac Heritage.
Santa Fe.
Mormon.
Mississippi River.
Gold Rush.
Metropolitan Area Trails.

HUDSON RIVER BASIN STUDY

Another major assignment of the Bureau in fiscal year 1968 is the Hudson River Basin study. Public Law 89-605 directs the Secretary of the Interior to negotiate with the States of New York and New Jersey for the purpose of entering into a compact relating to the preservation, restoration, and development of the resources of the Hudson River Basin, and to submit a report to the President on the results of these negotiations no later than July 1, 1968. It also requires that all Federal departments and agencies shall consult with the Secretary concerning any plans, programs, projects, and grants under their jurisdiction within or affecting the Hudson Riverway.

The remainder of fiscal year 1967 and fiscal year 1968 will be devoted to collecting, summarizing and analyzing basic data and information on the resources of the Hudson River, conducting meetings and briefings on the negotiations, reviewing Federal projects under Section 5 of the Act, and preparing basic data and other materials to be included in the report to the President.

With the increase provided by Congress for fiscal year 1967 the Bureau has been able to handle the most important water and special area studies. Care has been taken to avoid studies that were not of high priority and to perform those that offered the greatest opportunities for outdoor recreation. The following paragraphs include information on the status of work under the water resources and special area studies programs.

(a) *Status of program—Water resources studies.*—The Bureau participated in planning, evaluating, and coordinating the recreation component of 76 individual Federal water programs or projects in fiscal year 1966.

The work of the Bureau is illustrated by its report on the Bureau of Reclamation's Southwest Water Plan, Garden Valley Reservoir, in which the Bureau of Outdoor Recreation planned the recreation component consisting of the proposed acquisition of 2,000 acres of land for development of public recreation facilities, which would be cost shared and be administered and maintained by the Forest Service and Idaho Department of Parks, pursuant to the provisions of the Federal Water Project Recreation Act.

During the past year the Bureau reviewed and prepared comments on 180 reports of other Federal agencies including 77 Corps of Engineers' projects, eight Bureau of Reclamation projects, and 95 applications (most including recreation plans) for Federal licenses to construct or maintain hydroelectric projects.

Examples of results of the work of the Bureau are illustrated by the following specific achievements which were accomplished in cooperation with other Federal agencies and/or non-Federal interests.

1. The Bureau, through its review of Duke Power Company's Keowee-Toxaway Project, South Carolina, and its recommendations to the Federal Power Commission and the company was able to obtain the inclusion of a provision, as a modification of the company's proposal, for an adequate recreation plan which will involve the expenditure of over $1,250,000 for recreation facilities in order to meet public needs.

2. As a result of the Bureau's review of the Corps of Engineers' Rowlesburg Reservoir Project report, Cheat River, West Virginia, the Corps has requested the Bureau's assistance in developing a pattern of flows below the dam which would provide improved boating opportunities for the public.

The Bureau participated in 21 interdepartmental comprehensive river basin studies in fiscal year 1966. Field studies were completed on the Sabin River Basin, Louisiana, and the Ohio River Basin.

The Bureau's studies in the Appalachian Region have only recently been initiated. Work is well underway toward determining outdoor recreation needs in Appalachia and recreation opportunities that water resources development would provide toward meeting these needs.

(b) *Status of program.—Special area studies.*—Work plans have been developed and some field reviews have commenced on the study of the Missouri River area from Yankton, South Dakota to Fort Benton, Montana; on the Connecticut River Study and on the Island inventory. The Bureau also is involved in developing back-up data on Scenic Rivers and Trails in anticipation of early legislative hearings and in the final preparation of technical reports on studies yet to be published.

It is noteworthy that the Bureau played an important role in conducting studies of several areas that received Congressional action in the 89th Congress. The following are some of the authorizations by the 89th Congress that were based largely on studies in which the Bureau participated:

Indiana Dunes National Lakeshore, Indiana, P.L. 89-761.

Pictured Rocks National Lakeshore, Michigan, P.L. 89-668.

Bighorn Canyon National Recreation Area, Wyoming and Montana, P.L. 89-664.

Delaware Water Gap (Tocks Island) National Recreation Area, Pennsylvania and New Jersey, P.L. 89-158.

Whiskeytown-Shasta-Trinity National Recreation Area, California, P.L. 89-336.

Authorize the Secretary of the Interior and States of New York and New Jersey to formulate program regarding the Hudson River, P.L. 89-605.

Assateague Island National Seashore, Maryland and Virginia, P.L. 89-195.

(c) *Research and education.*—F.Y. 1967, $105,000; F.Y. 1968, $105,000; "No change."

Plan of work.—The Bureau's research efforts will be devoted in large part to assisting in developing the Nationwide Outdoor Recreation Plan by evaluating the data that has been accumulated and by the preparation of statistical analyses which will assist Bureau management in determining action programs.

Greater efforts will be devoted to reviewing and evaluating outdoor recreation research being conducted by Federal agencies. There is a need to consider the effectiveness of on-going research, to insure that research results are distributed among concerned agencies and to avoid duplication of research efforts. The Bureau will work toward the objective of formulating an overall research program on problems relating to outdoor recreation which will determine the major areas of priority, outline some of the research procedures which will be necessary to solve the problems, and will identify specific research projects which would fit into a coordinated research effort.

Publications will be issued which deal with various types of statistical data relating to Federal and State outdoor recreation programs and problems. These publications are to be a substitute for a previous publication issued by the Bureau concerning State Park statistics.

Status of program.—Although the research efforts of the Bureau are limited, significant progress has been made by the small staff engaged in this activity. Following are some of the actions taken:

A Northern New England vacation homes contract study has been completed to determine the economic impact of vacation homes in the States of Maine, New Hampshire and Vermont. This study was coordinated with a related study which the Corps of Engineers had undertaken in the Connecticut River Valley. Arrangements were made for the Corps of Engineers to use the questionnaire developed by this Bureau and to combine the results of the Corps of Engineers survey with that of the Bureau thus avoiding needless duplication of effort. The study results will be helpful in developing the Nationwide Plan analysis of the supply and demand for recreation resources and facilities in the Northeast.

A prospectus for a survey of recreation visitors to the Lower Colorado River was developed for the use of the Lower Colorado River Land Use Office. The Bureau also provided advice on the statistical procedures to be used in designing the sample and developed various cost alternatives for consideration of the Land USE Office.

The first edition of a periodic catalog of current research projects related to outdoor recreation was prepared in a cooperative effort with the Science Information Exchange. Brief summaries of more than 180 projects are included in the first volume.

Compilation of a draft thesaurus of terms for indexing outdoor recreation literature was completed and indexing of current outdoor recreation literature, involving the systematic scanning of more than 300 periodicals and other current documents, was initiated. Abstracts were prepared on the more significant items indexed and a sufficient number have now been prepared to justify publication of the first abstract journal of current literature on outdoor recreation. Arrangements have been made with the government of Canada for exchange of comparable indexes of literature. The Canadian work will greatly expand the coverage of the service for it will scan all pertinent periodicals and publications available in the British Commonwealth.

Planning for the third National Conference on Policy Issues in Outdoor Recreation was done in cooperation with Utah State University in preparation for the meeting held in September 1966. The conferences brought together the administrators of land managing agencies, educators and research workers from the universities and government for mutual exchange of ideas relating to problems and methods of solving current issues in recreation policy.

The Bureau's small research staff is continuing to serve as a focal point for outdoor recreation research. By analysing current efforts and pointing up gaps on weaknesses in our knowledge, it can direct government, university and private efforts to projects designed to correct these differences.

2. Federal Coordination

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
Federal coordination	$809,005	$812,000	$912,000	+$100,000

2. *Federal coordination.*—F.Y. 1967, $812,000; F.Y. 1968, $912,000; Increase, $100,000.

Need for increase.—The major portion of the increase is to provide funds directly to the Bureau for financing staff and related services to the Citizens' Advisory Committee and to pay travel expenses of committee members. During the current fiscal year these expenses are being shared by the Federal agencies represented on the Council. This proposal, in essence, requires no greater amount of funds but simplifies administration by providing direct financing.

The remainder of the increase is needed to finance on a full year basis, the salaries of the existing staff of the Bureau assigned to assit the Recreation and Natural Beauty Council.

Plan of work.—The program of work under the activity Federal Coordination for fiscal year 1968 is discussed under two principal elements: Federal Program Review and Studies and Services for the President's Council and Citizens' Advisory Committee on Recreation and Natural Beauty.

(a) *Federal program review.*—The primary purpose of this program is to promote a unified, comprehensive Federal outdoor recreation effort designed to efficiently and economically meet the Nation's recreation needs.

The Federal program review staff directs its efforts to broad policy or substantive program aspects of outdoor recreation in the Federal Government. Studies are made of problems that are generally applicable on a Government-wide basis. These studies involve continuing contacts with many Goverment agencies and the reports prepared on the studies are made available to the concerned agencies for information and guidance. The Federal program review function is conducted pursuant to Section 2(g) of the Act of May 28, 1963 (Public Law 88-29), the Bureau's "Organic Act." That section provides for *promoting coordination of Federal plans and activities generally relating to outdoor recreation.*

There is a vast field wherein studies should be fruitful. The Department's own programs, the Government-wide Planning, Programing and Budgeting System and the budget for 1969 will warrant special attention.

In addition, selected studies on Federal grant programs for outdoor recreation, concessioner operated recreation areas, recreation financial grants, and operations and technical assistance programs should yield knowledge useful to furthering a more effective and coordinated effort in this field.

The following items are typical of the studies that are planned for fiscal year 1968:

1. The outdoor recreation elements of the President's budget will be analyzed and reported on, as directed in Recreation Advisory Council Circular No. 5. The report will bring into focus the total allocation of Federal funds by purpose and geographical location with recommendations in regard to meeting deficits in outdoor recreation opportunities. The results of the study will also be provided to the Bureau of the Budget for use in consideration of budget levels for Federal Outdoor Recreation programs.

2. Participate in the development and review of the outdoor recreation Planning, Programing, and Budgeting Systems for recreation in Interior and, ultimately, all agencies. This involves long-range planning of outdoor recreation programs.

3. Continue on-going studies of Federal programs relating to outdoor recreation to determine overlaps and duplications and gaps in recreation programs and recommend necessary adjustments. Studies may be made of concessioner operations, grant programs and technical assistance. The Bureau also will maintain current information on Federal programs and agreements, memorandum of understanding, and executive orders and maintain relations necessary to achieve better interagency coordination.

4. Conduct a demonstration study of a major regional complex of interrelated land and water areas with great recreational resources for which the development planning is presently under many Federal, State, and local public agencies. This

case study may be included as a special appendix to the Nationwide Outdoor Recreation Plan. The study would consider the need to protect national significant sites and at the same time provide for the coordinated development or recreational facilities. The location and need for roads, concessioner operations, and similar developments would be included in the study. It would review the expected visitor load in the region, the need of overnight and day use accommodations, the means of transporting recreational users, land use and development plans, and other basic problems including the participation by private interests.

Determination of the practicability of establishing a regional pattern of recreation resources use will also result from the study.

(b) *Legislative review.*—Because of the broad scope of the Bureau's functions in the field of outdoor recreation and conservation generally, the relationship to other Federal agencies in this field, and the cooperative work with the States, the Bureau is necessarily concerned with a large segment of legislative proposals that originate in the Congress or that are suggested by the Executive agencies. The increased activity in outdoor recreation and related legislation during the past several years is expected to continue during fiscal year 1968, with more bills being introduced in the Congress.

The Bureau provides an impartial review and analysis of proposed legislation in the outdoor recreation field, making recommendations to the Secretary or to the Bureau of the Budget regarding the effect of such legislation, whether it should be supported, and suggested amendments, if considered appropriate.

Under the legislative review services program, substantive and policy positions of the Bureau have been developed and prepared covering a wide range of conservation, resource development, fish and wildlife, and outdoor recreation legislation. Such work includes legislative research into the history of existing laws and programs that may be affected, and also includes the preparation of testimony for use at congressional hearings.

(c) *Studies and services for the President's Council, and Citizens' Advisory Committee, on Recreation and Natural Beauty.*—On May 4, 1966, the President signed Executive Order 11278 establishing the President's Council on Recreation and Natural Beauty. This Council supersedes the former Recreation Advisory Council. The first chairman of the new council is the Secretary of Commerce. The Executive Order also established a Citizens' Advisory Committee on Recreation and Natural Beauty. The first chairman of the Citizens' Advisory Committee, named by the President, is Mr. Laurance S. Rockefeller. The Executive Order significantly expanded the scope of the former Recreation Advisory Council by assigning responsibility for natural beauty to the President's Council. The words "natural beauty" have been construed to mean "the quality of man's environment." Since the order directs that the Council's Executive Director shall be from the Bureau of Outdoor Recreation, a substantial increase in responsibility and workload has been placed upon the Bureau.

The Council provides a Cabinet-level body whereby policy evolution and problem solutions can be worked out in an orderly fashion, a high degree of coordination can be achieved, and the President can be kept currently informed on important aspects of this program.

The Executive Order assigns to the Council broad functions by directing that "The Council *shall* review plans and programs of Federal agencies for or affecting outdoor recreation and natural beauty. The Council *shall* make recommendations to the President on matters of policy in the fields of outdoor recreation and natural beauty. The Council may conduct studies in those fields and *shall* encourage and assist Federal agencies to accomplish effective coordination in such fields." Regarding the first assigned function, the order is quite specific in directing the Council to ". . . advise Federal agencies with respect to the effect of their respective plans and programs on recreation and natural beauty, and may suggest to such agencies procedures to better accomplish the purposes of this order."

The Executive Order charges the Citizens' Advisory Committee with certain duties relating to both the private and public sectors. It states: "(a) The Committee *shall* advise both the President and the Council on matters relating to (1) outdoor recreation and the beautification of our Nation's cities and countryside, (2) the correlation of natural beauty and outdoor recreation activities by Federal agencies and bureaus, and (3) local, State, and private outdoor recreation and natural beauty activities, (b) the Committee *shall* advise and assist the Council in the evaluation of the progress made in carrying out the functions of the Council and recommend to the Council, as necessary, action to accelerate such progress, (c) the Committee may, on its own motion, request information relating to the functions and initiate consideration of items which relate to those functions."

The Bureau has established two divisions, the Division of Council Studies and the Division of Council Services which provide the staff services necessary for the efficient and effective operation of the President's Council. Within the limits of their capabilities, the divisions also provide assistance and services to the Citizens' Advisory Committee.

The Divisions of Council Studies and Council Services within the Bureau operate as a staff arm of the Council and receive their work assignments and direction from the Council's Executive Director (the Director of the Bureau of Outdoor Recreation). The Executive Director receives general guidance and supervision from the Council and its chairman.

The two divisions provide staff services necessary to conduct in-depth studies, correlate all pertinent information, obtain assistance from other Federal agencies as necessary, and provide the Council with adequate documentation on which it may base its decisions. In addition to simply reacting to Council guidance, they carry on a continuing review of policies for or affecting outdoor recreation and natural beauty, identify problems requiring Council consideration, and submit action proposals to the Council.

For fiscal year 1968, it is anticipated that the two divisions will be involved in the following projects:

1. *Report to the Nation on natural beauty.*—This report will concern the restoration, enhancement, and protection of the Natural Beauty (environmental quality) of America, and will include: (a) a report on progress in this field since the President's 1965 Natural Beauty Message, (b) recommendations for necessary future actions, and (c) practical action-oriented information for citizens and communities interested in pressing for action. The Report will also serve as a comprehensive response by the Executive Branch to the recommendations of the White House Conference on Natural Beauty. The Report was authorized by the Council in October 1966. It is expected to be completed, published and distributed during calendar year 1967.

2. *More effective use and disposition of federally-administered lands and waters for the enhancement of natural beauty and to meet public recreation needs.*—This study, directed to be undertaken by the Council, will result in a report from the Council to the President focusing on the improvement of present methods and procedures to assure that recreation, natural beauty, and other conservation potentials will receive adequate consideration in the use and disposition of Federal lands. The study will also encompass the question of public use of lands for recreation and natural beauty which are "temporarily excess" to the needs of administering agencies.

3. *Relationships between highway location and parks, urban open-space, historic sites, and other recreation areas.*—This study will review existing procedures for selecting the location of highway projects and recommend modifications to mitigate their impact on parks, urban open space, historic sites, and other recreation and natural beauty areas. Passage by the 89th Congress of the Highway Beautification Act of 1965 (Public Law 89–285), the Federal-aid Highway Act of 1966 (Public Law 89–574), and the Department of Transportation Act (Public Law 89–670) provides new statements of national policy and may expand this study to include more than highway location questions, or precipitate other studies aimed at adverse impacts on parks, urban open space, historic sites, and other recreation and natural beauty areas by other forms of transportation.

4. *Price escalation for lands to be acquired for recreation and natural beauty.*—Such a study was initiated by the Bureau in fiscal year 1967. The Bureau Director, in his capacity as Executive Director of the Council, has suggested to the Council Chairman that the problen of escalating land prices is a critical question which the Council should consider with a view to making appropriate recommendations to the President regarding administrative or legislative proposals which would best protect the Government's interests. The Bureau study would be the basis for Council review of the problem. This review would broaden the base of the over-all study by bringing to it the views and concerns of several land-acquiring agencies.

5. *National program of scenic roads and parkways.*—The objective of this study will be to develop a legislative program for a National Program of Scenic Roads and Parkways. A good deal of background material is available from the report on the subject prepared by the Department of Commerce for the former Recreation Advisory Council.

In addition to the above specific studies and projects to be conducted in fiscal year 1968, the Bureau will (a) follow-up to assure that Council decisions are being adequately implemented, (b) review previous Council actions to assure that they continue to be meaningful in the face of changing situations, (c) assure adequate continuing liaison with Council agencies, (d) operate a distribution system to assure that materials are transmitted in an orderly fashion, (e) make all arrangements for Council meetings, (f) assure that complete records of Council activities are maintained, and (g) provide a focal point for communication and liaison between the President's Council and the Citizens' Advisory Committee. These continuing functions will expand as the President's Council on Recreation and Natural Beauty releases additional policy recommendations and directives.

Status of program.—In the Federal Program Review Area, the Bureau has: (1) completed its study and prepared a report on its review of the outdoor recreation elements of the Federal budget for fiscal year 1967. This document was submitted to the Chairman of the President's Council on Recreation and Natural Beauty, and was also submitted to the Bureau of the Budget for use in determining the best allocations of Federal outdoor recreation funds.

(2) Completed a study of and a report on the availability of credit at the Federal level for outdoor recreation. The study will be supplemented with information on the availability of private credit for outdoor recreation enterprises before the end of the fiscal year after the results of a countrywide mail survey of financial institutions has been tabulated and analyzed.

(3) Completed a comprehensive report covering Federal outdoor recreation programs. The study sets forth in digest form the objectives, functions and authorities of all Federal programs related to outdoor recreation.

In providing services to the President's Council on Recreation and Natural Beauty the Bureau prepares background documentation necessary for the Council Chairman to determine agenda items for Council meetings; program back-up documentation, issue papers, and related data and has provided liaison and an information focal point for Council affairs. The Bureau has conducted or chaired the studies on which many policy decisions are based.

As the Council approves more policy and guideline issuances (seven have already been released); a continuing review and evaluation is made to keep the issuance up-to-date and accurate in the light of policy and program changes, and new or amended legislative authorities. The seven circulars published by the Recreation Advisory Council are:

Circular No. 1: Federal Executive Branch Policy Governing the Selection, Establishment, and Administration of National Recreation Areas.

Circular No. 2: General Policy Guidelines for Outdoor Recreation.

Circular No. 3: Policy Governing the Water Pollution and Public Health Aspects of Outdoor Recreation.

Circular No. 4: A National Program of Scenic Roads and Parkways.

Circular No. 5: Guides for Federal Outdoor Recreation Investment.

Circular No. 6: Federal Executive Policy Governing the Reporting of Recreation Use of Federal Recreation Areas.

Circular No. 7: Non-Federal Management of Recreational Facilities on Federal Lands and Waters.

Policy and related actions of the Council, upon Council approval, become the policies of the Council-member agencies. The policy and procedure issuances also are recommended for adoption by other Federal agencies. On a continuing basis, reviews are conducted of Federal agencies to evaluate the extent to which Council policies are being implemented, how successful the policies have been in terms of established objectives and what actions might be taken to make the policies more effective.

Within its capabilities, the Bureau has provided the Citizens' Advisory Committee with similar kinds of services. Also, travel and per diem expenses of the Citizens' Advisory Committee, as authorized in Sec. 203 of Executive Order No. 11278, have been paid from funds appropriated under this activity.

3. TECHNICAL ASSISTANCE

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
Technical assistance	$503,076	$532,000	$532,000	------------

3. *Technical assistance.*—F.Y. 1967, $532,000; F.Y. 1968, $532,000; "No change."

Plan of work.—During fiscal year 1968 the Bureau will provide direct advisory assistance to State and local agencies regarding outdoor recreation and also provide advisory assistance and technical review services to other Federal agencies to help them carry out their responsibilities relating to outdoor recreation. The work expected to be performed is discussed:

(a) *Technical assistance to Federal, State, and local agencies, and private interests.*—1. Based on past experience the Bureau expects to respond to 1,000 requests for assistance by participating in conferences; regional, State and local meetings; workshops; training sessions; and individual consultations. In addition the Bureau provides information on a wide variety of outdoor recreation matters by correspondence and telephone responses to specific requests.

2. Four technical assistance bulletins will be completed dealing with such subjects as Recreation Demand Participation Rates, Hiking and Riding Trails, Encroachment and Impairment of Recreation Areas, and Protection of Natural Areas.

3. To stimulate action in outdoor recreation at the local level, ten *Community Action Guides* are to be published under a contractual arrangement with the National Association of Counties Research Foundation. Topics are: (a) Enabling Legislation, (b) Financing Local Outdoor Recreation Programs, (c) Organization, (d) Staffing and Use of Consultants, (e) Areawide and Multi-Governmental Opportunities, (f) Comprehensive Outdoor Recreation Planning, (g) Land Acquisition, (h) Water-Based Recreation, (i) Technical and Financial Assistance, and (j) Citizen Action and Public Support.

4. To provide an information clearinghouse function on outdoor recreation actions of interest to other Federal agencies, local governments, private organizations, and individuals, the Bureau will continue the quarterly publications of *Outdoor Recreation Action.* Copies are printed of each issue and are distributed to individuals and agencies involved in outdoor recreation programs.

5. Applications by State and local public agencies for park and recreation use of public domain lands are reviewed for the Bureau of Land Management. At least 80 such applications are anticipated, but the number can be expected to increase as Bureau of Land Management completes its classification inventory during this fiscal year.

6. Department of Housing and Urban Development grant applications relating to outdoor recreation will be reviewed. Both Urban Planning Assistance applications (701 program) for comprehensive State planning grants where a recreation element is involved, and Open-space Land Acquisition applications will be reviewed to determine compatability with State outdoor recreation plans.

7. Perform reviews of 50 Federal water development projects reports to determine the extent to which recreation portions of these projects are in accord with the State comprehensive outdoor recreation plans.

(b) *Surplus property applications.*—A 50% increase in applications for the transfer of surplus property for park, recreation, or historical monument purposes is expected as the result of publicity being given to State and local outdoor recreation needs through State outdoor recreation plans. The Bureau has the responsibility of investigating all such applications and making recommendations to General Services Administration on them. In 1968, the Bureau anticipates making on-site investigations and preparing reports on 50 applications covering Federal surplus properties.

(c) *Surplus property compliance actions.*—The Bureau will inspect surplus properties disposed of in prior years for park and recreation purposes. This is to insure that the properties are being devoted to the use contemplated at the time of transfer. A change in compliance review necessitated by the Civil Rights Act of 1964 (Public Law 88-352) and the Department's implementing regulations (43 CFR 17) will result in a 100% increase in compliance review and on-site inspection responsibilities in 1968.

It is anticipated that there will be 350 on-site inspection trips and reports necessitated by new requirements. One hundred seventy-five biennial compliance reports due from property recipients are anticipated in 1968. Each report received must be reviewed, acknowledged, and compliance problems acted upon. Although the workload is increasing, no increase in funds is requested. Bureau staff are better trained and are in a position to handle the increased workload.

(d) *Conservation inventory of military lands.*—Lands expected to be surplus to military needs are being screened and inventoried so that conservation and recreation agencies (Federal, State, and local) may move expeditiously to acquire the properties when they reach excess or surplus status. Projected accomplishments for 1968 include:

> . . . Initial screening of 500 surplus military properties. These will require limited investigations and the preparation of an initial screening report.
>
> . . . Detailed investigation and the preparation of interagency land use reports for approximately 35 military properties.
>
> . . . Review Department of Defense inventory data on 1,900 military installations and accumulate additional inventory data as necessary.

Status of program.—A technical assistance information series has been inaugurated and the initial issue of "Outdoor Recreation Action" was published in August of 1966. The publication is designed as a clearinghouse to report actions taken throughout the Nation that will be of interest to States, local governments, and private individuals. It covers legislative actions on financing, zoning, etc. at the State and local levels and sets forth Federal legislation and other actions in the outdoor recreation field. In addition it is a useful means of informing the State and local levels of actions being taken by other State and local levels of government.

Negotiations have been completed with the National Association of Counties for the development of 10 community action guides for outdoor recreation. The contract with NACO is on about a 50–50 cost/sharing basis since both agencies will benefit from the results. The guides will be extremely valuable to State local, and private groups in developing sound outdoor recreation programs.

The Bureau is on schedule in its review of military lands that are to be released from military requirements. Over 1,000 actions have been reviewed since the beginning of the program about a year ago and over 100 properties have been converted or are planned for conversion to conservation/recreation uses.

The Bureau has been able to maintain on a current basis its compliance reviews on Federal properties deeded to State and local agencies for parks, recreation, or historic monument purposes. Over 300 properties involving about 45,000 acres are involved.

ITEMIZATION OF ESTIMATE

Salaries and expenses

	Actual, 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$3,372,165	$3,990,000	$4,240,000	+$250,000
Unobligated balance lapsing	91,832			
Transferred to General Services Administration	2,003			
Appropriation	3,466,000	3,910,000	4,240,000	+330,000
Proposed supplemental appropriation		80,000		−80,000
Obligations by objects:				
11.0 Personnel compensation	2,248,792	2,780,000	2,824,000	+44,000
12.0 Personnel benefits	168,024	220,000	223,000	+3,000
21.0 Travel and transportation of persons	168,956	197,000	241,000	+44,000
22.0 Transportation of things	15,746	22,000	18,000	−4,000
23.0 Rent, communications, and utilities	97,526	73,000	54,000	−19,000
24.0 Printing and reproduction	111,795	88,000	431,000	+343,000
25.1 Other services	173,398	270,000	214,000	−56,000
25.2 Services of other agencies	317,310	250,000	155,000	−95,000
26.0 Supplies and materials	32,187	56,000	60,000	+4,000
31.0 Equipment	38,431	34,000	20,000	−14,000
Total obligations	3,372,165	3,990,000	4,240,000	+250,000

PREPARED STATEMENT

Chairman HAYDEN. Mr. Crafts, would you please present your statement indicating the activities of the Bureau during the past fiscal year and its plans for the coming year?

(The statement follows:)

Mr. Chairman and members of the committee, we appreciate the opportunity to appear before this committee to explain the need for the funds requested for fiscal year 1968 to carry on Bureau of Outdoor Recreation programs.

This Bureau has been in existence for about five years. Our activities are divided into two main segments: (1) Those authorized by the Act of May 28, 1962 (P.L. 88–29) and the Federal Water Projects Recreation Act of 1965 (P.L. 89–72) for which we are requesting $4,240,000 for fiscal year 1968, and (2) those authorized by the Land and Water Conservation Fund Act of 1965 (P.L. 88–578) for which we are requesting $142,000,000.

These two segments are covered under the captions "Salaries and Expenses" and "Land and Water Conservation Fund" in the following paragraphs. The details of the budget are shown in the tables attached to this statement.

SALARIES AND EXPENSES

The request of $4,240,000 for fiscal year 1968 is an increase of $250,000 over the amount available for fiscal year 1967. The increase will be applied as follows: $100,000 will assist in financing expenses related to the work of the President's Council and the Citizens' Advisory Committee on Recreation and Natural Beauty; $75,000 will be utilized in financing a study of the Connecticut River Valley as authorized by the Act of October 3, 1966 (80 Stat. 867); and $75,000 will be utilized in financing a Nationwide inventory to determine the recreation potential of coastal and inland islands as directed by the President.

The programs for which increases are requested and the on-going programs for which no increases are requested are mainly the Nationwide Plan, Water Resources, Special Area Studies, and Federal Coordination.

Nationwide planning.—Under this program the Bureau is responsible for developing a Nationwide outdoor recreation plan by May 1968 and at periodic intervals thereafter. We are requesting an appropriation of $1,612,000 for fiscal year 1968—the same amount appropriated for fiscal year 1967. The final 12 months leading to the due date of the first plan is a crucial period. It is during this time that major decisions will have to be made on content, policies, and recommendations.

This will be in effect a State of the Union Message on outdoor recreation in its broadest aspects. It should supersede the ORRRC report. It will contain an action program that hopefully should guide Federal, State and local agencies and be of substantial use to the private sector for the next five years.

It is without question the most consequential single and ambitious undertaking before the Bureau at the present time, and is being carried out in fulfillment of the directive of the Organic Act that established the Bureau. It is scheduled for submission by the Secretary to the President and in turn by the President to the governors of the States and the Congress. It will offer a program to the Nation hopefully in a proper prospective. Like most such undertakings the concluding phases probably will be somewhat of a desperate and crash effort with much controversy in arriving at policy recommendations.

Water resources.—The purpose of the Bureau's participation in Federal water resources planning is to insure that recreation opportunities are given proper consideration at the time water resource development projects are prepared. In carrying out this purpose, the Bureau performs three kinds of work.

First, the Bureau participates in comprehensive river basin studies in the following ways: (a) Reconnaissance surveys of the recreation aspects of over-all water and land resources development needs of a basin, and (b) more detailed appraisals which evaluate possible alternative projects within the basin. The Bureau's participation takes the form of reports and recommendations to the construction agencies, namely, the Corps of Engineers and the Bureau of Reclamation.

Second, in connection with preparation of individual project proposals for Congressional consideration, we evaluate the recreation potential of such projects and recommend the proper allocation of project costs to recreation. This is done for projects sponsored by the Bureau of Reclamation, the Corps of Engineers, the Federal Water Pollution Control Administration, the Bureau of Land Management, and the Bureau of Indian Affairs.

Third, for those proposed projects which the Bureau does not have the capacity to handle itself, it reviews the recreation recommendations and allocations as proposed by construction agencies.

The second and third functions described above are handled under authority of the Federal Water Projects Recreation Act. A substantial portion of the authority in that act which was vested in the Secretary of the Interior has been delegated to the Bureau of Outdoor Recreation.

Following is a tabulation which summarizes the Bureau's water resources work this year and prospective assignments next year:

	Fiscal year 1967	Fiscal year 1968
1. Basin studies (both reconnaissance type and the more detailed type)	21	20
2. Projects appraisals (individual)	167	100
3. Review project studies made by construction agencies	180	200

No additional funds are being requested for water resource planning work in fiscal year 1968.

Special area studies.—A total of $403,000 is requested to finance studies of special areas of the Nation that offer potential for recreation development. This is an increase of $150,000 over the current year.

These studies involve areas of national or regional importance and in many instances culminate in the passage of legislation designating an area as a National Recreation Area, National Lakeshore, or National Seashore, as for example, Indiana Dunes National Lakeshore, Indiana; Pictured Rocks National Lakeshore, Michigan; Assateague Island National Seashore, Maryland and Virginia; Fire Island National Seashore, New York; Delaware Water Gap National Recreation Area, Pennsylvania and New Jersey; and Whiskeytown-Shasta-Trinity National Recreation Area, California. These are areas on which the Bureau of Outdoor Recreation had prepared a detailed study and recommendations.

Sometimes Bureau studies culminate in action by State governments rather than the Federal. This is demonstrated by the passage by the Maine State legislature of the Allagash Wilderness Waterway Act in 1966. The acquisition and development of this nationally important area will be financed jointly by the Federal government and the State of Maine with the administration remaining with the State.

Of the $150,000 increase, $75,000 is requested for an inventory of all islands over 10 acres in the United States, including Puerto Rico and the Virgin Islands. This study will determine which islands have been developed, which remain largely unspoiled, and which are already protected by public agencies. The data accumulated will be valuable in deciding which islands should be given further consideration for public protection in the interests of outdoor recreation or quality of environment. The President on November 11, 1966, directed that this study be made. It will be a two-year study.

The other $75,000 is requested to determine the feasibility and desirability of establishing a Connecticut River National Recreation Area in the States of Connecticut, Massachusetts, Vermont and New Hampshire. The Act of October 3, 1966, P.L. 89-616, which directed that this study be made authorized an appropriation of $100,000. This is also a two year study.

The Wilderness Act of 1964 established a National Wildlife Preservation System composed of federally owned areas designated by Congress as Wilderness Areas. In addition to the areas on national forest lands established as wilderness areas by the Act, primitive and roadless areas in the national forest, national park, or wildlife refuge systems may be subsequently established by an Act of Congress.

The Bureau of Outdoor Recreation, in order to fulfill its coordination functions as specified in the Organic Act (P.L. 88-29) will assist in considerations relating to the establishment of new wilderness areas being proposed by the several land management agencies involved (Forest Service, National Park Service, and Bureau of Sport Fisheries and Wildlife.) This involves study of about 175 separate areas over the next six years.

Other studies now under way may require additional work in fiscal year 1968 and additional studies may be required by Congress or by the Executive Branch. Examples include an appraisal of 1200 miles of the Missouri River from Yankton to Fort Benton as directed by the Senate Interior Committee, the basic studies prerequisite to a National Scenic River system, a National Trails system, a North Cascades National Park, and a redwoods national park. We are deeply involved in all of these undertakings, the last four of which have been recommended to this Congress by the President for legislative establishment.

Federal coordination.—A total of $912,000 is requested for this activity for fiscal year 1968—an increase of $100,000. The Bureau's Federal Coordination responsibilities are exercised through its Federal programs review responsibility, through its review of legislation, and through the President's Council on Recreation and Natural Beauty for which the Bureau provides staff services.

On May 4, 1966, the President signed E.O. 11278, establishing the President's Council on Recreation and Natural Beauty. This order provided for the following basic changes: (1) It broadened the scope of the President's Council to include natural beauty as well as recreation, (2) it added to the Council the Federal Power Commission and the General Services Administration, (3) it established an additional group; namely, a Citizens' Advisory Committee on Recreation and Natural Beauty to advise both the President and his Council. This Committee is composed of 12 distinguished citizens appointed by the President. It is chaired by Laurence Rockefeller. (4) the Bureau of Outdoor Recreation was directed to provide an executive director to the Council. It also provides staff services.

The Council is preparing a comprehensive report to the President and the Nation on natural beauty, including what has happened since the White House Conference 2 years ago and proposing citizen action. It is also investigating the potential for recreation and natural beauty of surplus Federal lands with a view to recommending to the President any desirable legislation or administrative adjustments.

The Bureau of Outdoor Recreation also assists in the staffing of the Citizens' Advisory Committee which is concentrating its attention at the moment on the undergrounding of utility lines, the disposal of solid wastes, more effective education at all levels in recreation and natural beauty, and the resolving of potential conflicts between highways and recreation, parks, and other open spaces.

It is expected that the Department of Transportation will be added to the Council shortly.

The requested increase of $100 thousand is entirely to provide more adequate staff services to the President's Council and the Citizens' Committee on Recreation and Natural Beauty.

Bureau of Outdoor Recreation—Estimated appropriation distribution—Submission to Congress including supplemental for 1967 pay cost

[Dollar amounts in thousands]

	1967		1968		Increase or decrease	
	Funds	Positions	Funds	Positions	Funds	Positions
	Salaries and expenses					
Planning and research:						
Nationwide planning	$1,612	88	$1,612	88		
Water resources	676	60	676	60		
Special area studies	253	20	403	30	+$150	+10
Subtotal, water resources and special area studies	929	80	1,079	90	+150	+10
Research and education	105	7	105	7		
Total, planning and research	2,646	175	2,796	185	+150	+10
Federal coordination:						
Federal programs review	528	43	528	43		
Legislative review	74	6	74	6		
Recreation and natural beauty	210	16	310	16	+100	
Total, Federal coordination	812	65	912	65	+100	
Technical assistance	532	40	532	40		
Total, salaries and expenses	3,990	280	4,240	290	+250	+10

See footnotes at end of table, p. 1359.

Bureau of Outdoor Recreation—Estimated appropriation distribution—Submission to Congress including supplemental for 1967 pay cost—Continued

[Dollar amounts in thousands]

	1967		1968		Increase or decrease	
	Funds	Positions	Funds	Positions	Funds	Positions
	Land and water conservation					
Assistance to States	$65,703	---------	$65,000	---------	−$703	---------
Federal programs:						
National Park Service	23,471	114	48,225	189	+24,754	+75
Forest Service	18,093	170	18,000	170	−93	---------
Bureau of Sport Fisheries and Wildlife	173	3	3,000	7	+2,827	+4
Bureau of Outdoor Recreation—Emergency planning and acquisition	---------	---------	5,000	---------	+5,000	---------
Subtotal, Federal programs	41,737	287	74,225	366	+32,488	+79
Bureau of Outdoor Recreation: Administrative expenses[1]	2,560	189	2,775	199	+215	+10
Total, land and water conservation	110,000	476	142,000	+565	32,000	+89
	Other funds					
Transfer funds (primarily Corps of Engineers and reclamation)	$450	37	$610	55	+$160	+18
Lewis and Clark Trail Commission	25	1	35	1	+10	---------
Total, other funds	475	38	645	56	+170	+18
Grand total, Bureau of Outdoor recreation	114,465	[2] 507	146,885	[2] 545	32,420	[2] +38

[1] Includes money for printing of recreation-conservation permits and audit function.

[2] Not including positions in National Park Service, Forest Service, and Bureau of Sport Fisheries and Wildlife.

PERSONNEL POSITIONS

Chairman HAYDEN. How many new positions are included in your fiscal year 1968 budget?

Mr. CRAFTS. Ten new positions.

Chairman HAYDEN. Would you place in the record a table showing these positions by grades and titles, and the particular activity in the Bureau in which the holders of them will participate?

Mr. CRAFTS. I will be happy to.

(The information follows:)

The increase of ten positions requested in the Salaries and Expenses appropriation will be utilized in newly assigned special area studies. Five of these positions will be assigned to the Connecticut River Study to determine the suitability of this area as a possible National Recreation Area. The other five positions requested will be used in preparing an inventory and study of American Coastal and Inland Islands which are still undeveloped to determine whether such areas should be recommended for recreation use.

Summary of position increase

GS-13 Recreation Resource Specialist	1
GS-12 Recreation Resource Specialist	6
GS-9 Recreation Resource Specialist	1
GS-5 Clerk Stenographer	1
GS-4 Clerk-Typist	1

NATIONWIDE OUTDOOR RECREATION PLAN

Chairman HAYDEN. The justification statement indicates that the funds to be provided in the coming fiscal year will complete and publish the first nationwide outdoor recreation plan.

Would you please describe briefly how this plan will be used?

Mr. CRAFTS. Several years ago, about five now, the Outdoor Recreation Resources Review Commission published its report with which I think all of you are familiar. Out of that Commission grew a great deal of the recreation conservation action which has occurred in the States and Federal Government in the last five years, including creation of this small Bureau, establishment of the land and water conservation fund and a number of other activities. In the Act that the Congress passed at the time this Bureau was created we were directed to prepare at five-year intervals a nationwide outdoor recreation plan. We have been working on this. It is due for submission to the President and through the President to the Congress and the Governors a year from this coming May.

It will be a policy report. It will cover the supply and demand presently and prospectively in outdoor recreation in a broad sense. It will include recommendations for action, public and private, and our expectation will be that it will serve as a policy guideline as the basis for program actions for the next five years ahead.

SECOND OUTDOOR RECREATION PLAN

Chairman HAYDEN. You also indicate in your justification statement that during the latter part of fiscal year 1968 work will begin on developing the next five-year plan which is to be completed by 1973. How does this plan differ from the one about which we just spoke?

Mr. CRAFTS. It will be, in effect, the next installment. It is hard to look six years ahead and say just how it will differ but there are rapid changes going on and I am sure it will be substantially different.

One of the things that we will be doing initially is in trying to plan the second 5-year planning a more efficient way. We have learned some lessons in this first 5-year period. My hope is that we can have less lost motion in the preparation the next time.

SPECIAL AREA STUDIES

Chairman HAYDEN. For the coming fiscal year you are proposing an appropriation of $403,000 for the special area studies, which is $150,000 more than was appropriated in this fiscal year.

How do you determine a study that is to be designated as special area study?

Mr. CRAFTS. These studies, Senator Hayden, and the term is not a very adequate term, are usually, I think, almost without exception, assigned to us either by the Congress, by a committee of the Congress, by the President, or by the Secretary.

They are studies that quite often culminate in legislative action of one sort or another. I could give you a few illustrations. One that is underway now is a study of the recreation potential of the Connecticut River Valley. This is the result of an act of Congress last year. Another is a similar type study of the Missouri River from

Fort Benton down to Yankton. This is the result of a directive of the Senate Interior Committee. We have activities underway to carry out an act last year passed by the Congress to negotiate an interstate compact on the Hudson. We have underway an island inventory that we were directed to do by the President.

I could go on and list several others but this is illustrative of the type of thing I am talking about.

Senator BIBLE. Might I ask a question at that point, Mr. Chairman.

Chairman HAYDEN. Certainly.

AUTHORIZATION FOR AREA STUDIES

Senator BIBLE. Are you required to have specific authorization to make this special area study?

Mr. CRAFTS. No.

Senator BIBLE. You mentioned the Connecticut River and I am familiar with that. You were directed to do it. But can you pick out areas around the United States under your broad powers and make a special area study?

Mr. CRAFTS. Yes, we can. We can do this under the Organic Act of the Bureau.

Senator BIBLE. Are you making that type of study?

Mr. CRAFTS. No, we do not normally. The island inventory, for example, was not undertaken by reason of a congressional directive. This is being done under the broad authority of the Bureau. We did not initiate it. This was initiated by a directive from the White House. We have made studies in the past on our own initiative, like the Assateague Island one. We were deeply involved in that one.

Senator BIBLE. I remember.

Mr. CRAFTS. Fire Island, we were involved in. Whiskeytown-Shasta-Trinity is one we were involved in. A number of those we initiated. But in the last year or two the impact on us from higher authority, so to speak, has been sufficient to utilize all the capacity that we have in this area.

Senator BIBLE. The main purpose of my question, Mr. Chairman, was to try to indicate these tremendous costs that are involved and will become more apparent as Mr. Craft testifies. It seems to me that it might be well to somewhat await a congressional directive before you get into this. I simply make that by way of suggestion. Maybe you would like to comment on it. Maybe you will develop it further. You know what these costs are as well as I do.

We are almost pricing ourselves out of business in my judgement.

Mr. CRAFTS. When we get into the land and water fund I could comment on that a little more.

Senator BIBLE. I wish you would remember and comment on that as you go along.

Mr. CRAFTS. I will.

AMERICAN ISLANDS AND CONNECTICUT RIVER STUDIES PERSONNEL

Chairman HAYDEN. The American Islands study and the Connecticut River study are proposed for the coming year and you are asking $75,000 for each of them. Do you have the necessary personnel now on the rolls or will you be required to recruit additional personnel for these studies?

Mr. CRAFTS. There are 10 more personnel contemplated for those two studies, Senator.

MISSOURI RIVER AREA RECREATIONAL OPPORTUNITIES

Chairman HAYDEN. Last year Congress directed that you utilize $50,000 to survey recreational opportunities and to recommend development of the Missouri River area between Yankton, S. Dak., and Fort Benton, Mont.

What is the status of your work on this project?

Mr. CRAFTS. The field work on this study has been largely done. The contacts and cooperation established with the Federal agencies involved of which there are a considerable number and with the States and local governments is underway. We are in what you might call the initial analytical phases of it now. I think I should say to this committee or in some manner perhaps advise the Senate Interior Committee that I am concerned as to whether we are going to be able to fully complete the job within the July 1, 1967, deadline that was given. We were given 1 year to do this. We are doing our best and we are going to come close to it but we may be a little bit late.

PRESIDENT'S COUNCIL AND CITIZENS' ADVISORY COMMITTEE ON RECREATION AND NATURAL BEAUTY

Chairman HAYDEN. The increase which you request for Federal coordination is to provide financing for staff and related services for the Citizens' Advisory Committee and to pay travel expenses of those Committee members. You indicate that during the fiscal year these expenses have been met by Federal agencies represented on the Council. Would you please submit for the record a breakdown of the contributions to the Council by each of the agencies involved?

Mr. CRAFTS. I will be glad to do that.

(The information follows:)

Expenses involved during fiscal year 1967

Citizens'Advisory Committee	$56, 400
Printing Natural Beauty Report	90, 000
Total	146, 400

Contributions by Federal agencies

Department of Commerce	20, 000
Department of the Interior	20, 000
Department of Agriculture	20, 000
Department of Defense	20, 000
Department of Health, Education, and Welfare	20, 000
Department of Housing and Urban Development	20, 000
Tennessee Valley Authority	8, 800
Federal Power Commission	8, 800
General Services Administration	8, 800
Total	[1] 146, 400

[1] Includes a one-time cost of $90,000 for printing the Natural Beauty Report.

AGENCY CONTRIBUTIONS

Chairman HAYDEN. If your budget estimate is approved then there will be no financing by any of these agencies of the Advisory Committee; is that correct?

Mr. CRAFTS. This is correct. There will be no further assessment against the other agencies.

Senator BIBLE. Might I ask a question at that point, Mr. Chairman. I am wondering why you just don't continue that practice. Why don't you continue having the Federal agencies make their payments as they do now.

Mr. CRAFTS. This could be done. It is really a half dozen of one or six of the other. When the President by executive order created the present Council and established the new Citizens Committee there was no provision made for financing the expenses of the Citizens Committee. The Committee came into existence last May and therefore the question was who is going to pay them.

Senator BIBLE. So the Federal agencies paid it. What is wrong with that?

Mr. CRAFTS. This was taken up with the Bureau of the Budget and arrangements made to assess the member agencies of the Council this year and this was done. I think it was the preference of both the member agencies and the Bureau of the Budget, instead of continuing this practice, to locate the financing in one place and they located it in the Bureau of Outdoor Recreation because under the terms of the Executive Order the Director of the Bureau is designated as Executive Director of the Council. So this seemed to be a convenient and proper place to do it.

BUDGET REQUEST

Senator BIBLE. How much money are we talking about?

Mr. CRAFTS. We are talking next year of $100,000.

Mr. RICE. Half of it would be for the Citizens' Advisory Committee and the rest of it would be for Council activities. We are talking this year of about $56,000 for the Council activities.

Senator Bible. In fiscal year 1968?

Mr. RICE. Fiscal year 1967.

Senator BIBLE. In fiscal year 1967 it was $56,000. In 1968 it will be $100,000?

Mr. RICE. No, sir; for the Citizens' Advisory Committee for the next fiscal year it will be the same as this year. The additional amount of $100,000 is also to provide additional staffing service for the Council. There are two bodies. One is the Citizens' Advisory Committee and the other is President's Council on Recreation and Natural Beauty.

Senator BIBLE. It seems to me, we have more advisory bodies and study commissions and groups to advise groups than I have ever seen. I was interested in what this embraced. You are talking about the $100,000 item.

Mr. RICE. That is correct.

Senator BIBLE. Thank you.

CONTRACT WITH NATIONAL ASSOCIATION OF COUNTIES

Chairman HAYDEN. A cooperative program with the National Association of Counties Research Foundation has been announced by the Secretary of the Interior.

What is this program and what is its status now?

Mr. CRAFTS. This is a contract that we entered into on a matching fund basis with the National Association of Counties. It is $200,000 of Federal money and an equal amount put up by the county organization over a 2-year period. They will prepare and issue about 10 publications, a list of which I can supply you, aimed primarily at being of assistance to local governmental officials and citizens who want to promote recreation at this level of government. Also, they are planning to hold what they call about 30 recreation institutes. These are meetings, working type meetings of officials in different States.

Chairman HAYDEN. Are there any additional funds for this program needed for the fiscal year 1968?

Mr. CRAFTS. No, sir, no additional funds.

Senator BIBLE. What is the annual cost of this particular activity? $100,000?

Mr. CRAFTS. It is for 2 years, we have contracted for $200,000. So that is $100,000 for each of the 2 years but we are obligating this year's money for it. So we will not use any of the 1968 money for it. They are putting in an equal amount of money.

Senator BIBLE. The money you are using is still Federal money and it is costing the Federal Government $100,000 a year. Is that correct?

Mr. CRAFTS. That is right.

THURSDAY, MARCH 9, 1957.

LAND AND WATER CONSERVATION FUND

BUDGET REQUEST

Chairman HAYDEN. The budget estimate for the Land and Water Conservation Fund in fiscal year 1968 is $142 million. Of this amount, $110 million is expected to be derived from the various receipts set up for the fund, and $32 million is to be obtained as an advance from the general fund of the Treasury as provided in the basic Land and Water Conservation Fund Act.

JUSTIFICATION

The justification for the estimates will be printed in the record.
(The justification follows:)

HIGHLIGHT STATEMENT

This program is authorized by Public Law 88–578, the Land and Water Conservation Fund Act of 1965, which was approved on September 3, 1964. The Act created a receipt account from which appropriations can be made to provide outdoor recreation facilities and opportunities at State, local, and Federal levels. It became effective on January 1, 1965, and has a terminable life of 25 years. Funds made available will provide a means of helping to bring the national outdoor recreation supply of public facilities and areas more nearly in line with the need. This will be done in two ways; (1) assisting States and their political subdivisions on a 50 percent matching basis to plan, acquire, and develop areas with high recreation potential before such lands are diverted to other uses or the cost of both land and development increases to a point where such an investment would not be economically wise and; (2) by providing funds for authorized acquisition by the National Park Service, Forest Service, and Bureau of Sport Fisheries and Wildlife.

For fiscal year 1968, the request for appropriations from the fund totals $142 million. This will provide $65.0 million for grants-in-aid to States; $69.2 million to three Federal agencies to acquire lands; $5.0 million to the Bureau of Outdoor Recreation for emergency planning and for acquisition of priority tracts of land; and $2.8 million to the Bureau of Outdoor Recreation for coordinating and administering the program. Excluding the administrative expenses, the State share of the 1968 estimate is 47 percent and the Federal program is 53 percent.

A comparison of 1967 appropriations with estimates for fiscal year 1968 is shown below:

[In thousands of dollars]

Item	Fiscal year 1967 appropriated	Fiscal year 1968 estimate	Fiscal year 1968 increase
Assistance to States	65,703	65,000	−703
Federal programs:			
National Park Service	23,471	48,225	24,754
Forest Service	18,093	18,000	−93
Bureau of Sport Fisheries and Wildlife	173	3,000	2,827
Bureau of Outdoor Recreation	----------	5,000	5,000
Subtotal	41,737	74,225	32,488
Administrative expenses	2,560	2,775	215
Total	110,000	142,000	32,000

The increase in the request for Federal purposes (National Park Service) is to acquire lands in newly authorized areas before land price escalation has made the lands prohibitively expensive. While the States have a land price increase problem, the situation is particularly acute to the Federal Government because of the publicity that is generated by a Congressional action authorizing a new area. Increased funds also are requested to acquire lands for endangered species of fish and wildlife to preserve these species from extinction. Forest Service acquisitions are contemplated at the 1967 level. The estimate for fiscal year 1968, for the first time, includes funds for emergency planning and acquisition. An amount of $5,000,000 is requested for the Bureau of Outdoor Recreation to allocate funds to Federal land acquiring agencies making it possible for them to move immediately into newly authorized areas to make preliminary surveys, title searches and conduct appraisal work. Some of these funds may be used to purchase tracts where unusually favorable terms to the Government can be arranged or where key tracts should be purchased to forestall adverse development.

The major portion of the appropriations requested will be funded from receipts covered into a special account in the Treasury, the Land and Water Conservation Fund. The receipts will be derived from the following sources:

a. The sale of the annual entrance permit and other admission and user fees at designated Federal recreation areas,

b. Net proceeds from the sale of Federal surplus real and related personal property, and

c. Existing Federal taxes on motorboat fuels.

The remainder, or $32 million, will be obtained as an advance from the general fund of the Treasury. There is a provision in the authorizing act for appropriations to be made from the general fund up to an average of $60 million annually during an eight year period beginning in fiscal year 1968. Any advance appropriation from the general fund will be repaid from receipts in the Land and Water Conservation Fund beginning in 1976, the eleventh year of the program. Also, any receipts in the Fund which are not appropriated within two years following the fiscal year in which they are received shall be transferred to miscellaneous receipts of the Treasury.

Revenues from the sales of the annual recreation permit were a disappointment in fiscal year 1965 and 1966. Although sales in fiscal year 1966 increased by some 53 percent over sales during fiscal year 1965, they fell short of the Bureau's original estimates. There are several reasons for the low returns from Federal recreation fees. First, our original estimates on the number of families who would purchase the annual permit were too high. Second, it took longer to get the program moving than originally anticipated. Third, enforcement of the fee regulations in too many cases has been weak. A contract survey of recreationists at pre-selected designated recreation areas revealed many of the visitors to designated areas who should have paid did not pay. The Bureau is working closely with the administering agencies and the Department of Justice to see how we can achieve the best possible enforcement system.

Revenues from the sale of Federal surplus property have exceeded the estimates. Had it not been for the revenues from these sales, the program through 1966 would have been seriously underfunded. Revenues to the Land and Water Conservation Fund for fiscal year 1968 are expected to range between $110 and $120 million dollars. Surplus property receipts will amount to about $70 million and motorboat fuel taxes and entrance, admission, and user fees will account for the remainder.

STATUS OF PROGRAM

1. The States have participated fully in this program. Each of the 50 States and five territories or possessions have submitted initial Statewide outdoor recreation plans. Fifty-four of these have been found adequate for a limited period. Fourteen States have updated and revised their initial plans and about seventeen additional States are expected to submit revised plans before June 30, 1967.

2. The following tabulation shows the volume of projects and/or amendments received by the Bureau as of December 31, 1966, and the progress made in processing them:

	Number	Amount
Total received	1,937	$176,575,456
Withdrawn or disapproved	−208	−20,121,132
Found to be in order technically	−1,152	−94,346,096
Total funded or obligated	(1,034)	(51,655,640)
Balance to be reviewed	577	62,108,228

3. The Federal agencies had obligated or committed $40,348,124 as of November 30, 1966, last reporting date, as shown:

	Cash available to date	Purchase commitments	Obligations incurred	Uncommitted balance
National Park Service	$38,467,605	$5,032,609	$16,202,698	$17,232,298
Forest Service	27,117,336	704,659	18,404,334	8,008,343
Bureau of Sport Fisheries and Wildlife	90,004		3,824	86,180
Total	65,674,945	5,737,268	34,610,856	25,326,821

4. The Bureau has developed an inspection program covering grants-in-aid projects and has made on site inspections on 837 projects as of December 31, 1966.

5. The Bureau also has reviewed and acted on audit reports covering audits of 16 States participating in the Land and Water Conservation Fund Program.

6. Authority to take final approving or disapproving action (within specific limits) on grants-in-aid projects has been delegated to the Regional Directors and to the Assistant Director in charge of the program. This action should help to expedite the processing of project proposals.

7. The Bureau has taken an active role in the coordination of areas designated for fee application during calendar year 1966. During the past year, the Bureau in close cooperation with the administering agencies has been evaluating the Federal recreation fee aspects of the Land and Water Conservation Fund with the view of maximizing fee collections through a uniform system of designating areas and application of fee schedules. In 1966 there was a net increase of 414 designated areas, or 20 percent above those areas or management units where fees were collected in 1965.

8. The Bureau worked with administering agencies in developing criteria supplemental to those of Executive Order 11200 for determining when a Federal recreation area should be designated as an area associated with Federal water resource development projects.

9. The Bureau initiated "Golden Eagle" information and education efforts to further explain the Federal fee program to all segments of the public and designed, printed, and distributed the "Golden Eagle" permit to agencies participating in the sale of annual permits. These activities included arrangements with the Newspaper Comics Council, travel associations, and with petroleum firms and airlines. This effort, combined with accelerated activities of Federal agencies and States, resulted in an overall increase in revenues above those collected in 1965.

10. The Bureau contracted for a private survey of user reactions at a series of randomly selected designated Federal outdoor recreation areas throughout the Nation. This survey will also give a measure of public demand for use of Federal recreation areas.

11. The Bureau prepared and distributed educational material to the administering agencies to assist in the training of personnel contacting the public at designated areas. The goal of this training is to enable Federal fee collection personnel to better explain to the public the need for recreation fees and the use made of them.

BUREAU OF OUTDOOR RECREATION

Land and water conservation

Appropriation, 1967	$110,000,000
Transferred to "Operating Expenses, Public Buildings Service," General Services Administration (building rent)	−34,914
Appropriation (adjusted)	109,965,086
Unobligated balance from prior years	107,148,046
Total available for obligation	217,113,132
Decreases:	
Assistance to States	144,218,291
Federal programs	70,360,155
Administrative expenses	2,534,686
Subtotal	217,113,132
Increases:	
Assistance to States	135,087,977
Federal programs	96,563,155
Administrative expenses	2,775,000
Total available for obligation	234,426,132
Less: Unobligated balance from fiscal year 1967	−92,426,132
Budget estimate 1968	142,000,000

Analysis by activities

	Amount available, 1967	Fiscal year 1968			Total available 1968 compared to total available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate	
1. Assistance to States	$144,218,291	$135,087,977	$70,087,977	$65,000,000	−$9,130,314
2. Federal programs	70,360,155	96,563,155	22,338,155	74,225,000	+26,203,000
3. Administrative expenses	2,534,686	2,775,000		2,775,000	+240,314
Total	217,113,132	234,426,132	92,426,132	142,000,000	+17,313,000

1. ASSISTANCE TO STATES, $65,000,000

Funds requested in 1968 will be used for grants-in-aid to States to finance 50 percent of the cost of preparing and maintaining outdoor recreation plans, acquiring land and water areas, and developing areas for outdoor recreation purposes.

2. FEDERAL PROGRAMS, $74,255,000

Funds requested in 1968 will provide for acquisition of land and water areas by the National Park Service ($48,225,000); Forest Service ($18,000,000); and Bureau of Sport Fisheries and Wildlife ($3,000,000). Funds are also requested for the Bureau of Outdoor Recreation ($5,000,000) to be allocated to the land acquiring agencies, for emergency planning of newly authorized areas and for possible acquisition of prime tracts.

3. ADMINISTRATIVE EXPENSES, $2,775,000

Funds requested in 1968 will finance the cost of administering the Federal and State programs under the Land and Water Conservation Fund Act.

1. Assistance to States

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
Assistance to States	$92, 579, 550	$65, 703, 000	$65, 000, 000	−$703, 000

1. *Assistance to States.*—A total of $65 million is requested for grants-in-aid to States to finance 50 percent of the cost of preparing and maintaining outdoor recreation plans, acquiring land and water areas, and developing areas for outdoor recreation purposes.

Needs for funds requested.—These funds will be used to match costs incurred in providing needed outdoor recreation areas and facilities at State and local levels. The need for recreation opportunities at the State and local levels is increasing at a higher rate than the increase in the population growth. Most States and political subdivisions do not have adequate financial resources to handle this problem. The funds requested under this activity will help provide a part of the needed financial resources.

Plan of work.—The States are being urged by the Bureau to utilize a greater portion of their financial resources in acquiring recreation lands. Land price escalation is a problem for the States as well as for the Federal Government. Furthermore, desirable outdoor recreation areas throughout the Nation are being preempted for other purposes and action is needed to obtain as much of these lands as possible before they are lost forever.

The States also are expected to give greater attention to the development of basic outdoor recreation facilities insofar as the use of grants-in-aid funds is concerned. The Bureau has advised the States that fund moneys will not be used for luxury type cabins and cottages and for motels and lodges. While these facilities are undoubtedly needed, the Bureau believes that other sources of financing rather than Land and Water Conservation Fund moneys should be used.

The grants-in-aid program is now operating at a high level. The States have their outdoor recreation plans approved, understand the Bureau's operating regulations and generally are staffed to handle the work.

Status of program.—From inception of the program in January 1965 through December 1966 the States had submitted 1,937 projects and amendments to the Bureau in an aggregate of $176.6 million. The breakdown of these projects is shown:

Type of project	Number	Amount
Planning	99	$3, 004, 230
Acquisition	588	71, 440, 410
Development	1, 250	102, 130, 816
Total	1, 937	176, 575, 456

The volume varies considerably by States. Some States have submitted projects in excess of apportionments while others are just beginning to submit projects. A State-by-State breakdown as of December 31, 1966, showing the status of funds apportioned from inception through fiscal year 1967 follows:

	Amount of apportionment	Total requests received		Total qualified		Total obligated	
		Number	Amount	Number	Amount	Number	Amount
STATE							
Alabama	$2,567,034	5	$1,025,781	2	$196,799	2	$196,799
Alaska	1,430,017	31	3,090,270	17	1,253,170	15	834,950
Arizona	2,011,321	41	1,742,986	26	1,068,213	23	936,438
Arkansas	1,931,862	16	3,031,253	12	1,449,927	12	793,761
California	8,304,813	47	11,591,786	38	10,495,032	24	5,842,216
Colorado	2,140,966	43	846,133	32	556,345	32	556,345
Connecticut	2,517,505	23	2,157,034	15	778,537	13	746,787
Delaware	1,473,180	3	1,039,765	3	1,039,765	2	800,250
Florida	3,610,709	1	4,250,000	1	1,250,000	1	1,250,000
Georgia	2,739,672	27	2,149,557	19	1,360,315	19	1,360,315
Hawaii	1,681,043	16	1,187,806	13	881,434	13	881,434
Idaho	1,568,987	36	1,433,784	30	1,272,600	24	980,657
Illinois	5,877,239	23	7,177,125	9	1,829,891	3	240,412
Indiana	3,294,308	17	1,150,844	7	695,438	5	220,188
Iowa	2,559,354	37	1,572,842	11	782,670	10	441,650
Kansas	2,238,279	107	5,963,506	76	3,793,433	54	1,569,417
Kentucky	2,536,541	2	1,763,650	2	1,763,650	2	1,763,650
Louisiana	2,743,997	68	3,747,571	21	870,201	21	784,911
Maine	1,731,072	28	3,907,501	25	2,391,815	22	961,403
Maryland	3,015,311	24	10,439,223	21	6,281,621	15	661,072
Massachusetts	3,548,996	14	197,302	13	189,450	13	189,450
Michigan	4,918,985	51	3,238,562	13	1,147,109	13	804,609
Minnesota	2,815,766	23	308,231	7	197,636	7	197,520
Mississippi	1,998,137	18	814,598	7	233,582	7	227,332
Missouri	3,299,502	126	5,269,446	39	2,106,807	33	1,905,657
Montana	1,793,060	42	1,126,388	39	1,005,118	39	1,005,118
Nebraska	1,993,443	47	2,914,376	40	2,666,176	28	1,825,086
Nevada	1,495,632	6	4,291,510	3	3,391,510	3	3,391,510
New Hampshire	1,605,210	10	3,686,051	7	3,226,551	6	810,911
New Jersey	4,222,005	48	18,513,156	12	7,164,615	9	1,302,770
New Mexico	1,879,911	68	2,239,781	46	1,031,987	45	943,761
New York	9,265,284	41	15,890,240	29	13,475,051	29	3,773,974
North Carolina	2,831,275	40	1,766,222	13	288,248	13	288,248
North Dakota	1,641,322	92	1,987,219	49	1,401,680	43	1,092,030
Ohio	5,427,593	8	6,325,455	3	918,253	2	873,253
Oklahoma	2,249,130	20	746,018	11	325,260	11	325,253
Oregon	2,131,765	58	919,412	55	887,332	46	807,668
Pennsylvania	6,048,162	23	3,609,512	4	972,186	4	920,916
Rhode Island	1,715,548	20	6,078,208	8	1,080,101	7	685,638
South Carolina	2,182,200	22	406,772	12	293,760	12	293,387
South Dakota	1,807,062	27	334,640	15	120,147	15	120,147
Tennessee	2,596,992	1	32,376	1	32,376	1	32,376
Texas	5,971,502	21	3,030,481	17	2,624,819	15	2,265,316
Utah	1,756,593	13	1,037,220	8	114,173	8	114,173
Vermont	1,679,614	36	1,148,962	34	1,118,460	33	900,527
Virginia	2,809,493	19	10,390,649	12	2,260,149	10	1,240,403
Washington	2,483,446	35	1,914,185	26	1,638,127	26	1,262,677
West Virginia	2,014,770	20	1,530,497	6	427,096	6	427,096
Wisconsin	3,051,281	121	5,134,066	37	2,621,173	32	508,137
Wyoming	1,575,518	50	711,307	33	496,653	33	418,387
TERRITORY							
District of Columbia	[1] 832,271	4	799,500	------	------	------	------
Puerto Rico	[1] 1,341,399	3	743,856	3	743,856	3	743,856
Virgin Islands	[1] 208,335	------	------	------	------	------	------
Guam	[1] 221,402	2	56,042	1	31,000	1	31,000
American Samoa	[1] 202,671	3	114,799	2	104,799	2	104,799
Total	[1] 147,588,485	1,727	176,575,456	985	94,346,096	867	51,655,640

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[1] Includes $830,000 special apportionment to territories.

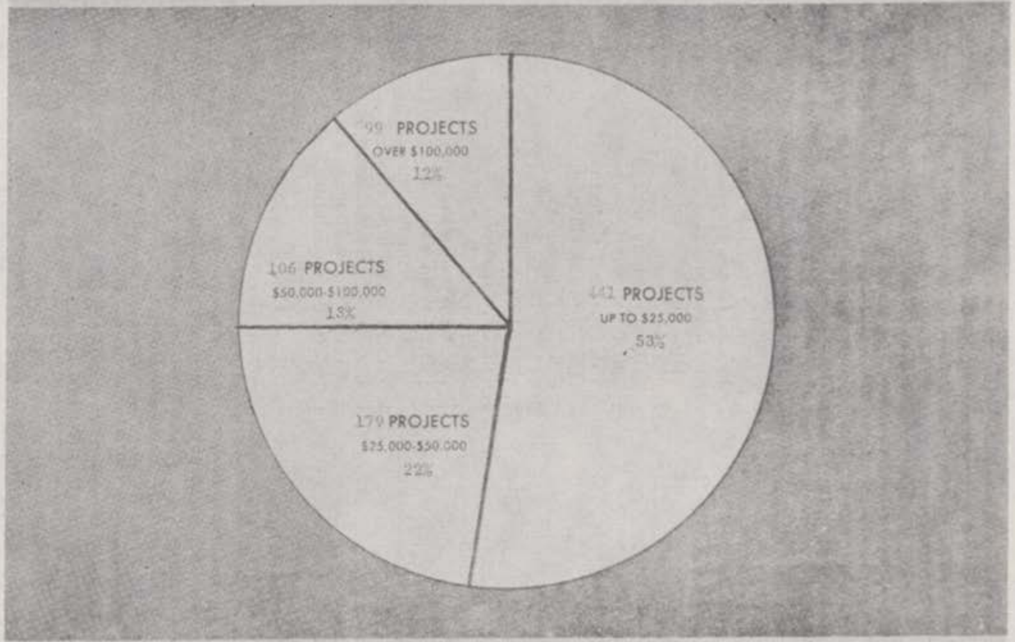
Funds made available to States may be used for planning, for acquisition of land and water areas and for developing recreation areas. Of the $65 million requested for States in fiscal year 1968, it is estimated that one million dollars will be used for planning, $30 million will be used for land acquisition and $34 million will be used for development. These estimates reflect a greater use of funds for land acquisition than has been the case up to the present time. The funds requested for fiscal year 1968, if approved, will be apportioned to States in the approximate amounts shown:

State	*Amount*
Alabama	$1, 062. 7
Alaska	594. 2
Arizona	828. 9
Arkansas	799. 4
California	3, 476. 7
Colorado	879. 3
Connecticut	1, 061. 1
Delaware	610. 1
Florida	1, 590. 7
Georgia	1, 151. 7
Hawaii	727. 3
Idaho	648. 3
Illinois	2, 412. 8
Indiana	1, 363. 6
Iowa	1, 089. 0
Kansas	915. 1
Kentucky	1, 169. 6
Louisiana	1, 132. 9
Maine	719. 9
Maryland	1, 317. 5
Massachusetts	1, 439. 5
Michigan	2, 081. 9
Minnesota	1, 167. 6
Mississippi	824. 8
Missouri	1, 479. 4
Montana	739. 0
Nebraska	815. 3
Nevada	624. 8
New Hampshire	714. 0
New Jersey	1, 747. 0
New Mexico	$786. 1
New York	3, 884. 0
North Carolina	1, 168. 1
North Dakota	672. 5
Ohio	2, 203. 4
Oklahoma	914. 4
Oregon	936. 6
Pennsylvania	2, 442. 7
Rhode Island	715. 6
South Carolina	903. 7
South Dakota	754. 2
Tennessee	1, 079. 2
Texas	2, 467. 6
Utah	723. 2
Vermont	755. 5
Virginia	1, 166. 5
Washington	1, 022. 2
West Virginia	838. 1
Wisconsin	1, 271. 0
Wyoming	644. 9
District of Columbia	360. 0
Puerto Rico	577. 8
Virgin Islands	91. 6
Guam	98. 6
American Samoa	88. 4
Subtotal	61, 750. 0
Reserve	[1] 3, 250. 0
Total	65, 000. 0

[1] Contingency reserve of 5 percent.

STATE AND LOCAL FUNDED PROJECTS

(Number, Amount and Percent of Total)



The above pie chart shows for projects heretofore approved the numbers of projects by dollar size that have been approved, cumulative to December 15, 1966.

2. FEDERAL PROGRAM

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
Federal program	$42,358,431	$41,737,000	$74,225,000	+$32,488,000

2. *Federal program.*—A total of $74,225,000 is requested for fiscal year 1968 to provide funds for the acquisition of land and water areas by the National Park Service, Forest Service and the Bureau of Sport Fisheries and Wildlife. Funds also are requested for the Bureau of Outdoor Recreation to be allocated to the land acquiring agencies for emergency planning of newly authorized areas and for possible acquisition of prime tracts of land.

National Park Service	$48,225,000
Forest Service	18,000,000
Bureau of Sport Fisheries and Wildlife	3,000,000
Bureau of Outdoor Recreation	5,000,000
Total	74,225,000

Need for funds requested.—The funds requested for acquiring land and water areas are to assist in meeting the needs of an increasingly heavy visitor load on Federal recreation areas and to acquire areas suitable for preserving certain species of fish or wildlife threatened with extinction.

One of the best indicators of need for additional Federal recreation lands is the overcrowded conditions of existing areas. The visitor load increases markedly each year making it difficult to overcome these overcrowded conditions. Furthermore, public access to the recreation lands and to the lakes, streams and the ocean beaches has diminished by reason of such areas being acquired by private interests or converted to other than recreation purposes. All of these facts lend support to the proposed acquisition of additional lands for public use.

Sec. 6(a) of the Land and Water Conservation Fund Act of 1965 authorizes the use of moneys appropriated from the Fund for acquisition of land, waters, or interests in land or waters. There are quoted below provisions of the Act related to the acquisition of such areas:

"*National Park System; Recreation Areas.*—Within the exterior boundaries of areas of the national park system now or hereafter authorized or established and of areas now or hereafter authorized to be administered by the Secretary of the Interior for outdoor recreation purposes.

"*National Forest System.*—Inholdings within (a) wilderness areas of the National Forest System, and (b) other areas of national forests as the boundaries of those forests exist on the effective date of this Act which other areas are primarily of value for outdoor recreation purposes: Provided, that lands outside of but adjacent to an existing national forest boundary, not to exceed five hundred acres in the case of any one forest, which would comprise an integral part of a forest recreational management area may also be acquired with moneys appropriated from this fund: Provided further, that not more than 15 percentum of the acreage added to the National Forest pursuant to this section shall be west of the 100th meridian.

"*Threatened Species.*—For any national area which may be authorized for the preservation of species of fish and wildlife that are threatened with extinction.

"*Recreation at Refuges.*—For the incidental recreation purposes of Section 2 of the Act of September 28, 1962 (76 Stat. 653; 16 U.S.C. 460 K–1)."

Section 6(a) also provides for payment into miscellaneous receipts as a partial offset of those capital costs, if any, of Federal water development projects hereafter (from January 1, 1965) authorized to be constructed by or pursuant to an Act of Congress which are allocated to public recreation and the enhancement of fish and wildlife values and financed through appropriations to water resource agencies. This provision will not become effective until such time as projects authorized after the date of the Land and Water Conservation Fund Act have been developed and have been designated as areas where fees may be charged. Therefore, no funds are included in this estimate for payment into miscellaneous receipts.

Plan of work.—Land and water areas scheduled to be acquired during fiscal year 1968 are priority acquisitions for meeting recreation needs or preserving endangered species. Proposed acquisitions have been scheduled to the extent possible in those areas of the Nation which show the greatest deficit in recreation resources. Proposed acquisitions by the Forest Service, for example, are mainly in the eastern half of the country. This is where the need is greatest and also is in conformance with the above quoted provisions of the Land and Water Conservation Fund Act that not more than 15 percentum of the acreage acquired by the Forest Service shall be west of the 100th meridian. The estimate for National Park Service involves significant acquisitions in the eastern portion of the country for newly authorized areas.

The estimate for the Bureau of Sport Fisheries and Wildlife is mainly for lands to preserve the Key Deer in Florida and the Columbia Whitetailed deer in Washington.

The need for the funds by each agency is identified below:

NATIONAL PARK SERVICE, $48,225,000

The request of $48,225,000 is an increase of $24,754,000 over the amount appropriated for fiscal year 1967. This relatively large increase is requested for the deliberate purpose of obtaining sufficient funds to begin an effective program of combating land price escalation. It has been determined that one of the best ways of overcoming spiraling land costs is to buy as much of the lands as possible as soon as an area has been authorized by Congress. This action allows the Government to establish a land price pattern and decreases the chances of major speculations. With this purpose in mind, the acquisition program of the National Park Service for fiscal year 1968, contemplates utilizing about $43.9 million of the $48.2 million requested to purchase lands in newly authorized areas.

The newly authorized areas and inholdings in which most of these funds will be utilized and the amount programed for each are listed below:

NEWLY AUTHORIZED AREAS

	Amount
Whiskeytown-Shasta National Recreation Area	$6,000,000
Lake Mead National Recreation Area	783,000
Indiana Dunes National Lakeshore	6,500,000
Assateague Island National Seashore	6,439,100
Piscataway Park, Maryland	2,738,900
Pictured Rock National Lakeshore	800,000
Delaware Water Gap National Recreation Area	11,000,000
Fire Island National Seashore	3,864,900
Guadalupe Mountain National Park	1,800,000
San Juan Island National Historic Park	1,750,000
All other proposed acquisitions, less than $500,000 per unit	2,247,700
Subtotal	43,923,600

INHOLDINGS

Everglades National Park	1,048,000
Virgin Islands	511,300
Grand Teton National Park	870,200
All other proposed acquisitions, less than $500,000 per unit	1,871,900
Subtotal	4,301,400
Total amount programed	48,225,000

The need to buy lands in newly authorized areas before speculation occurs is the primary purpose of seeking an advance of $32 million to the Land and Water Conservation Fund from the general fund of the Treasury.

With the increase in staff requested for fiscal year 1968, the National Park Service will be able to utilize effectively the increased funds requested and should move ahead in acquiring these lands in an orderly manner.

FOREST SERVICE, $18,000,000

Public recreation use of the National Forest System reached a new high in calendar year 1965 with an estimated 160,000,000 visitor-days. Recreation use is increasing at an annual rate of 10 percent. This places increased urgency to acquire additional recreation lands suitable for recreation development and enjoyment. For example, the National Forest Recreation Survey shows that 16,900 additional recreation sites are needed in order to provide projects required at one time capacity for 2,500,000 visitors.

The Land and Water Conservation Fund provides the necessary financing to acquire lands for new recreation facilities, for expansion of existing campgrounds and other facilities, protection of the wilderness system, and for other recreation uses. Acquisition of many of the required lands will provide an additional benefit through a practical program for recreation development in economically depressed rural areas with increased growth of ourist and other recreation use industries in these areas.

In the recommended fiscal year 1968 program for the Forest Service, there is continued emphasis to acquire recreation lands serving the population centers of the Eastern United States. Under the $18,000,000 program, the Forest Service proposes to acquire 91.7 percent of the acreage east of the 100 meridian at a cost of $13,377,800; with 8.3 percent of the acreage in the western United States at a cost of $4,622,200. All of the lands in the east are within three (3) hours driving time of at least one major population center of 50,000 people and are within a day's driving time of at least one of the eighteen (18) largest population centers of the east.

The program in the western part of the United States includes 2,601 acres located in the wilderness system or in primitive areas under study for possible inclusion in the wilderness system. Subdivision or other adverse use of these lands would severely damage the purposes for which the areas were established. Failure to acquire these properties as they are available will also result in continued escalation of land prices in the future.

Any appropriation made available to the Forest Service from the Land and Water Conservation Fund will be expended for the acquisition of lands, waters, or interests therein under authorities of the Act of March 1, 1911, as amended (16 U.S.C. 513–519), the Act of August 3, 1956 (7 U.S.C. 428a), and/or the special acts creating National Recreation Areas.

BUREAU OF SPORT FISHERIES AND WILDLIFE

The estimate of $3,000,000 is for land acquisition for propagation and preservation of endangered species of native wildlife. The Endangered Species Preservation Act (80 Stat. 926) authorizes the use of Land and Water Conservation Fund moneys to buy land for restoration and propagation of threatened species. It also amends the Key Deer Refuge Act by removing the limitation of 1,000 acres on acquired land and by removing the prohibition against condemnation of lands traversed by U.S. Highway No. 1, except for lands within 1,000 feet of either side of the Highway; and changes the limitation on appropriated funds that may be used for the acquisition of lands for the refuge from $35,000 to $2,035,000. The Land and Water Conservation Fund Act authorizes the use of "Fund" moneys to buy land for the preservation of threatened species if otherwise authorized by law. Funds requested for fiscal year 1968 will be used to acquire lands to preserve the Key Deer and the Columbia White-tailed Deer and to acquire lands for an endangered species research center.

Key Deer.—The proposed acquisition is in Monroe County, Florida, comprising 1,854 acres at an estimated cost of $1,900,000. The diminutive Key Deer is limited to a specific habitat found in the lower Florida Keys. The existing National Key Deer Refuge includes 835 acres acquired or withdrawn under special legislation. An additional 465 acres have been withdrawn within the Great White Heron Refuge. In addition, some lands are leased for Key Deer management and protection, but these can be terminated on 90 day's notice. The proposed acquisition is to preserve enough habitat to maintain a minimum herd to assure survival of the population in a natural environment. Though the Key Deer population has increased from less than 50 in 1950 to about 400 animals at present, the trends and patterns of real estate development point to very serious problems in the future. Real estate developments, built in response to an increasing demand for weekend and vacation facilities on the Keys, are encroaching on the Key Deer habitat and forcing land prices to skyrocket. The lease program is beginning to lose its effectiveness and is destined to fail, as a continuing program. Outright purchase in fee before the land is cleared and drained is the only means of assuring the preservation of Key Deer habitat.

Columbia White-tailed Deer.—The proposed acquisition is in Wahkiakum County, Washington, comprising an area of about 2,000 acres, of which 970 acres are proposed for acquisition in fiscal year 1968 at a cost of $350,000. The Columbia White-tailed Deer is threatened with extinction from loss to intensive agricultural development of its selected and limited habitat. Elimination of normal annual floods, as well as periodic floods of disastrous proportions, has made it economically feasible to clear, level, and plant the river bottom lands historically occupied by the Columbia White-tailed Deer. At one time the deer were widely distributed in the Lower Columbia River Basin from the Dalles to Astoria, and along the lower reaches of the Willamette and Lewis Rivers. The last of the Columbia White-tailed Deer habitat is being cleared at a rapid rate. The deer are very restricted in range and highly selective in habitat and it has been found that they cannot adapt to available coastal range woodlands occupied by the Columbia Black-tailed Deer.

Patuxent Endangered Species Research Center.—The proposed acquisition is in Prince Georges County, Maryland, 15 miles northeast of Washington, D.C. The proposal includes about 470 acres of which 253 acres are included in the fiscal year 1968 program. The estimated cost of the 253 acres is $750,000. Since this is the maximum amount allowed by the Endangered Species Preservation Act for acquisition of any one area, specific authority must be obtained for the additional land needed.

Detailed research is prerequisite to a full program to preserve endangered species. The limiting biological factors must be determined for each species before a realistic program can be developed. The Endangered Species Research Center which is an addition to the Patuxent Wildlife Research Center will provide laboratory facilities for research in nutritional requirements, genetics, disease, propagation, and behavior. The station will hold a variety of species to serve as breeding stock for testing, captive propagation, imprinting, and release. One of the major objectives of the station is to develop techniques for propagating certain species in captivity, and reintroducing the resulting stock into the wild.

BUREAU OF OUTDOOR RECREATION

An amount of $5 million is requested for the Bureau of Outdoor Recreation for emergency planning and for acquisition of priority tracts of land. The purpose of seeking such sum is to allow the Federal Government to move ahead immediately after the enactment of authorizing legislation to perform all of the preliminary surveys and investigations that are associated with land acquisitions and to acquire key tracts of lands that appear to be most significant for recreation needs in the particular area. The Bureau believes that through such a procedure significant benefits will accrue to the Federal Government because (1) actions can be taken to acquire lands before speculators have moved into the area or to stop subdivision work underway and (2) the initial purchase by the Federal Government may establish a price pattern that will be helpful in future purchase negotiations or in establishing values in the event an action is taken to the courts.

The funds requested would be utilized in establishing land ownership data, topographic and photogrammetric mapping and preparing the necessary legal descriptions. Also included will be the initial needs for tract appraisals and title evidence. Normally several months are involved in contracting for and obtaining the delivery of the complete mapping and surveying required in land purchases and for assembling other basic legal and engineering information. With funding available immediately upon authorization much time can be saved.

The major portion of the funds is expected to be utilized in acquiring those tracts which are the most desirable in meeting the recreation needs or in instances where willing sellers offer their lands at very attractive prices.

The amount of funds proposed for this purpose is less than five percent of the total Land and Water Conservation Fund budget. It is believed that this is a very reasonable request in view of the potential benefits to the Federal Government through such a program.

The Bureau would not perform the preliminary land work or purchase tracts. It would allocate funds to the Federal land acquiring agencies on a case by case basis to provide these agencies with the financial resources needed to move ahead promptly.

In accordance with directives contained in the House and Senate Reports on the Interior and Related Agencies Appropriations Bill, 1966 the Bureau has reviewed and evaluated the lands proposed to be acquired with funds requested in 1968.

The areas proposed for purchase and descriptive data thereon are included in a separate document made available to the committee.

Status of program.—Funds available and those requested for 1968 for purchasing land and water areas are listed:

[In thousands of dollars]

	National Park Service	Forest Service	Bureau of Sport Fisheries and Wildlife	Total
Fiscal year 1965—Appropriated	$4,805.0	$750.0	----------	$5,555.0
Fiscal year 1966—Appropriated	21,371.5	16,894.4	----------	38,265.9
Fiscal year 1967—Appropriated	23,471.5	18,093.0	$172.5	41,737.0
Fiscal year 1968—Budget request	48,225.0	18,000.0	3,000.0	69,225.0
Total	97,873.0	53,737.4	3,172.5	154,782.9

Of the funds appropriated through fiscal year 1967 the Federal agencies had obligations and purchase commitments totaling more than $40 million as of November 30, 1966. The amount by agency is shown:

	Obligations	Purchase commitments
National Park Service	$16,202,698	$5,032,609
Forest Service	18,404,334	704,659
Bureau of Sport Fisheries and Wildlife	3,824	----------
Total	34,610,856	5,737,268

Although the land acquisition program has been accelerated substantially in recent months, funds are not obligated until purchase agreements have been signed. Thus, obligations do not reflect a true picture of progress.

3. ADMINISTRATIVE EXPENSES

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−) compared with 1967
Administrative expenses	$1,440,000	$2,560,000	$2,775,000	+$215,000

3. *Administrative expenses.*—A total of $2,775,000 is requested to finance the cost of administering the Federal and State programs under the Land and Water Conservation Fund Act. These funds also finance the cost of printing and selling the Federal Recreation Area entrance permits and the development and overview of the admission and user fees program applicable to designated Federal recreation areas.

Need for funds requested.—The increase requested will provide the funds to finance additional staff to conduct inspections of grants projects and to administer provisions of Title VI of the Civil Rights Act of 1964. Present staff available to the Bureau is not adequate to process the large number of project proposals and also do the necessary compliance and inspection work that needs to be done. The Bureau is also guided by the House Appropriations Committee directive that it be more aggressive in informing the public on the Federal Recreation Area Entrance Permit. Funds are needed for entering into sales agreements with a variety of organizations and agencies and for preparing materials informing the public of areas designated as fee areas and for preparing related informational materials.

Plan of work.—The major activities of the Bureau in fiscal year 1968 in administering the State and Federal programs under this fund include:

(a) Reviewing, evaluating and approving Statewide Outdoor Recreation Plans. State plans will be reviewed to determine their adequacy for continued eligibility of the State to receive financial assistance from the Land and Water Conservation Fund for the acquisition and development of outdoor recreation areas and facilities.

Greater emphasis is being placed on State Plans as the coordinating instrument of all outdoor recreation plans and programs within the States. Consequently, the revised and updated plans which will be submitted to the Bureau in the future are expected to be more comprehensive.

The Bureau will expect the updated plans to be more specific in setting forth the resources and needs of the State and in reflecting demands for outdoor recreation. Particular attention will be given to the State's proposals for sharing the benefits of the Fund with local governments, for enhancing the natural environment and for meeting urban needs. Approximately 26 revised plans are expected to be reviewed during fiscal year 1968.

(b) Providing assistance to States in developing Statewide Plans.

The Bureau expects an increasingly heavy load of requests as the States prepare their updated and revised plans in order to continue their eligibility. States must be engaged in a continuous planning program in order to keep their plans updated to qualify for extended periods of eligibility. Many States may continue to get short periods of eligibility, requiring additional refinements and updating of material until they have a plan which is complete in all respects. Such fully comprehensive plans must be qualified within five years from date of approval of their first plan. Frequently the States just do not have the technical skills to take full advantage of the opportunities offered under the Land and Water Conservation Fund Act. If the Bureau is unable to provide this needed planning assistance, there is a possibility that many of the States' programs will be seriously delayed. In addition, only the Bureau is in a position to coordinate State plans adequately with those of various Federal agencies.

(c) Reviewing, evaluating and processing an estimated 2,500 grants submitted by States.

Project proposals will be reviewed to determine the manner and degree to which they conform to the Statewide outdoor recreation plans.

After it has been determined that projects are in accordance with the State plans, it is necessary to further review the proposals for conformance to program criteria and policy. Care must be given to see that proposals seek to improve the quality of the environment and will enhance the capacity of the State to provide a significant outdoor recreation opportunities. Consultations may be held with representatives of other Federal, State and local agencies, and on occasion with private groups and individuals. In many instances it may be necessary to visit the site. The Bureau must also ascertain the effectiveness of the practices, procedures, and past performance of the applicant.

The number of proposals to be received is estimated to increase from 1,750 in fiscal year 1967 to 2,500 in fiscal year 1968. Also, the quality of the proposals will be given greater consideration as the grantees gain experience. Experience has shown that the individual projects have been larger than expected, with corresponding increases in complexity and in the time required to review the projects.

(d) Administration of on-going projects.

It will be necessary in 1968 to supervise an estimated 2,621 projects underway. This function represents a major part of the total workload under the grants-in-aid program.

Project progress reports must be reviewed, and on-site inspections will be made, as necessary, to check for compliance with terms of the project agreement and for compliance with civil rights laws and regulations.

Title VI of the Civil Rights Act places a burden on the Bureau that was not contemplated at the outset of the program. Under this Act and based on instructions issued thereunder, the Bureau must (1) assure that States agree to comply; (2) obtain reports periodically on compliance and review these reports; (3) make on-site reviews to assure compliance and check with local sources; (4) investigate complaints, hold hearings, issue requests thereon, and take corrective action; and (5) report weekly and monthly to the Office of the Secretary on this activity.

Without more experience, an accurate workload pattern cannot be projected, but it seems reasonable that Title VI reviews will run as high as 1,000 projects annually and considerable travel will be involved.

The rate of progress on the project will also be measured. Proposed amendments of projects must be reviewed and negotiations will be conducted on changes which involve significant deviations from the scope of the original agreement or in the amount of assistance required. Requests for payments will be reviewed, comparing the amounts requested with the rate of progress accomplished before payments are made. The volume of reports and correspondence on specific projects will be considerable, and files and records must be set up and adequately maintained for proper administration.

It is estimated that engineering and appraisal review and action in 1968 will be required on approximately 600 complicated appraisals, plans, and specifications. The size of individual projects is larger than expected making it necessary to review appraisals and plans and specifications on a larger proportion of projects.

(e) Audit of grants-in-aid projects.

The estimate of $2,775,000 includes funds for auditing State financial records which relate to expenditures in connection with approved projects. This function will be performed by auditors in the Office of the Secretary. Audit reports are submitted to the Bureau and the Bureau must provide the staff to follow up on audit findings and insure that corrective actions are taken. This requires a careful review of the audit reports, a determination of what action, if any, is to be taken on audit finding, the preparation of letters to States setting forth corrective actions needed and obtaining assurances from States that corrective action has been taken. On many occasions, the Bureau provides advisory assistance to the States in developing adequate accounts to meet Federal requirements.

(f) Development of long-range program—Federal land acquisition.

In fiscal year 1968, emphasis will be placed on assisting the Federal land acquiring agencies in developing long-range land use and recreation development plan for each management unit. Such plans will enable the agencies and the Bureau of Outdoor Recreation to make meaningful judgment as to the lands needed for optimum recreational utilization of the management unit and the establishment of acquisition priorities. The immediate goal is a Federal land acquisition program coordinated with local, State, regional, and national recreation plans and needs. This will require a considerable degree of coordination and the establishment of working arrangements at all Government levels.

(g) Reviews of proposed Federal land acquisitions.

The Bureau is charged with the responsibility for reviewing on-site or otherwise the lands programed by Federal agencies for acquisition from the Land and Water Conservation Fund. The heaviest workload arises from on-site reviews which the Bureau conducts under the following guidelines:

1. *On-site review of management units.*—The Bureau conducts an on-site review of the agency five year management unit land acquisition program if one or more of the following conditions exist.

(a) The total estimated cost of acquisition during the budget year is $300,000 or more.

(b) The total estimated cost of improvements to be acquired in the budget year is $100,000 or more.

(c) Estimated land acquisition costs are estimated to total $1,000,000 or more during the five-year program

2. *On-site review of tracts.*—The Bureau conducts an on-site review of individual tracts proposed for acquisition if one or more of the following conditions exist:

(a) Total estimated cost of the tract exceeds $25,000.

(b) Total estimated value of improvements exceeds $10,000.

(c) Total estimated cost of tract exceeds $300 per acre; except unimproved lots in subdivisions with values in excess of $300 per acre may be inspected on a sample basis or grouped together and covered in a single report.

(d) Total area of tract exceeds 1,000 acres.

(h) Reprograming—Federal land acquisition.

Because of the numerous properties involved, the escalation of land values, the time lag between budget estimates and acquisition, the impracticability of appraising and securing options in advance of budgeting and the need to acquire high priority tracts that become available, program adjustments will continue to be a big factor in the land acquisition workload.

Tracks proposed for substitution for those in the program must be inspected and checked for conformance with overall plans and for adherence to criteria, as well as for the basis used in establishing the estimated costs.

(i) Coordination of the administration of recreation entrance and user fees and the designation of Federal charge areas.

This function has a direct effect on the revenues collected from recreation fees deposited in the Land and Water Conservation Fund and it is vital that the Bureau's efforts in this area be expanded. The Bureau has taken a more active role in this field but has not been able to devote adequate efforts at the field level to study the comparisons of fees charged at Federal, State, and private recreation areas and the possible expansion of the fee system to additional Federal areas.

Also, even though this program is almost two years old, there is a general lack of public awareness about the purpose of the Land and Water Conservation Fund Act program, particularly with regard to knowledge about the fees and the designated Federal charge areas. This situation was called to the Bureau's attention and was discussed in hearings before the House Subcommittee on Appropriations early this year. Efforts have been instituted to overcome this situation and continued efforts will be made in fiscal year 1968.

Status of program.—Although the Land and Water Conservation Act became effective two years ago (January 1, 1965), an extended tooling-up period was necessary. The Federal land acquiring agencies had never before experienced a workload of this magnitude and the States in many instances were not staffed to get the grant program underway promptly, particularly as it affects local units of government. Furthermore, the Bureau of Outdoor Recreation had to staff up and develop the detailed regulations and procedures for administering the program.

Each State was required, under the Act, to prepare a Statewide Outdoor Recreation Plan as a prerequisite to obtaining financial assistance for land acquisition and development projects. As a consequence it was about October 1965 before the first project proposals were received by the Bureau.

The volume was low at first but increased to such an extent that the Bureau had a backlog of 695 projects or amendments amounting to $72,800,000 as of August 31, 1966. Some gains are being made in overcoming the backlog and as of December 31, 1966, 577 projects or amendments amounting to $62,108,228 were on hand. The Bureau has processed an average of 157 projects or amendments averaging $12.2 million each month during the period September–December 1966.

The Bureau has undertaken to mesh its grants-in-aid program with those grants programs being undertaken by other Federal agencies to avoid duplication of Federal efforts. Consultations have been undertaken with several agencies of the Department of Housing and Urban Development, the Economic Development Administration, the Office of Regional Economic Development, the Soil Conservation Service, Agriculture Stabilization and Conservation Service, the Office of Economic Opportunity, Office of Education, Appalachian Regional Commission, and the Bureau of Sport Fisheries and Wildlife. In some cases, formal agreements have been worked out, notably those required under Executive Order 11237 relating to coordination between the Fund program and the Open Space Program of DHUD. Others have resulted in some procedural arrangements and in tentative proposals to undertake more formal arrangements when staff time would allow such action.

To facilitate the development of the Federal program, the following coordination memorandums have been promulgated in consultation with the land acquiring agencies:

1. Coordination Memorandum No. 5—"Request for Federal Land Acquisition Programs": This memorandum established the policy and procedural quidelines to be followed in the development of the coordinated Federal land acquisition program.

2. Coordination Memorandum No. 7—"Reprograming for Federal Outdoor Recreation Land Acquisition." The purpose of this coordination memorandum was to set forth the guidelines governing the reprograming of funds appropriated for Federal land acquisition from the Land and Water Conservation Fund and the procedures to be followed by participating Federal agencies in submitting reprograming proposals to the Bureau of Outdoor Recreation for processing and approval within the authorities established by the House and Senate Appropriations Committees. Among other things this memorandum established guidelines and criteria for the deletion of tracts from approved programs, addition of new tracts, maintenance of records and preparation of reports, including semiannual reports of accomplishments and quarterly reprograming reports.

A systematic review of long-range recreation land acquisition and development programs as planned for each management unit (a National Park or Forest) by the acquiring agency has been undertaken by the Bureau of Outdoor Recreation. This type of review is essential if meaningful evaluations are to be made of the individual tracts proposed for acquisition.

This Bureau has strongly urged the land acquiring agencies to improve their techniques in the preparation of land cost estimates so that these estimates will reflect fair market value *at the time funds become available to purchase the land.* Recognizing that this lag will be at a minimum of 12 months, acquiring agencies are also being encouraged to determine, as far as possible, whether the owners of a tract to be included in the budget request will be willing to sell at a fair market value, when funds are available. The goal is to have cost estimates prepared so that they will accurately reflect for each tract the fair market value of the land, improvements, if any, and other interests to be acquired. However, it is realized that because of varying and unforeseen upward trends in real estate prices or other factors which cannot be determined without an expensive full appraisal and time-consuming detailed inspection, the estimated cost of some individual tracts may vary from final purchase price.

The following table shows the status of the Land and Water Conservation Fund Programs as of November 30, 1966:

	Forest Service	Park Service	States
Revenues accrued and allotted	$27,117,336	$38,467,605	$127,181,992
Deduct:			
Obligations through Nov. 30, 1966	18,404,334	16,202,698	[1] 51,665,000
Purchases underway but title not yet passed to Government	704,659	5,032,609	
Projects approved as technically adequate but funds not yet obligated [2]			42,681,000
Remainder of uncommitted funds	8,008,343	17,232,298	32,835,992

[1] As of Dec. 31, 1966.

[2] States have not requested that funds be obligated. All of these projects may not be financed from available funds.

Itemization of estimate

	Actual, 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$29,072,804	$124,687,000	$164,460,000	+$39,773,000
Transferred to "Operating expenses, Public Buildings Services," General Services administration	4,457	34,914		−34,914
Unobligated balance lapsing	157,131			
Unobligated balance available, start of year	14,267,790	107,148,046	92,426,132	+14,721,914
Unobligated balance available, end of year	107,148,046	92,426,132	69,966,132	−22,460,000
Appropriation	122,114,648	110,000,000	142,000,000	+32,000,000
BUREAU OF OUTDOOR RECREATION				
Obligations by objects:				
11 Personnel compensation	781,170	1,732,000	1,790,000	+58,000
12 Personnel benefits	55,356	139,000	141,000	+2,000
21 Travel and transportation of persons	63,938	150,000	181,000	+31,000
22 Transportation of things	8,811	21,000	15,000	−6,000
23 Rent, communications, and utilities	37,074	43,000	46,000	+3,000
24 Printing and reproduction	143,044	73,000	80,000	+7,000
25 Other services	102,750	90,000	189,000	+99,000
Services of other agencies	39,124	195,000	270,000	+75,000
26 Supplies and materials	10,845	40,000	43,000	+3,000
31 Equipment	40,757	52,000	20,000	−32,000
32 Lands and structures			5,000,000	+5,000,000
41 Grants, subsidies, and contributions	14,064,259	74,130,000	83,450,000	+9,320,000
Total, Bureau of Outdoor Recreation	15,347,128	76,665,000	91,225,000	+14,560,000
ALLOCATION ACCOUNTS				
11.0 Personnel compensation	1,617,200	2,607,000	3,396,000	+789,000
12.0 Personnel benefits	120,547	207,000	307,000	+100,000
21.0 Travel and transportation of persons	99,389	306,000	480,000	+174,000
22.0 Transportation of things	61,397	78,000	94,000	+16,000
23.0 Rent, communications and utilities	111,646	133,000	184,000	+51,000
24.0 Printing and reproduction	12,031	14,000	29,000	+15,000
25.1 Other services	437,906	1,405,000	2,512,000	+1,107,000
25.2 Services of other agencies	35,297	103,000	195,000	+92,000
25.3 Payments to "Revolving fund, Corps of Engineers," civil	56,000	160,000	200,000	+40,000
26.0 Supplies and materials	62,659	181,000	461,000	+280,000
31.0 Equipment	91,224	103,000	403,000	+300,000
32.0 Lands and structures	11,022,326	42,727,000	64,976,000	+22,249,000
42.0 Insurance claims and indemnities	410			
Subtotal	13,728,032	48,024,000	73,237,000	+25,213,000
95.0 Quarters and subsistence charges	−2,356	−2,000	−2,000	
Total, allocation accounts	13,725,676	48,022,000	73,235,000	+25,213,000
Total obligations	29,072,804	124,687,000	164,460,000	+39,773,000
Obligations are distributed as follows:				
Bureau of Outdoor Recreation	15,347,128	76,665,000	91,225,000	+14,560,000
National Park Service	6,386,198	26,880,000	51,725,000	+24,845,000
Bureau of Sport Fisheries and Wildlife		162,000	3,010,000	+2,848,000
Forest Service	7,339,478	20,980,000	18,500,000	−2,480,000

PREPARED STATEMENT

Chairman HAYDEN. Mr. Crafts, would you please present your statement indicating the activities of the fund during the past fiscal year and its plans for the coming year?

(The statement follows:)

We now turn to the Land and Water Conservation Fund program authorized under Public Law 88-578. This program has been in operation slightly over two years. Its first appropriation was received in May 1965. Through fiscal year 1967, a total of $251 million has been appropriated to the Fund by Congress.

Of this amount, about $90 million has been allocated to the Forest Service, the National Park Service, and the Bureau of Sport Fisheries and Wildlife for acquisition of authorized Federal areas and to the Bureau of Outdoor Recreation for administration. About $160 million has been allocated for matching grants to the States.

The appropriations have been made on the premise that revenues will accrue to the Fund in amounts sufficient to cover the appropriation authorization. In the event that revenues are not sufficient, a proportionate reduction is made in the allocations to the Federal agencies and States. For the fiscal year 1966, revenues were short of financing the full appropriation authorization by less than two per cent.

During the current fiscal year, revenues have accrued at a rate which will be adequate to fully fund the appropriation authorization if collections continue as indicated.

Since the inception of the program and through December 31, 1966, collections have amounted to $202 million. This amount was derived from the following sources:

Status of revenues, as of Dec. 31, 1966 (covers all deposits since inception of fund)

Annual recreation permits	$5, 405, 476. 49
Surplus real property	130, 427, 926. 09
Motorboat fuel taxes	56, 203, 912. 84
Other admission and user fees	10, 259, 180. 18
Total	202, 296, 495. 60

The following table summarizes the distribution of appropriations and estimated revenues to the Fund by sources from the inception of the program through F.Y. 1967.

[In millions of dollars]

	Total, 1965-67	1965	1966	1967
Estimated Federal needs:				
National Park Service	50. 1	4. 8	21. 9	23. 4
Forest Service	36. 1	. 7	17. 3	18. 1
Bureau of Sport Fisheries and Wildlife	. 2			. 2
Administration and contingency	4. 1	. 1	1. 4	2. 6
Total, Federal needs	90. 5	5. 6	40. 6	44. 3
Estimated State needs (Federal portion only on 50-50 basis)	160. 5	10. 4	84. 4	65. 7
Estimated total Federal and State needs	251. 0	16. 0	125. 0	110. 0
Estimated revenues to the fund from existing sources:				
Annual permit	8. 5	. 7	2. 8	5. 0
Other admission and user fees	13. 3	1. 3	5. 0	7. 0
Motoboat fuel tax	61. 0	4. 4	27. 6	29. 0
Surplus real property	170. 3	16. 8	79. 5	74. 0
Total estimated revenue from existing sources	253. 1	23. 2	114. 9	115. 0

State Aspects.—A total of about $160 million has been appropriated for matching grants to the States for the F.Y.'s 1965, 1966, and 1967. Our FY 1968 budget request is $65 million for this purpose. This is almost identical with the amount appropriated for this purpose in FY 1967.

Where do we stand on this program. First, under the terms of the Land and Water Conservation Fund Act, each State must prepare a statewide comprehensive outdoor recreation plan which the Secretary finds adequate before the State is eligible for acquisition or development grants. Most States required a considerable amount of time to prepare plans that were adequate. It was only last month that the last State became eligible to participate. Now, however, all States are actively sharing in the program and as of February 1 we had received 1,822 requests for a total of $181,911,701.

Of this total, we have qualified 1,104 projects for $101,676,897, and have actually signed contracts with the States for 996 projects and 199 project amendments totaling $57,725,225.

The program is now in high gear and for the past four months we have been obligating funds at a rate in excess of $5 million a month. This rate not only will utilize the appropriated backlog but also will utilize the requested appropriation during the 1968 fiscal year. In considering State progress it is important to remember that under the terms of the Act, the money apportioned to the States is available for three fiscal years. This has made it possible for the States to plan their program to mesh with State legislatures, bond issues, and other State actions.

An analysis of the State plans show that future needs are several times present levels of expenditure, but programs have been curtailed by the availability of funds at both Federal and non-Federal levels.

In general, the States are satisfied with our performance. There are some sore spots and policy problems to be worked out. The ability of the Bureau to handle the workload is a key factor. We had a backlog of project applications and were dropping further behind at this time last year. During our appearance before this Committee, we indicated that if the several thousand submittals expected materialized, we would be completely swamped.

Since about August 1965, the States have submitted about 2,000 applications to the Bureau. As expected, this volume was so great and came so suddenly that we were unable to process them in an orderly manner and by August 31, 1966, a backlog of 695 projects, totaling $72.8 million, was on hand. Since that time, we have kept pace with the current monthly volume of about 130 applications and have reduced the backlog to 577 projects amounting to $62 million as of December 31, 1966.

Question has been raised concerning the percentage of development projects as opposed to those for acquisition. About 60 per cent of the dollar value of projects qualified has been for development and 40 per cent for acquisition. The most important reason is that the States and local governments are under heavy pressure from a recreation-minded public that wants to use existing areas now and demands that they be developed to a usable state.

It also reflects the fact that a number of States have earmarked substantial sums of State money for acquisition only. To mention a few where there were bond acquisition issues—New York $125 million, New Jersey $60 million, Pennsylvania $70 million, Rhode Island $5 million and California $80 million. The States in this category have naturally concentrated Federal funds on development. There are other States that are already rich in public lands and thus devote a greater share to development.

The following table summarizes the distribution of the program between State and local governments.

Projects qualified and obligated, by State, county, city, and other agencies as of Dec. 30, 1966

Level of government agency	Projects					
	Qualified			Obligated		
	Number	Amount (thousands)	Percent [1]	Number	Amount (thousands)	Percent [1]
State	480	$70,194	74	412	$35,530	69
Local:						
County	109	3,854	4	98	2,473	5
City	337	12,801	14	301	10,416	20
Other	59	7,497	8	56	3,237	6
All local	505	24,152	26	455	16,126	31
Total	985	94,346	100	867	51,656	100

[1] Based on dollar volume.

In summarizing the State program, let me say that I know of no single action taken by the Federal Government which has done more than the Land and Water Conservation Act to encourage States and local governments to analyze their outdoor recreation needs and to initiate realistic programs to meet them. The planning requirements presented time consuming difficulties initially; but they have been tremendously valuable and now that they have been met, the grant program is accelerating to the level anticipated by the Congress and this Committee in their previous appropriations.

The amount that is being requested this year is considerably less than the States are now in a position to match, but it was purposely held at last year's figure until the States had actually shown by their expenditures that their programs really were in high gear.

Federal Aspects of Program.—Land and Water Conservation Fund amounts requested for fiscal year 1968 for Federal agencies will be used for the acqujsition of land and water areas for outdoor recreation purposes and for the preservation of endangered species of wildlife. The request of $74,225,000 will be allocated as shown:

National Park Service	$48, 225, 000
Forest Service	18, 000, 000
Bureau of Sport Fisheries and Wildlife	3, 000, 000
Bureau of Outdoor Recreation	5, 000, 000
Total	74, 225, 000

Of the allocations to the Federal agencies, $32 million will be derived as an advance from the general fund of the Treasury and $42,225,000 will be derived from revenues from entrance and user fees, taxes on motorboat fuels and sales of surplus property. The latter amount represents approximately 40 per cent of total revenues expected to accrue to the Fund during the fiscal year—the remaining 60 per cent as previously discussed, will be allocated to the States.

The full $32 million advance will be used by the Federal agencies, primarily the National Park Service, as a first step in alleviating the price escalation of recreation lands. This it will do by providing funds to purchase some of these lands before the spiralling prices have made them prohibitively expensive.

In order to overcome the escalating costs of land insofar as possible, the $32 million will be devoted to land acquisition within the newly authorized National Park System areas such as Delaware Water Gap National Recreation Area, Pennsylvania and New Jersey; Fire Island National Seashore, New York; Assateague Island National Seashore, Maryland; Indiana Dunes National Lakeshore, Indiana; and Whiskeytown National Recreation Area, California.

The Forest Service allocation will be used mainly for acquiring recreation lands in the eastern part of the country—about 92 per cent of the acreage acquired will be east of the 100th meridian.

The funds for the Bureau of Sport Fisheries and Wildlife will finance lands for the Florida key deer, the Columbia (Washington) White-tailed deer and for a threatened species research station at Patuxent, Maryland.

As another step in combating land price increases, the Bureau of Outdoor Recreation is requesting $5,000,000. This is to be allocated to Federal agencies so that they can begin verification of property lines, mapping, development of ownership data, and appraisals immediately in areas where land acquisition is newly authorized. The funds also would be used to acquire quickly key tracts in the newly authorized areas which are exceptionally desirable for meeting outdoor recreation needs or where willing sellers offer their lands at very attractive prices.

The Bureau of Outdoor Recreation has published a report entitled "Recreation Land Price Escalation." I shall be glad to discuss that report with you, especially its recommendations. I call your particular attention to the long range 10-year program of estimated needs, revenues, and possible new sources of income, as tabulated on page 16 of the report. This long-range program, for convenience, is attached to my testimony today.

The prospective needs, revenues, and deficits and potential sources of revenue to overcome the deficits ard summarized below:

[In billions]

	Fiscal year 1968–77 needs	Fiscal year 1968–77 revenues	Deficit
Federal	$1.1	$0.4	−$0.7
State	2.5	.5	−2.0
Total	3.6	.9	−2.7

Additional revenues to the Land and Water Conservation Fund would overcome the ten-year deficit between outdoor recreation needs and prospective revenues and are summarized as follows:

	Billions
Estimated total deficit, fiscal year 1968–77	−$2.7
Proposals for overcoming deficit, fiscal year 1968–77:	
(1) Advance appropriation now authorized	+.5
(2) Unearmarked Interior mineral receipts	+1.5
(3) Unearmarked Forest Service receipts	+.7
Total	+2.7

Returning to the current situation, the status of funds appropriated to the Land and Water Conservation Fund through December of this year is summarized below.

	Appropriated, 1965–67	Cash allocated as of Dec. 31, 1966	Amount obligated as of Dec. 31, 1966	Portion of cash allocated that is obligated (percent)
National Park Service	$49,647,980.27	$39,677,319.45	$26,654,211	67
Forest Service	35,737,450.82	28,049,674.25	19,835,767	71
Sports Fisheries	172,500.00	98,861.97	4,336	4
States	158,486,717.54	[1] 130,567,530.62	51,655,640	40
BOR 1965–66	1,500,240.15	1,343,109.31	1,356,449	
BOR 1967	2,560,000.00	2,560,000.00	1,219,984	48
Total	[2] 248,104,888.78	202,296,495.60	[3] 100,726,387	50

[1] As of Feb. 10, 1967, the amount obligated was $57,725,225.

[2] Due to an underrun of revenues to the fund of $2,900,000 in fiscal year 1966, this amount is less than the summation of the appropriated amounts shown in the appropriations acts for fiscal year 1965 through fiscal year 1967 of $251,000,000.

[3] Includes options accepted.

It is apparent that both the National Park Service and the Forest Service had obligated about 70 percent of the moneys available to them as of December 31. Both agencies are increasing their rates of obligation and by the end of this fiscal year, it is expected that obligations will nearly equal allocations.

With the moneys expended through December, the Forest Service had purchased about 130 thousand acres and the Park Service about 21 thousand acreas.

As in previous years, you have already been furnished both a summary and individual tract listing of the 1968 recommended program for the National Park Service, Forest Service and the Bureau of Sport Fisheries and Wildlife. We and the agencies are prepared to answer questions that you may have on those detailed schedules as you may wish.

In the administration of the Federal aspects of the Land and Water Conservation Fund, as with the State aspects, numerous policy questions have arisen. There have been problems associated with recreation admission and user fees. Both this Bureau and the acquisition agencies have been concerned over the extent of reprogramming that has occurred over the past two years. Some of this doubtless is inevitable but if it becomes too extensive, questions of good faith and competence of the agencies involved are at stake. Similarly we are being confronted now with court awards in eminent domain cases that are running substantially over the original desposits.

Accordingly, there have been prepared with the cooperation of the agencies concerned two reports, one on each of these subjects; namely, the reprogramming of tracts approved by the Appropriations Committee, and the effect on available funds of court awards through eminent domain. I am submitting at this time each of these reports to the Committee for its information and would welcome any policy guidance that the Committee would care to express after it has had an opportunity to consider them. We shall we glad to summarize these reports in any detail you may wish.

Mr. Chairman, this concludes my prepared testimony. I appreciate deeply the courtesy, patience, and responsiveness of this Committee in past years in activating the Land and Water Conservation Fund and the Organic Act of the Bureau of Outdoor Recreation. We do our best to comply with your oversight guidelines, to administer the program efficiently, to be forthright in explaining it, and to answer your questions to the best of our ability.

Estimated Federal and State outdoor recreation needs, revenues to the land and water conservation fund from presently authorized sources, and amounts from proposed new sources, by years, during period, fiscal years 1968–77

[In millions of dollars]

	Fiscal years										
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1968–77
Estimated Federal needs:											
National Park Service	[1] 104	79	84	73	62	47	42	42	42	42	617
Forest Service	18	25	30	35	40	40	40	40	40	40	348
Bureau of Sport Fisheries and Wildlife	3	3	3	4	5	5	5	5	5	5	43
Administration and contingency	8	8	8	8	8	8	8	8	8	8	80
Total Federal needs	[1] 133	115	125	120	115	100	95	95	95	95	1,088
Estimated State needs (Federal portion only on 50-50 basis)	65	260	275	320	310	280	260	250	240	240	2,500
Estimated total Federal and State needs	[1] 198	375	400	440	425	380	355	345	335	335	3,588
Estimated revenues to the fund from existing sources:											
Annual permit	5	5	6	8	9	9	9	10	10	10	81
Other admission and user fees	7	8	8	9	10	11	11	11	11	10	96
Motorboat fuel tax	31	32	34	35	37	[2] 13	([2])	([2])	([2])	([2])	[3] 182
Surplus real property	72	70	67	64	64	64	62	60	55	50	628
Total estimated revenue from existing sources	115	115	115	116	120	97	82	81	76 [4] (38)	70 [4] (35)	987 [4] (914)
Utilization of advance appropriation authority	[1] 83	80	105	144	68	------	------	------	------	------	480
Proposed new sources of revenue to the fund:											
Unearmarked Interior mineral receipts	------	100	100	100	100	100	100	100	100	100	900
Unearmarked national forest receipts	------	80	80	80	80	80	80	80	80	80	720
Releases to the United States from Interior mineral receipts in excrow [5]	------	------	------	------	57	103	93	84	117	120	574
Estimated total revenues from existing and proposed sources	198	375	400	440	425	380	355	345	335	335	3,588

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[1] Based on authorization of a Redwood National Park and a supplemental appropriation of $56,000,000 (utilizing the advance appropriation authority) for land acquisitions in the park.

[2] Under existing law, taxes relating to motorboat fuels will expire on Sept. 30, 1972. Hence, revenues to the fund from that source for fiscal year 1973 will be about $13,000,000 and, for subsequent years, there will be no revenues from this source.

[3] This amount would be about $192,000,000 more if the tax on motorboat fuels is extended beyond the present expiration date of Sept. 30, 1972.

[4] Under existing law, any advance appropriations made in earlier years would be repaid beginning with fiscal year 1976 by utilizing ½ of the annual revenues to the fund. Hence, only half of the amounts shown for fiscal year 1976 and 1977 would be available for appropriation for outdoor recreation purposes, or a combined total of $73,000,000 less than the amount shown.

[5] There is no way to determine now how much of the $800,000,000 of the revenues that have been collected from the Outer Continental Shelf and presently held in escrow pending court decision may be released in the future to the United States and how much to Louisiana. The amount which may be released to the United States may be larger or smaller than shown which is the additional amount needed to meet outdoor recreation needs.

RECEIPTS FROM FISCAL YEARS 1967-68

Chairman HAYDEN. Will you please place in the record a statement of the estimated receipts to the Land and Water Conservation fund from the various sources established by law?

Show these for fiscal years 1967 and 1968.

Mr. CRAFTS. Yes, sir, I will do that. They are in the statement which I am submitting for the record.

(The information follows:)

[In millions of dollars]

	Fiscal year 1967	Fiscal year 1968
Estimated revenues to the fund from existing sources:		
Annual permit	5	5
Other admission and user fees	7	7
Motorboat fuel tax	29	31
Surplus real property	74	72
Total estimated revenues from existing sources	115	115

RECREATION PERMIT SALES

Chairman HAYDEN. I note that the estimate of income from the annual recreation permit is still below its expectations and that one of the reasons is a low estimate on the number of families who would purchase the permit.

Is the lower number of families a result of inability to afford the permit or a smaller number of those who are interested in purchasing a year's entrance to Federal areas?

Mr. CRAFTS. I think really the answer to that is neither. The visitations to the Federal areas in general have gone up. We do not have evidence that the $7 is a prohibitive price. I think we are coming to the conclusion on the other hand that in some respects it is too good a bargain. Among the basic reasons for the permit not being sold in larger numbers includes the decision on the part of some of the participating agencies not to designate areas which might be designated.

There are problems of lack of authority for enforcement. There are problems as to the length of the year to which it is feasible to apply these fees. There are many other problems. But I do not think it goes to the question of the price of the permit or the fact that there are small numbers of people using the recreation areas.

Senator BIBLE. Might I ask a question at that point, Mr. Chairman.

Chairman HAYDEN. Certainly.

PERMIT REVENUES

Senator BIBLE. At the time that the land and water conservation fund was established it was estimated, if my memory is right, that you would receive something in the neighborhood of $15 million per year from the sale of these $7 permits.

Is that right or wrong?

Mr. CRAFTS. I think you are a little low, Senator Bible. We made estimates but I think the estimate was around $25 million a year that we expected to get from the sale of the permit.

Senator BIBLE. How much actually was received in the first year of its operation?

Mr. CRAFTS. We got about $1 million in 1965, which was a partial year. We got $3 million in 1966. We are getting $5 million this year, as nearly as we can judge in 1967. It is gradually going up. You see it is very substantially underrunning the estimates.

Of course in addition to the revenues from the permit there are revenues from user fees.

Senator BIBLE. I am just talking about the permit.

Mr. CRAFTS. The permit itself, last year it was $3 million, this year it is about $5 million.

Senator BIBLE. When you say this year you are using that on a calendar basis?

Mr. CRAFTS. Fiscal 1967.

Senator BIBLE. Your fiscal 1967 will bring you about $5 million?

Mr. CRAFTS. That is right.

Senator BIBLE. You are estimating fiscal 1968 will bring you about $7 million or $8 million?

Mr. CRAFTS. Yes.

Senator BIBLE. It is still way below your best judgment at the time we passed the Land and Water Conservation Act?

RECREATION LAND COSTS STUDY

Mr. CRAFTS. Yes, that is right. I don't know whether this is the time to introduce it or not but we have prepared here and we have just received them this morning, as a matter of fact, a study of what is happening to the price of recreation land. This is the recreation land price escalation report which was requested of us by the House. I would like to make it available to the committee members. We have in here a 10-year program in which we price out both the estimated needs of the agencies and the States and we also price out the prospect of revenues and the source of revenues.

This is the latest and best long-range program that the Department has. I would like to submit it to the committee.

Senator BIBLE. Mr. Chairman, I am very anxious to follow this study. It was my intention at a later time and possibly after you concluded your questions, to try to go into this in depth. I might even ask Mr. Crafts to come back at a later time after I have had the benefit of reading the study which I have not seen but the purpose of my question was to try to pinpoint one single facet of it and that was to find out how much he receives from the permits per year, the so-called $7 permit.

He has answered it very well. He received $3 million last year. He anticipates he will receive $5 million this year and he hopes to receive $7 million next year but this is still below the $25 million which is the predicate on which we established the land and water conservation fund.

Chairman HAYDEN. You are speaking as a member of the committee that authorized it.

Senator BIBLE. More particularly as a member of both committees but I think this is a very critical part in the creation of new parks because of the accelerated land cost. I don't want to go into that at this time. I just wanted to cover the revenue part with these preliminary questions.

ASSISTANCE TO STATES

Chairman **HAYDEN**. For assistance to States you propose a $65 million appropriation, of which $3,250,000 will be withheld from apportionment and will be used as a contingency reserve.

Would you please explain the use of this fund?

Mr. **CRAFTS**. The contingency reserve is a portion of the allocation to the States. It is not specifically authorized but it is within the framework of the authorization for the apportionment of funds to States in the basic Land and Water Conservation Fund Act. It specifies that 40 percent should be allocated equally to the different States and the balance distributed in accordance with need, and that population and Federal programs and out-of-State visitor use and so on be considered.

In connection with the apportionment to the States the formula has been submitted to this committee and to the House committee in earlier hearings. The formula contains provisions for holding back 5 percent of what is called a contingency reserve for unusually meritorious and unforeseeable needs.

I think in retrospect this has proved to be useful. This is the amount of money that the States could qualify for over and above their normal apportionment. I give you a few examples of how this money has been used. A substantial sum was made available to the State of Nevada to help finance a State park on Lake Tahoe. A substantial sum has been made available to the State of Maine to preserve the Allagash River under the administration of the State of Maine. A sum has been made available to California for additional State parks to preserve the redwoods. Some for a State wilderness river in Wisconsin, the Wolf River. We use this money for especially meritorious projects that have come up, that are more than can be handled in the normal State allocation.

This is what this fund is for.

Chairman **HAYDEN**. How did you determine the size of the contingency fund?

DETERMINATION OF FUNDS TO BE ALLOCATED TO STATES

Mr. **CRAFTS**. The $65 million is the total amount that will be allocated among the States next year under the budget request. The contingency portion of that $65 million is 5 percent.

Chairman **HAYDEN**. How did you determine the amount of $65 million?

Mr. **CRAFTS**. The $65 million is the amount that was determined in making the initial breakdown between the States and Federal agencies. Last year the States received about the same amount. This year the administration has recommended an increase in the total fund from $110 million to $142 million. It further recommends that that increase be made available to the National Park Service for the purpose of moving forward on some of the recent authorizations that have been supported by the administration and passed by the Congress. It recommends that the States continue next year at their present level of this year.

Chairman **HAYDEN**. What is the statutory authority for establishing the contingency fund?

Mr. CRAFTS. This comes out of the Land and Water Conservation Fund Act of 1965.

Chairman HAYDEN. Are grants from the contingency fund an amount in addition to the normal allotment so that a State's allotment may be increased above the amount indicated by the allotted funds?

Mr. CRAFTS. Yes, sir.

Chairman HAYDEN. Is a Federal grant to a State made before the State's matching amount is actually available?

Mr. CRAFTS. The allocation is made to the State at the beginning of each fiscal year. The moneys are not actually paid to the State until the State has submitted a project, had it approved, has State money available and has proceeded to carry out the project. The actual check writing, the transfer of cash to the State is in practically all cases on a reimbursable basis.

Senator YOUNG. Could I ask a question at this point?

Chairman HAYDEN. Yes.

NUMBER OF STATE GRANTS, PURPOSE AND LOCATION

Senator YOUNG. I would like to have you submit for the record, and send a copy to my office, every grant you have made, what project it was for and in what State.

Mr. CRAFTS. We can do that, Senator. We have made about 1,000 grants. We can do that.

Senator YOUNG. I want the amount of each grant and the location.

Mr. CRAFTS. We can do that.

(The information follows:)

QUARTERLY REPORT
December 30, 1966

	Number	Amount
Qualified and Unfunded (Estimated)	118	$ 19,308,597
Future unfunded phases of active projects	-	$ 23,381,859
Active and Funded	802	$ 47,860,762
Completed	65	$ 3,794,878
TOTAL ASSISTANCE AMOUNTS	985	$ 94,346,096

Meaning of Terms Used:

1/ Type of Project (P - Planning; A - Acquisition; D - Development; C - Combined Acquisition and Development)

2/ Assistance Amounts - Amount of Land & Water Conservation Fund money for support of an outdoor recreation project.
Qualified - Estimated financial assistance for projects found technically eligible for a grant.
Awarded - The amount of assistance granted from the Land and Water Conservation Fund.
Active - Projects underway.
Completed - Projects on which final payment has been made.

STATE: ALABAMA 01

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS 2/		
					Qualified	Awarded Active	Awarded Completed
Department of Conservation	02 D	Pensacola	Develop deepwater fishing pier at Gulf State Park.	6/1/65-7/30/67	9/21/66 177,874	9/21/66 177,874	
Department of Conservation	04 D	Gadsden	Marking waterway channel and hazards in Weiss Lake, include 56 black can buoys, 56 red nun buoys, hazard buoys, etc.	9/5/64-4/15/67	10/28/66 18,925	10/28/66 18,925	
				TOTAL	196,799	196,799	

STATE: ALASKA 50

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS 2/ Qualified	Awarded Active	Awarded Completed
Department of Natural Resources	01.1 P	Statewide	Prepare statewide comprehensive outdoor recreation plan.	9/4/64-12/1/67	12/6/65 64,000	12/6/65 51,500	
Department of Natural Resources	04 D	Fairbanks	Develop Chena River Campground.	9/4/64-6/30/67	12/18/65 107,950	12/18/65 107,950	
Department of Natural Resources	05.1 D	Fairbanks	Develop recreational facilities on Harding Lake Recreation Area.	1/1/65-1/1/70	12/18/65 107,100	12/18/65 20,000	
Department of Natural Resources	02.1 D	Sitka	Construct sightseeing and study facilities at Baranof Castle State Historical Monument.	5/1/65-10/1/67	2/4/66 54,000	2/4/66 36,000	
Department of Natural Resources	10 D	Fairbanks	Help construct an outdoor recreation facility at Pioneer Memorial Historical Park.	9/4/64-12/31/67	3/9/66 400,000	7/6/66 400,000	
Department of Natural Resources	06 D	Statewide	Provide added camping, picnicking facilities to wayside areas at Porcupine Creek, Kodiak, Old Sitka, and Clearwater-Alcan.	1/1/65-10/1/66	6/23/66 11,250	9/16/66 11,250	
Greater Juneau Borough	08 D	Juneau	Develop ball field, picnic area, water and sanitary facilities at Lena Loop Recreation Area.	3/1/66-10/1/68	6/23/66 14,750	9/16/66 14,750	
City of Juneau	09 D	Juneau	Develop camping, picnicking, and sports facilities at Evergreen Bowl Recreation Area.	9/4/65-9/4/67	6/23/66 85,770	9/16/66 35,000	
City of Anchorage	19 D	Anchorage	Expand camping and picnicking facilities at Russian Jack Springs Park.	1/67 - 9/68	7/5/66 13,125	12/6/66 13,125	
City of Anchorage	12 C	Anchorage	Acquisition and development of Mt. View Neighborhood Park.	10/66 - 9/67	6/23/66 4,300	12/6/66 4,300	
City of Anchorage	13 C	Anchorage	Acquisition and development of Fairview Neighborhood Park.	10/66-10/67	6/23/66 16,150	12/6/66 16,150	
Department of Public Works	15 D	Juneau	Develop new mooring facilities for recreational watercraft at Auke Bay.	8/1/66-6/1/67	6/23/66 17,500	12/15/66 17,500	
				SUBTOTAL	895,895	727,525	

STATE: ALASKA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Anchorage	30 C	Anchorage	Acquire and develop 2.5 acres of land at the South Mountain View Area.	10/65-10/67	10/4/66 24,425	11/30/66 24,425	
Department of Public Works	25 D	Ketchikan	Replace and expand Knudson Cove Float Facilities.	3/1/67-10/30/67	10/13/66 35,000	12/1/66 35,000	
City of Kenai	20 C	Kenai	Acquire 82 acre tract and develop Kenai Municipal Park including camping, boating, picnicking, skating, sightseeing.	9/1/66-9/1/71	10/19/66 93,000	12/7/66 48,000	
City of Anchorage	24 D	Anchorage	Construct sports complex including softball, baseball fields, tennis courts, parking at Chester Creek Park.	1/1/67-6/30/69	11/18/66 99,750		
Greater Juneau Borough	07 C	Juneau	Acquire 51 acres of land for development of North Douglas Island Camping and Recreation Area.	1/1/67-8/1/67	11/23/66 105,100		
				TOTAL	1,253,170	834,950	

STATE: AMERICAN SAMOA 55

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS 2/ Qualified	Awarded Active	Awarded Completed
Department of Public Works	01.1D	Utulei	Develop beach area to provide water-oriented outdoor recreation.	1/15/66-6/30/67	2/11/66 44,925	2/11/66 44,925	
Department of Public Works	02 D	Pago Pago	Develop first increment of a community park and installation of a marina complex.	1/15/66-11/15/66	2/11/66 59,874	10/21/66 59,874	
				TOTAL	104,799	104,799	

STATE: ARIZONA 02

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Pima County Park and Recreation Department	04 D	Ajo	Develop facilities at Ajo County Park, including 2 ramadas complete with fireplaces, archery range, hiking trails.	2/1/66-11/30/66	3/2/66 6,200	3/2/66 6,200	
State Parks Board	06.1 D	Parker	Develop Red Rock Unit of Buckskin Mount State Park, including picnicking, camping, boating, swimming.	10/64-9/30/67	3/2/66 99,000	3/2/66 99,000	
City of Scottsdale	07.2 D	Scottsdale	Reconstruct and upgrade public swimming pool and bathhouse.	8/4/65-7/31/66	3/2/66 25,971	3/2/66	25,783
City of Phoenix	09.1 D	Phoenix	Develop access roads, parking areas, hiking and riding trails, picnic areas in Papago Regional Park.	2/17/66-7/31/67	3/2/66 85,000	3/2/66 85,000	
City of Tucson	10 D	Tucson	Construct municipal swimming pool and bathhouse.	9/1/65-7/31/66	3/25/66 30,200	3/25/66	29,128
Outdoor Recreation Coordinating Commission	01 P	Statewide	Prepare comprehensive statewide outdoor recreation program.	10/25/64-12/31/66	4/3/66 37,334	4/3/66 37,334	
City of Willcox	03.1D	Willcox	Complete recreation complex including construction of swimming pool tennis courts, ball park.	12/1/65-12/31/66	4/7/66 100,000	4/7/66 100,000	
City of Tucson	11.1 D	Tucson	Install lighting facilities and improve softball fields at two city parks.	10/1/65-4/1/67	4/15/66 22,500	4/15/66 22,500	
City of Phoenix	12.1D	Phoenix	Develop North Mountain Park including access roads, parking areas, hiking and riding trails, picnic areas.	2/17/66-2/67	4/30/66 60,000	4/30/66 60,000	
City of Phoenix	13 D	Phoenix	Develop South Mountain Park including park drive, restroom facility, picnic areas, shelters.	2/17/66-2/67	4/30/66 28,000	4/30/66 28,000	
City of Nogales	14.2 D	Nogales	Construct 2 tennis courts on existing playground in Nogales.	4/66-1/31/67	4/30/66 4,200	4/30/66 4,200	
City of Prescott	15 A	Prescott	Acquire 7.6 acres of land for development of Prescott City Park complex.	6/15/65-7/7/65	7/6/66 4,000	7/6/66	4,000
				SUBTOTAL	502,405	501,145	

STATE: ARIZONA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Game and Fish Department	02.1D	Heber	Construct dam for impoundment of Willow Springs Lake.	9/4/64-12/31/66	6/22/66 140,325	7/20/66 140,325	
Prescott Parks and Recreation Department	16.1D	Prescott	Develop athletic field, picnic area, restroom, and other facilities at Prescott City Park.	6/15/65-5/1/67	7/6/66 13,295	7/6/66 13,295	
Tucson Department of Parks and Recreation	17.1D	Tucson	Construct swimming pool and bathhouse at Mansfield Park.	11/1/65-4/30/67	7/11/66 30,000	7/11/66 30,000	
Tucson Department of Parks and Recreation	18.1D	Tucson	Construct bathhouse for existing swimming pool at Pueblo Gardens.	3/1/66-4/30/67	7/11/66 6,500	7/11/66 6,500	
Tucson Department of Parks and Recreation	19 D	Tucson	Construct night lighting and multiple use court lighting at 24 parks in Tucson.	3/1/66-6/30/67	7/23/66 37,455	7/23/66 37,455	
Winslow Park Department	20.2D	Winslow	Construct bathhouse for existing swimming pool at Winslow City Park.	2/2/66-6/30/67	7/23/66 14,593	7/23/66 14,593	
Maricopa Parks and Recreation Department	21.1 D	Phoenix	Develop bridges, control gates and other facilities on Sun Circle Trail.	7/1/66-6/1/67	7/15/66 22,000	7/15/66 22,000	
Maricopa County	08.1 D	Glendale	Construct a water system in Thunderbird County Park.	1/15/66-6/1/67	8/8/66 45,000	8/8/66 31,000	
City of Phoenix	05 D	Phoenix	Develop Squaw Peak Park including access roads, scenic drives & overlooks, hiking and riding trails, utilities, restrooms.	7/1/66-6/30/67	9/20/66 105,125	9/20/66 105,125	
City of Tempe	22 D	Tempe	Develop Tempe Canal Park including walks, picnic areas, lawns, landscape plantings, comfort station, parking, terraces.	6/1/66-6/30/67	11/7/66 30,000	11/7/66 30,000	
City of Phoenix	24 D	Phoenix	Develop Cortez Canal Bank Park including lagoon, canal docking & bridges, shelters, apparatus area, parking facilities.	10/1/66-8/31/67	12/7/66 51,765		
State Parks Board	26 D	Tucson	Develop Picacho Peak State Park including road system, service & storage building, water & electrical systems, picnic sites.	7/1/66-7/1/67	12/13/66 50,000		
				SUBTOTAL	546,058	430,293	

STATE: ARIZONA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Complete
					12/15/66	12/15/66	
City of Tombstone	25 D	Tombstone	Develop new city park including picnic areas, camping sites & water lines, ramadas and nature trails, access road.	7/1/66-6/30/67	5,000	5,000	
City of Tucson	39 D	Tucson	Provide additional lighted playfield at Palo Verde Park.	5/1/67-4/1/68	14,750		
				TOTAL	1,068,213	936,438	

STATE: ARKANSAS 03

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Complete
City of North Little Rock	04 A	North Little Rock	Acquire 2 parcels of land for subsequent development of a city park.	1/1/66 -4/30/66	5/6/66 82,136	5/6/66 82,136	
City of Little Rock	01.1 A	Little Rock	Acquire 3 parcels of land for a city park.	3/1/66-2/1/67	5/14/66 31,500	5/14/66 31,500	
City of Little Rock	02 D	Little Rock	Construct golf course, tennis courts, picnic area and other facilities.	1/1/65-9/1/68	5/14/66 78,750	5/14/66 78,750	
Publicity and Parks Commission	05 A	Huntsville	Acquire 100.83 acres to expand Withrow Springs State Park.	11/9/64-2/10/66	6/20/66 29,608	7/23/66 29,608	
Publicity and Parks Commission	06 A	Hector	Acquire 56.6 acres to preserve wild azalea plants.	6/17/65-8/1/66	6/20/66 5,250	7/23/66 5,250	
Planning Commission	10 P	Statewide	Update comprehensive statewide outdoor recreation plan.	2/1/66-1/31/67	7/23/66 13,827	7/23/66 13,827	
City of Heber Springs	08 D	Heber Springs	Develop 10 acre city park including band shell, restroom, amphitheater seating, picnic, play and parking area.	6/13/66-7/15/67	7/23/66 55,650	7/23/66 55,650	
City of North Little Rock	09 D	Little Rock	Develop Prothro Park including tennis courts, picnic tables, pavilions, play area, walks, roads, waterlines, fencing.	4/25/66-7/25/68	9/30/66 116,471	9/30/66 59,200	
City of Conway	11 A	Conway	Acquire 10 acres for future development of Fourth Avenue Park.	6/1/66-12/31/66	10/10/66 13,125	10/10/66 13,125	
City of Little Rock	13 D	Little Rock	Develop Reservoir Park including parking lot, picnic pavilion, game courts, restrooms, playground equipment, fences.	12/1/66-3/1/68	10/26/66 31,500	10/26/66 31,500	
Publicity and Parks Commission	14 D	Fayetteville	Develop Devil's Den State Park including picnic tables, parking spaces, roads, campsites, bathhouses, playfields, stable.	9/4/64-12/1/69	11/3/66 413,459	11/3/66 29,545	
City of North Little Rock	12 D	North Little Rock	Develop Burns Park including landscaping, campsites, sanitary facilities, golf course, stables, trails, parking lot.	9/4/64-3/4/69	11/18/66 578,651	11/18/66 363,670	
				TOTAL	1,449,927	793,761	

STATE: CALIFORNIA 04

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
Division of Beaches and Parks	02 A	Morro Bay	Assist the State in acquiring 4,441 acres ocean frontage and uplands for a new State Park (Montana de Oro State Park).	9/4/64-1/31/65	4/15/66 617,158	4/15/66	617,158
Department of Parks and Recreation	01 P	Statewide	Maintain, strengthen, and update California's comprehensive outdoor recreation plan.	7/1/66-6/30/67	6/23/66 133,328	6/23/66 133,328	
County of Orange	03 A	Anaheim	Acquire 18 acres to serve as nucleus of a new 300 acre regional park.	7/1/66-12/31/68	6/10/66 45,000	9/3/66 45,000	
County of Orange	04 D	Anaheim	Develop roads, water system, comfort station and other facilities at Sycamore Flat Regional Park.	10/1/66-3/31/68	5/21/66 120,000	9/3/66 120,000	
City of Santa Barbara	09 D	Santa Barbara	Develop parking and picnic facilities, comfort stations and other facilities at Shoreline Park.	7/1/66-12/31/68	5/21/66 100,000	9/30/66 100,000	
City of San Diego	11 D	San Diego	Develop parking lot, restrooms, access road, landscaping at Mission Beach Aquatic Park.	7/1/65-6/30/67	5/21/66 137,500	10/25/66 137,500	
City of Mountain View	13 A	Mountain View	Acquire approximately 440 acres of tideland for development of regional park.	7/1/66-7/1/68	5/31/66 1,100,000	8/19/66 1,100,000	
City of Mountain View	14 D	Mountain View	Develop land and water area at Shoreline Park including sailing lake with facilities.	7/1/66-12/1/68	5/31/66 100,000	12/28/66 100,000	
Kings County	15 A	Layton	Acquire 52 acres for development of Laton-Kingston Regional Park including picnic, parking and sanitary facilities.	7/66-6/67	6/10/66 30,000	9/9/66 30,000	
County of Merced	16 A	Merced	Acquire 119 acres for expansion of Lake Yosemite Park.	7/1/66-6/30/68	5/31/66 17,850	9/9/66 17,850	
County of Merced	17 D	Merced	Develop Lake Yosemite Park including access roads, parking area, picnic and sanitary facilities.	7/1/66-6/30/68	5/31/66 64,750	9/30/66 64,750	
City of Los Angeles	18 D	Los Angeles	Develop camping, picnic and boating facilities at Harbor Regional Park.	2/66-2/67	6/10/66 100,000	9/30/66 100,000	
				SUBTOTAL	2,565,586	2,565,586	

STATE: CALIFORNIA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Berkeley	19 D	Berkeley	Develop public access, roadway, boat ramp, parking and other facilities at Marine Park.	9/4/64-6/30/67	6/10/66 100,000	12/27/66 100,000	
City of Long Beach	20 D	Long Beach	Install irrigation system to permit further development of El Dorado Park.	9/66-2/67	6/10/66 100,000	9/30/66 100,000	
City of San Jose	21 D	San Jose	Develop picnic units, restroom, water, parking, trails and other facilities at Kelley Park.	7/66-9/67	6/10/66 100,000	9/30/66 100,000	
City of Santa Clara	22 D	Santa Clara	Develop camping, picnic and play areas and other facilities at Central Park.	7/1/66-10/1/67	6/10/66 50,000	9/30/66 50,000	
East Bay Regional Park District	05 A	Fremont	Acquire 671 acres of land on San Francisco Bay for development as park.	7/1/66-6/30/67	7/23/66 950,000	8/24/66 950,000	
City of San Clemente	06 A	San Clemente	Acquire 2.7 privately owned parcels of land along beach within the city limits.	10/64-12/31/67	7/11/66 280,925	9/9/66 280,925	
City of Santa Barbara	08 A	Santa Barbara	Acquire 15 acres of beach-line property along Pacific Ocean to be developed into a community park.	4/15/66-12/31/68	7/11/66 325,000	9/9/66 325,000	
City of San Diego	10 A	San Diego	Acquire .05 acres of land at the southerly tip of Mission Beach.	8/65-11/66	7/11/66 12,500	9/9/66 12,500	
San Mateo County	24 D	Belmont	Develop 2 feeder trails for access to State and County trail systems including clearing, grading, fencing, trail signs.	8/1/66-8/1/67	7/15/66 29,886	7/15/66 29,886	
Los Angeles Board of Recreation and Park	12 A	Los Angeles	Acquire 70 acres for an addition to Chatsworth Regional Park.	6/1/66-6/30/67	8/19/66 320,000	8/19/66 320,000	
Resources Agency	23 A	Eureka	Acquire 1,600 acres of redwood forest area as an addition to Humboldt Redwoods State Park.	7/1/66-6/30/71	8/19/66 3,500,000	8/19/66 1,000,000	
City of San Clemente	07 D	San Clemente	Develop public restroom on beach property in San Clemente	4/65 - 12/65	9/3/66 8,319	9/3/66 8,319	
				SUBTOTAL	5,776,630	3,276,630	

STATE: CALIFORNIA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
The Resources Agency	31 D	Porterville	Develop Bartlett Park including a well and related water system, restrooms, road system, play equipment, 3 arbors.	7/1/67-1/31/69	11/21/66 36,337		
The Resources Agency	34 D	San Pedro	Construct public fishing pier in San Pedro urban area.	8/1/67-1/31/69	12/7/66 336,600		
The Resources Agency	29 D	San Fernando	Develop Hansen Dam Recreation Area including picnic units, walking trails, access roads, parking lot, landscaping.	5/67 - 2/68	12/7/66 166,667		
The Resources Agency	27 D	San Diego	Develop Ocean Beach Park including access road, parking, irrigation system, landscaping.	7/1/67-6/30/68	12/9/66 81,600		
The Resources Agency	28 A	Santa Rosa	Acquire 50 acres of land for development of a regional park.	1/1/67-6/30/68	12/9/66 242,250		
The Resources Agency	32 A	Sacramento	Acquire 1,265 acres of land & water for development of Delta Meadows State Park.	7/1/66-6/30/68	12/9/66 350,000		
The Resources Agency	37 A	Modesto	Acquire 818.5 acres of land to add to existing Modesto Reservoir Park.	7/1/66-7/31/69	12/9/66 93,922		
The Resources Agency	38 A	Torrance	Acquire 2.41 acres of beach property at South Torrance Beach.	7/1/67-12/31/68	12/9/66 153,000		
The Resources Agency	30 A	San Jose, Salinas	Acquire 122 acres for Royal Oaks Park.	4/18/66-4/18/70	12/13/66 62,440		
The Resources Agency	41 D	Sacramento	Develop Sailor Bar Park including access roads, parking, riding & hiking trails, boat launching area, lakes.	7/1/66-6/30/70	12/13/66 60,000		
Wildlife Conservation Board	33 D	Sacramento	Develop angling access at Poker Bend.	1/1/67-7/31/68	12/27/66 25,500		
City and County of San Francisco	45 D	San Francisco	Develop John McLaren Regional Park including day camp, trails, archery range, tennis courts, lake shoreline.	12/1/66-12/31/70	12/23/66 300,000		
				SUBTOTAL	1,908,316		

STATE: CALIFORNIA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Orange County	25 D		Develop Sycamore Flat Regional Park including camp & picnic units, restrooms, playfield, lagoon, access road, parking.	7/1/67-1/31/69	12/27/66 206,500		
County of Marine	39 A	San Rafael	Acquire 3.3 acres of land known as Paganini Point.	12/1/66-7/31/67	12/29/66 38,000		
				TOTAL	10,495,032	5,842,216	

STATE: COLORADO 05

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game, Fish and Parks Department	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-12/15/65	2/16/66 12,500	2/16/66 12,500	
City and County of Denver	04 A	Denver	Acquire 5 acres of hiking and bicycle trail right-of-way near Sanderson Gulch.	7/1/66-10/1/67	7/15/66 10,000	7/15/66 10,000	
City and County of Denver	05 D	Denver	Develop 3 miles of surfaced hiking and bicycle trail on Sloan Lake Park.	6/1/66-10/1/67	7/15/66 25,000	7/15/66 25,000	
Game, Fish and Parks Department	02 D	Denver	Develop roads, turnouts, sanitary facilities, water system at Cherry Creek Reservoir.	10/1/64-7/31/68	8/9/66 100,550	8/9/66 100,550	
City of Otis	21 D	Otis	Develop roadside park including landscaping, picnic tables, grills, wading pool, restrooms, walks, parking.	4/1/66-12/31/67	9/30/66 4,823	9/30/66 4,823	
Game, Fish and Parks Department	27 D	Colorado Springs	Develop Ramah State Recreation Area by constructing sanitary facilities, fire places, shelters, landscaping.	7/1/65-7/1/67	10/7/66 8,294	10/7/66 8,294	
City of Broomfield	20 D	Broomfield	Develop City Park including landscaping, irrigation system, soccer, softball, picnicking, football facilities.	3/1/66-11/30/66	10/21/66 12,500	10/21/66 12,500	
Game, Fish and Parks Department	03 A	Denver	Acquire 561 acres for development of Golden Gate State Recreation Area.	4/1/65-7/30/66	10/21/66 46,000	10/21/66 46,000	
Bent County Commissioners	06 D	Hasty	Develop Hasty Park including roads, playground area, landscaping, restrooms.	6/1/66-6/1/67	10/28/66 3,213	10/28/66 3,213	
City of Wray	07 D	Wray	Improve golf course in City of Wray.	6/1/66-10/1/66	10/28/66 15,000	10/28/66 15,000	
Game, Fish and Parks Department	36 D	Lake George	Develop Tarryall Reservoir State Recreation Area including parking lots, roads, sanitary facilities.	7/1/65-7/1/67	11/3/66 4,240	11/3/66 4,240	
Game, Fish and Parks Department	37 A	Golden	Acquire 80 acres for an addition to Golden Gate State Park.	2/4/66-1/1/67	11/3/66 4,750	11/3/66 4,750	
				SUBTOTAL	246,870	246,870	

STATE: COLORADO (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game, Fish and Parks Department	25 D	Dillon	Construct comfort station and 4 shade shelters at Green Mountain Reservoir State Recreation Area.	7/1/65-7/1/67	11/4/66 5,245	11/4/66 5,245	
Game, Fish and Parks Department	29 D	Ignacio	Patch and seal coat park road at Navajo State Recreation Area.	7/1/65-7/1/67	11/4/66 3,800	11/4/66 3,800	
South Jeffco Metropolitan Recreation & Park District	17 A	South Jeffco	Acquire 4.7 acres for an addition to Alameda Park.	9/5/64-12/1/65	11/8/66 8,761	11/8/66 8,761	
City and County of Denver	18 D	Denver	Construct shelter building with sanitary facilities at Washington Park.	7/1/65-12/31/67	11/10/66 7,500	11/10/66 7,500	
City and County of Denver	22 D	Denver	Develop Evergreen Lake including access bridge, parking area, lighting, drill water well, dredging.	7/1/65-12/31/67	11/16/66 15,000	11/16/66 15,000	
Game, Fish and Parks Department	30 D	Steamboat Springs	Construct boat ramp and parking, comfort station at Lester Creek Recreation Area.	7/1/65-7/1/67	11/16/66 9,080	11/16/66 9,080	
Game, Fish and Parks Department	38 D	Glenwood Springs	Construct comfort station at Sylvan Lake Recreation Area.	7/1/65-7/1/67	11/8/66 5,830	11/8/66 5,830	
Game, Fish and Parks Department	41 D	Delta	Expand water system and improve park entrance at Sweitzer Lake State Recreation Area.	7/1/65-7/1/67	11/16/66 2,650	11/16/66 2,650	
City(Walsenburg) and County (Huerfano) Golf Course Board	13 D	Walsenburg	Develop Lathrop State Park including 9-hole golf course, maintenance building, pump & sprinkler system.	9/1/65-7/31/67	11/25/66 40,000	11/25/66 40,000	
City and County of Denver	19 D	Denver	Develop Sloan Lake Park including grading, seeding, install sprinkler system, site preparation.	7/1/65-12/31/67	11/30/66 75,000	11/30/66 75,000	
City of Boulder	09 D	Boulder	Develop Boulder Reservoir Park including road, picnic shelters, ski docks, landscaping.	1/1/65-12/31/66	11/28/66 13,285	11/28/66 13,285	
City of Golden	15 A	Golden	Acquire 9.1 acres adjacent to Clear Creek Park.	1/1/65-1/1/67	12/7/66 32,550	12/7/66 32,550	
				SUBTOTAL	218,701	218,701	

STATE: COLORADO (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game, Fish and Parks Department	26 D	Denver	Develop Golden Gate State Park including shop building, toilets, road, parking spaces.	7/1/65-7/1/67	12/7/66 29,250	12/7/66 29,250	
City of Trinidad	10 D	Trinidad	Improve municipal golf course.	5/1/65-5/31/67	12/13/66 12,759	12/13/66 12,759	
City of Glenwood Springs	12 D	Glenwood Springs	Develop Riverside Park including fence, grading, landscaping, comfort stations, develop plans & specifications.	1/1/66-12/31/69	12/13/66 8,000	12/13/66 8,000	
Town of Walden	31 D	Walden	Develop Michigan River Campground including road, camp turn-outs, safety barriers, play area equipment, sanitary facilities.	1/1/66-12/31/67	12/13/66 8,492	12/13/66 8,492	
City of Canon	33 D	Canon	Develop Red Canon Park including site plans & specifications, restrooms, shelters, picnic facilities, water wells.	3/1/65-10/1/68	12/13/66 2,500	12/13/66 2,500	
Game, Fish and Parks Department	40 D	Grand Junction	Construct comfort stations at Vega Reservoir State Recreation Area.	7/1/65-7/1/67	12/6/66 13,643	12/6/66 13,643	
City of Canon City	32 D	Canon	Develop Temple Canyon Park including road, picnic facilities, water system, foot trails, sanitary facilities.	3/1/65-10/1/68	12/6/66 4,500	12/6/66 4,500	
Game, Fish and Parks Department	28 D	Grand Junction	Develop Crawford Reservoir State Recreation Area including road, parking area, campground, sanitary facilities.	7/1/65-7/1/67	12/6/66 11,630	12/6/66 11,630	
				TOTAL	556,345	556,345	

STATE: CONNECTICUT 06

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Agriculture and Natural Resources	01.1 A	Suffield	Acquire land for parking lot and access to boat launching area.	3/1/65-10/7/65	11/16/65 5,000	11/16/65	5,000
Department of Agriculture and Natural Resources	02 A	Chaplin	Acquire property to expand Goodwin State Forest.	11/25/64-2/23/65	11/16/65 6,000	11/16/65	6,000
Town of Mansfield	05.1 A	Mansfield	Acquire property for hiking and nature studies.	3/17/65-12/23/66	11/16/65 500	11/16/65 500	
Town of Bozrah	03.1 A	Bozrah	Acquire land for recreational facilities and preservation of open space areas near the center of town.	9/4/64- 7/23/66	12/16/65 3,000	12/16/65 3,000	
Department of Agriculture and Natural Resources	04 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	1/14/65-11/1/65	12/16/65 22,500	12/16/65	22,500
Town of Durham	06.1 A	Durham	Acquire 110 acres for year-round recreation area for fishing, hunting, ice skating, sleding, etc.	10/1/64- 7/6/66	12/16/65 27,500	3/15/66 27,500	
Department of Agriculture and Natural Resources	07 A	Plainfield, Canterbury	Acquire 640 acres along Quinebaug River to provide public access, preserve natural features, maintain game area.	12/1/65- 10/1/66	4/11/66 25,000	11/9/66	25,000
Town of Old Saybrook	13 A	Old Saybrook	Acquire two non-contiguous parcels inorder to round the present limited recreational land holdings.	3/4/66 -12/30/66	11/2/66 27,250		
Department of Agriculture and Natural Resources	10 A	Suffield	Acquire approx. one-acre of land for boating access point and parking lot on the shore of Congamond Lake.	11/15/65-5/27/66	11/7/66 4,500		
Department of Agriculture and Natural Resources	11 A	Hartland	Acquire approx. 120 acres for addition to Tunxis State Forest.	12/1/65-12/1/66	11/7/66 3,200	11/7/66 3,200	
Department of Agriculture and Natural Resources	18 A	East Haddam	Acquire 2.2 acres of land contiguous to Gillette Castle State Park.	7/1/66-3/1/67	11/4/66 2,500	11/4/66 2,500	
Department of Agriculture and Natural Resources	20 A	Griswold	Acquire 195 acres adjacent to Hopeville Pond State Park.	8/29/66-8/1/67	11/21/66 40,000	11/21/66 40,000	
				SUBTOTAL	166,950	135,200	

STATE: CONNECTICUT (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
Department of Agriculture and Natural Resources	14 D	East Lyme	Construct bathhouse & addition parking facilities at Rocky Neck State Park.	9/5/64-9/5/67	12/1/66 103,537	12/1/66 103,537	
Department of Agriculture and Natural Resources	16 D	Madison	Develop Hammonasset Beach State Park including bathhouse, parking area, access road, planting grass, seed area.	9/5/64-12/31/67	12/1/66 484,800	12/1/66 484,800	
Town of Mansfield	12 A	Mansfield	Acquire 57 acres known as Dreesen Estate for recreation facility.	4/1/66-6/30/67	12/19/66 23,250	12/19/66 23,250	
				TOTAL	778,537	746,787	

STATE: DELAWARE 07

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Park Commission	01 A	Wilmington	Acquire 433 acres for development of Brandywine Creek State Park.	12/2/64-3/1/65	10/22/66 750,000	12/1/66	750,000
State Park Commission	03 A	Felton	Acquire 551 acres for Killens Pond State Park to facilitate swimming, boating, fishing and hiking activities.	3/24/65-9/3/65	11/9/66 239,515		
Board of Game & Fish Commissioners	02 A	Dover	Acquire 138 acres to be used as a park and water-based recreation area.	2/12/65-6/10/65	12/20/66 50,250	12/20/66 50,250	
				TOTAL	1,039,765	800,250	

STATE: DISTRICT OF COLUMBIA 08

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed

STATE: FLORIDA 09

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Outdoor Recreational Development Council	01 A	Miami	Acquire 100 acres of park land on tip of Key Biscayne.	3/31/66-1/1/68	7/5/66 1,250,000	7/5/66 —	1,250,000
				TOTAL	1,250,000	1,250,000	

STATE: GEORGIA 10

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Department of Industry and Trade	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-12/31/67	3/2/66 115,000	3/2/66 115,000	
City of Atlanta	07 D	Atlanta	Develop system of bicycle and hiking trails connecting 3 city parks, including bridges, safety features, landscaping.	9/15/64-7/5/67	7/15/66 26,211	7/15/66 26,211	
Department of State Parks	02 D	Lafayette	Develop Cloudland Canyon State Park including cottages, cabins, campsites, concession building, restroom facilities	9/15/64-4/30/66	10/13/66 81,020	10/13/66 81,020	
Department of State Parks	03 D	Gainesville	Develop Amicalola Falls State Park including cabins, campsites, concession-restroom building.	9/15/64-10/30/66	10/13/66 116,625	10/13/66 116,625	
Department of State Parks	06 D	Dalton	Develop Fort Mountain State Park including cabins, campsites, concession-restroom building.	9/4/64-12/1/66	10/13/66 123,953	10/13/66 123,953	
Department of State Parks	05 D	Augusta	Develop Magnolia Springs State Park including cabins, comfort stations, well, concession buildings, campsites.	9/5/64-12/31/66	10/13/66 66,796	10/13/66 66,796	
Department of State Parks	04 D	Jacksonville	Develop Crooked River State Park including cabins, comfort stations, concession building, campsites.	9/5/64-4/1/67	10/13/66 66,358	10/13/66 66,358	
Department of State Parks	10 D	Atlanta	Construct golf course at Hard Labor Creek State Park.	6/22/66-7/2/67	10/13/66 138,750	10/13/66 138,750	
Department of State Parks	09 D	Jackson	Develop Indian Springs State Park including bathhouse, service center, comfort station, roads, campsites.	9/4/64-4/1/67	10/13/66 175,641	10/13/66 175,641	
Department of State Parks	15 D	Fargo	Develop Stephen C. Foster State Park by constructing overnight cabins, water & sewerage disposal system.	6/5/65-6/1/67	10/18/66 70,857	10/18/66 70,857	
Department of State Parks	18 D	Kingsland	Develop Crooked River State Park including walkway and fishing pier.	8/1/66-9/1/67	10/14/66 19,167	10/14/66 19,167	
Game and Fish Commission	17 D	Statewide	Construct 42 concrete boat ramps on various lakes and rivers.	9/1/66-7/1/67	10/21/66 50,000	10/21/66 50,000	
				SUBTOTAL	1,050,378	1,050,378	

STATE: GEORGIA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of State Parks	08 D	Clayton	Develop Black Rock Mountain State Park including overnight cabins, campsites, service center, comfort station.	9/4/64-4/1/67	10/22/66 106,438	10/22/66 106,438	
Putnam County	11 C	Eatonton	Acquire 4 acres and develop Oconee State Park.	3/1/65-9/1/67	10/26/66 25,675	10/26/66 25,675	
Department of State Parks	16 D	Clayton	Construct 5 overnight cabins at Black Rock Mountain State Park.	3/18/66-6/1/67	10/31/66 41,891	10/31/66 41,891	
Department of State Parks	20 D	Rutledge	Construct picnic shelter, comfort station, campground at Hard Labor Creek State Park No. 2.	6/5/65-6/1/67	11/7/66 29,194	11/7/66 29,194	
Department of State Parks	21 D	Adel	Develop Reid Bingham State Park including visitors center-concession building, water well, group picnic shelter.	2/4/65-6/1/67	11/28/66 80,357	11/28/66 80,357	
Department of State Parks	22 D	Statewide	Install playground equipment & beautify play areas in 7 State parks.	1/1/66-9/1/67	12/23/66 15,382	12/23/66 15,382	
Richmond County Recreation Department	24 A	Augusta	Acquire 13 acres to develop Bayvale Recreation Park.	1/1/67-1/1/68	12/23/66 11,000	12/23/66 11,000	
				TOTAL	1,360,315	1,360,315	

STATE: GUAM 54

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
					9/25/65	9/25/65	
Territorial Planning Commission	01 P	Territory-wide	Completion of Territorial Recreation Plan	7/1/65-12/31/66	31,000	31,000	
				TOTAL	31,000	31,000	

STATE: HAWAII 51

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
County of Kauai	01 D	Kapaa	Develop a beach park including picnic pavilions, picnic facilities, lighting, sanitary facilities.	3/15/66-6/30/67	4/15/66 25,200	4/15/66 25,200	
County of Kauai	03 D	Eleele	Develop open air pavilions, picnic facilities and lighting at Hanapepe Beach Park.	4/1/66-6/30/67	4/15/66 11,150	4/15/66 11,150	
County of Kauai	04 D	Kekaha	Develop open air pavilion, sanitary facilities, picnic facilities at Kekaha Beach Park.	4/1/66-6/30/67	4/15/66 14,000	4/15/66 14,000	
County of Hawaii	05.1 D	Hilo	Develop swimming, picnic, camping and other facilities at Onekahakaha Beach Park.	6/1/66-5/31/67	4/15/66 77,250	4/15/66 77,250	
County of Hawaii	06.1 D	Kamuela	Develop sanitary facilities, camping and other facilities at Spencer Beach Park.	8/1/66-5/31/67	4/15/66 52,250	4/15/66 52,250	
County of Maui	07.1D	Wailuku	Construct 2 botanical gardens and parking area at Kepaniwai Botanical Garden.	4/1/66-7/30/67	4/15/66 56,800	4/15/66 56,800	
County of Honolulu	08 D	Honolulu	Develop 13 acres of beach frontage lands for group and family camping facilities at Waimanalo Beach.	4/66-4/67	4/30/66 50,100	4/30/66 50,100	
County of Kauai	02.1A	Waimea	Acquire a park site for subsequent city park development.	4/15/66-7/30/67	5/21/66 10,000	5/21/66 10,000	
Division of Harbors	09 A	Honolulu	Acquire 3.8 acres of access and parking space to serve a new small boat harbor.	2/1/66-2/28/67	7/23/66 125,000	7/23/66 125,000	
Department of Land and Natural Resources	14 D	Maui	Develop Waianapanapa State Park including parking lots, roads, picnic areas, trails, cabins, landscaping, utilities.	10/1/64-6/30/67	10/23/66 83,640	10/23/66 83,640	
Department of Land and Natural Resources	15 D	Mauna Kea	Develop Mauna Kea State Park including group camp, roads, parking, irrigation system, cabins, landscaping.	1/1/65-6/30/67	10/22/66 149,940	10/22/66 149,940	
City & County of Honolulu	11 D	Honolulu	Develop Pearl Harbor Park including clearing, grubbing, utilities, irrigation system, roadways, parking, landscaping.	4/2/65-6/30/67	11/9/66 145,205	11/9/66 145,205	
				SUBTOTAL	800,535	800,535	

STATE: HAWAII (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Department of Planning & Economic Development	16 P	Statewide	Revise, update, maintain State outdoor recreation plan.	9/15/65-10/31/67	12/21/66 80,899	12/21/66 80,899	
				TOTAL	881,434	881,434	

STATE: IDAHO 11

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Parks	01.4 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-3/1/67	6/24/65 20,090	6/24/65 20,090	
Department of Parks	02 D	Priest River	Develop Indian Creek Recreation Area.	9/4/64-6/30/67	12/10/65 37,500	12/10/65 37,500	
Department of Parks	05 D	McCall	Develop Ponderosa State Park.	9/4/64-6/30/67	12/10/65 37,500	12/10/65 37,500	
Department of Parks	06.I D	Coeur d'Alene	Develop Heyburn State Park.	9/4/64-6/30/67	12/10/65 37,500	12/10/65 37,500	
Department of Parks	08 A	Winchester	Acquire land and lake for development of fishing and camping area.	9/4/64-6/30/67	12/10/65 37,500	12/10/65 37,500	
Department of Parks	09 D	Winchester	Develop Winchester Park and Recreation Area.	9/4/64-6/30/67	12/10/65 20,000	12/10/65 20,000	
Department of Highways	03 D	Statewide	Develop 11 highway rest and recreation areas.	9/4/64-6/30/67	2/16/66 101,500	2/16/66 101,500	
Fish and Game Department	10 A	Boise	Acquire 1,012 acres for addition to the Boise River Elk and Deer Winter Range.	9/4/64-6/30/67	2/23/66 38,000	2/23/66 38,000	
Department of Parks	17 A	Statewide	Acquire 320 acres of land for public fishing access to Silver Creek in Blaine County.	10/1/65-12/31/67	1/20/66 70,000	3/2/66	36,000*
Department of Parks	19 D	Coeur d'Alene	Develop Farragut State Park including facilities for boating, swimming, camping headquarter building, and seeding.	7/1/65-12/31/67	3/29/66 268,874	3/29/66 268,874	
Department of Parks	11 D	Winchester	Construct overnight camping facilities including tables, stoves, electricity, sewer hookups.	9/1/65-6/30/67	1/20/66 37,500		
Department of Parks	12 A	Mount Home	Acquire approximately 40 acres of land for overnight camping facilities.	9/1/65-6/30/67	1/20/66 4,000		
				SUBTOTAL	709,964	634,464	

*First phase completed.

STATE: IDAHO (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Parks	13 D	Boise, Mount Home	Construct overnight camping facilities at Mount Home Campground.	9/1/65-6/30/67	1/20/66 37,500		
Department of Parks	14 A	Twin Falls	Acquire approximately 40 acres for development of overnight camping facilities	9/1/65-6/30/67	1/20/66 25,000		
Department of Parks	15 A	Montpelier	Acquire approximately 40 acres for overnight camping facilities.	9/1/65-6/30/67	1/20/66 5,000		
Department of Parks	16 D	Yellowstone National Park	Construct overnight camping facilities at Henry's Lake State Park.	9/1/65-6/30/67	1/20/66 17,500	11/19/66 17,500	
Department of Parks	18 A	Statewide	Acquire game habitat areas to sustain and perpetuate wildlife resources of the State.	10/1/65-12/31/67	1/20/66 25,000		
Fremont County	21 A	St. Anthony	Acquire 110 acres of land for construction of golf course.	5/1/66-5/1/67	7/11/66 13,473	7/11/66 13,473	
City of Coeur d'Alene	20 D	Coeur d'Alene	Develop picnicking, boating, fishing facilities on South Third Street Waterfront	1/18/66-5/1/67	8/23/66 26,240	8/23/66 26,240	
City of Boise	24 .1 D	Boise	Improve recreational facilities at Julian Davis Park and Capitol Boulevard Rest Stop.	1/1/66-10/31/67	8/20/66 8,551	8/20/66 8,551	
City of Blackfoot	26 C	Blackfoot	Acquire and develop Blackfoot Park and Recreation Area including picnicking, camping, swimming, boating.	1/1/66-12/31/71	8/30/66 141,233	8/30/66 29,075	
County of Ada	25 D	Boise	Develop picnicking facilities, tennis & basketball courts, play apparatus, landscaping, at Ada County Park.	9/1/66-9/1/67	8/20/66 35,500	8/20/66 35,500	
City of Pocatello	22 D	Pocatello	Develop and renovate zoological facility at Pocatello Zoological Gardens at Ross Park.	1/1/66-6/1/67	10/13/66 21,388	10/13/66 21,388	
County of Fremont	28 D	Ashton	Develop golf course, access road, landscaping, parking area, sprinkler system.	10/1/66-11/1/69	10/25/66 35,983	10/25/66 35,983	
				SUBTOTAL	392,368	187,710	

STATE: IDAHO (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Lewiston	27 D	Lewiston	Develop Lewiston Heights Park including softball field, tennis courts, spray pool, picnic areas, playground areas.	11/1/66-6/31/71	10/26/66 51,500	10/26/66 51,500	
City of Shelley	30 D	Shelley	Develop Riverside Park & Recreation Area including picnic & parking area, boating facilities, sports area, play area.	11/1/66-6/30/70	11/8/66 24,570	11/8/66 24,570	
County of Shoshone	23 A	Osburn	Acquire 28.1 acres of land for recreation and camping facilities.	4/26/66-4/26/69	11/9/66 15,714	11/9/66 3,929	
City of Ammon	29 D	Ammon	Develop McCowin Park & Recreation Area including swimming facility, roadway, irrigation system, picnic facilities.	12/1/66-9/1/68	12/2/66 18,076	12/2/66 18,076	
City of Meridian	34 A	Meridian	Acquire 15 acres of land to provide a community swimming pool.	11/15/66-11/15/67	12/6/66 15,450	12/6/66 15,450	
City of Twin Falls	32 C	Twin Falls	Acquire 5 acres and develop Hayes Park including picnic facilities, playground area, landscaping, ball courts.	11/1/66-11/1/68	12/12/66 44,958	12/12/66 44,958	
				TOTAL	1,272,600	980,657	

STATE: ILLINOIS 12

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
Department of Conservation	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/66	9/16/65 66,026	9/16/65	61,662
Department of Conservation	02 A	Mt. Carmel	Acquire 625 acres of land in Wabash County for subsequent outdoor recreation development and preservation.	7/1/65-1/1/66	3/3/66 143,750	3/3/66	143,750
Department of Conservation	08 A	Rockford	Acquire 658.5 acres to expand Rock Cut State Park.	7/1/65-12/31/68	5/14/66 266,550		
Department of Conservation	09 A	Morrison	Acquire 714 acres to expand Whiteside County Conservation Area.	7/1/65-12/31/68	5/14/66 134,325		
Department of Conservation	03 A	St. Louis	Acquire 357.21 acres contiguous to the boundaries of Cahokia Mounds State Park.	7/1/65-12/31/68	7/6/66 764,750		
Department of Conservation	06 A	Kankakee	Acquire 560 acres to add to Kankakee River State Park.	7/1/65-12/31/68	7/6/66 228,500		
Chicago Park District	14 D	Chicago	Rehabilitate bike trail on Lake Michigan and develop riverfront bikeway along bank of North Shore Channel.	6/1/66-11/15/67	7/15/66 61,000	7/15/66 35,000	
Department of Conservation	13 A	Arcola, Tuscola	Acquire 468 acres of land adjacent to Douglas County Conservation Area.	7/1/65-12/31/68	10/15/66 147,740		
City of Springfield	20 A	Springfield	Acquire 34.5 acres as an addition to Riverside Park.	7/1/66-7/1/67	12/12/66 17,250		
				TOTAL	1,829,891	240,412	

STATE: INDIANA 13

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
Department of Natural Resources	01 P	Statewide	Prepare Supplement No. 1 to Indiana's Master Plan for Acquisition and Development.	1/65-7/65	3/2/66 19,000	3/2/66 19,000	
Department of Natural Resources	04 A	New Harmony	Acquire approximately 700 acres of land for development of a new State Park.	12/1/65-12/31/67	6/23/66 325,250		
Board of Park Commissioners	05 D	Hammond	Develop Edward C. Dowling Park including ball fields, tennis courts, picnic areas, lake, walks, raods, shelters.	6/66 - 6/68	8/23/66 150,000		
Department of Natural Resources	03.1 A	Lincoln	Acquire 161.46 acres of inholdings in Lincoln State Park.	1/1/65 3/31/66	8/24/66 19,788	8/24/66 19,788	
Department of Natural Resources	06.1 A	Angola	Acquire 218.84 acres of land contiguous to Pokagon Park.	10/2/64-12/31/65	8/24/66 31,400	8/24/66 31,400	
Board of Park Commissioners Gary, Indiana	11 D	Gary	Construct swimming facilities at Tolleston Park.	7/25/66-6/30/67	8/24/66 75,000	8/24/66 75,000	
Board of Park Commissioners Gary, Indiana	12 D	Gary	Construct swimming facilities at Washington Park.	7/25/66-6/30/67	8/24/66 75,000	8/24/66 75,000	
				TOTAL	695,438	220,188	

STATE: IOWA 14

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
State Conservation Commission	01 P	Statewide	Prepare preliminary comprehensive outdoor recreation plan.	9/4/64-2/28/66	6/22/66 19,264	6/22/66	19,264
Conservation Commission	05.1D	Des Moines	Renovate spillway at Lake Ahquabi dam to protect lake and restore recreational uses of the lake.	10/1/65-12/31/66	8/24/66 54,689	8/24/66 54,689	
Conservation Commission	07.1D	Des Moines	Renovate spillway at Lake Keomah Dam to protect lake and restore recreation uses of the lake.	10/6/65-12/31/66	8/24/66 52,164	8/24/66 52,164	
Conservation Commission	03 A	Mason	Acquire 14+ acres adjacent to Beeds Lake State Park to expand camping facilities.	1/1/66-12/31/66	9/9/66 7,500	9/9/66	7,500
Council Bluffs Park Department	09 D	Council Bluffs	Construct swimming pool adjacent to Woodrow Wilson Jr. High School.	9/1/66-12/1/67	10/5/66 45,225	10/5/66 45,225	
Linn County Conservation Board	08 C	Cedar Rapids	Acquire 123 acres and develop Pinicon Ridge Park including dam, campgrounds, picnic areas, roads, sanitary facilities.	9/4/65-9/4/70	10/27/66 215,156	10/27/66 34,239	
Conservation Commission	11 D	Bedford	Reconstruct concrete spillway, install water treatment & water storage tank at Lake of Three Fires State Park.	1/1/67-12/31/69	11/30/66 62,000		
Conservation Commission	10 D	Council Bluffs, Des Moines	Develop Lake Anita State Park including service building, water & sewer system, roads, parking, bethhouse, landscaping.	10/1/65-12/31/68	11/29/66 211,957	11/29/66 113,854	
Conservation Commission	12 D	Washington, Richland	Develop Lake Darling State Park including bathhouse, campground and trailer dump.	6/66 - 12/67	12/7/66 49,125	12/7/66 49,125	
Conservation Commission	17 D	Statewide	Construct water wells at four State Parks for camping areas.	5/1/66-12/31/67	12/22/66 24,838	12/22/66 24,838	
Conservation Commission	20 D	Creston	Develop Green Valley State Park including bathhouse, water & sewage system, parking area, beach retaining wall.	4/1/66-3/31/67	12/27/66 40,752	12/27/66 40,752	
				TOTAL	782,670	441,650	

STATE: KANSAS 15

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
State Park and Resources Authority	01 P	Statewide	Prepare statewide comprehensive outdoor recreation plan.	9/4/64-10/12/65	6/23/66 21,390	6/23/66 21,390	
State Park and Resources Authority	28 D	Wakefield	Develop recreational facilities, parking areas, and roads in Clay County Park.	5/1/66-5/1/67	6/22/66 33,578	6/22/66 33,578	
City of Olathe	29 A	Olathe	Acquire 18 acres of land for development of baseball diamonds and tennis courts.	5/15/66-11/18/66	6/22/66 18,000		
State Park and Resources Authority	02 .1D	Vassar	Construct bathhouse with sanitary facilities and develop beach at Pomona State Park.	1/1/65-1/1/66	7/6/66 16,519	7/6/66	16,519
State Park and Resources Authority	03.1D	Mankato	Construct shower, water and sanitary facilities at Lowell State Park.	6/8/65-9/1/66	7/6/66 6,150	7/6/66	6,150
State Park and Resources Authority	04.1D	Russell	Construct shower, water and sanitary facilities at Wilson State Park camping area.	6/8/65-9/1/66	7/6/66 7,750	7/6/66	7,750
State Park and Resources Authority	05.1D	Stockton	Construct showers, water and sanitary facilities at Webster State Park.	6/8/65-9/1/66	7/6/66 6,000	7/6/66	6,000
State Park and Resources Authority	06 D	Meade	Construct showers, water and sanitary facilities at Meade State Park.	6/6/65-6/30/66	7/6/66 6,575	7/6/66	6,575
State Park and Resources Authority	07.1D	Fort Scott	Construct shower, water and sanitary facilities at Crawford State Park.	5/1/65-9/1/66	7/6/66 7,828	7/6/66	7,828
State Park and Resources Authority	09.1D	Wichita	Develop bathhouse, picnic shelters, and sanitary facilities at Cheney State Park.	9/4/64-11/1/66	7/6/66 63,750	7/6/66 63,750	
State Park and Resources Authority	10.1D	Junction City	Construct shower, water and sanitary facilities at Milford State Park.	1/1/66-1/1/67	7/6/66 8,000	7/6/66 8,000	
State Park and Resources Authority	11.1D	WaKeeney	Construct shower, water and sanitary facilities at Cedar Bluff State Park.	9/4/64-11/1/66	7/6/66 5,300	7/6/66 5,300	
				SUBTOTAL	200,840	182,840	

STATE: KANSAS (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	 Completed
State Park and Resources Authority	12 D	Norton	Construct bathhouse for beach at Prairie Dog State Park.	6/8/65-7/1/66	7/6/66 9,450	7/6/66	9,450
State Park and Resources Authority	13 D	Scott	Construct shower, water and sanitary facilities at Scott State Park.	1/1/66-7/1/66	7/6/66 7,500	7/6/66 7,500	
City of Atchison	27 D	Atchison	Develop roads, lighting, picnic areas, nature trails, and other facilities at Warnock Lake.	2/1/65-12/15/67	7/6/66 49,587	7/6/66 49,587	
City of Atchison	26 A	Atchison	Acquire 113.8 acres of land for development of Warnock Lake Recreation Center.	2/1/65-9/15/67	7/6/77 13,991	7/6/77 13,991	
Leavenworth County	53 A	Leavenworth	Acquire 827 acres for development of Opossum Hollow Recreation Park.	9/1/66-1/1/68	9/30/66 84,148		
City of Haysville	70 C	Haysville	Acquire 11 acres of land and develop Haysville Park Reserve.	7/1/66-7/1/67	10/17/66 23,209	10/17/66 23,209	
State Park Authority	15 D	Abilene	Develop Pleasant View Recreation Area, Milford Reservoir, including boating facilities, utilities, landscaping.	7/1/66-6/30/68	10/15/66 175,925	10/15/66 25,425	
City of Winfield	60 A	Winfield	Acquire 13 acres of land for development of Cherry Street Park.	9/1/66-7/1/67	10/18/66 47,315	10/18/66 47,315	
City of Olathe	56 A	Olathe	Acquire 115 acres of land for development of Olathe Recreation Area No. 2.	7/1/66-9/1/66	10/18/66 24,126	10/18/66 24,126	
City of Rolla	62 D	Rolla	Construct municipal swimming pool and related facilities.	5/1/66-7/1/67	10/18/66 30,525	10/18/66 30,525	
State Park Authority	08 D	Statewide	Develop access roads, campground loops and parking areas in 13 State parks.	6/1/65-7/1/67	11/15/66 480,300	11/15/66 480,300	
City of Great Bend	54 A	Great Bend	Acquire 48 acre tract for development of McKinley Street Park.	8/1/66-12/31/66	10/19/66 85,470	10/19/66 85,470	
				SUBTOTAL	1,031,546	796,898	

STATE: KANSAS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Park and Resources Authority	84 D	Manhattan	Develop facilities at Tuttle Creek State Park including picnic, sanitary, campground, trailer parking area.	9/4/64-7/1/67	10/21/66 29,736	10/21/66 29,736	
City of Lakin	61 D	Lakin	Construct swimming pool and related facilities.	5/1/66-7/1/67	10/21/66 45,800	10/21/66 45,800	
City of Pittsburg	58 D	Pittsburg	Renovate and remodel city swimming pool and related facilities.	10/1/64-8/1/66	10/21/66 27,321	10/21/66 27,321	
State Park Authority	14 D	Wichita	Develop boat marina at Cheney State Park.	5/1/66-6/30/68	10/25/66 175,925	10/25/66 103,785	
City of Overland Park	65 A	Overland Park	Acquire .78 acres of land adjacent to existing Young's Park.	9/1/66-12/31/66	10/25/66 9,665	10/25/66 9,665	
City of Overland Park	66 D	Overland Park	Develop South Lake Park including picnic sites & shelters, fishing pond, water & sanitary facilities, playground area.	12/1/65-12/31/66	10/25/66 16,963	10/25/66 16,963	
Board of Sedgwick County Commissioners	71 D	Wichita	Construct two modern comfort stations.	4/1/66-12/31/66	10/27/66 14,245	10/27/66 14,245	
Kansas Park & Resources Authority	83 D	Wichita	Construct picnic shelters, one pit toilet, 15-unit trailer park, water storage system.	12-11-64-12/30/65	10/27/66 9,409	10/27/66 9,409	
Kansas Park & Resources Authority	86 D	Topeka	Construction of area bulletin boards, picnic shelters, 15-unit trailer parks, camping area, water system, etc.	9/4/64-7/1/66	10/27/66 15,323	10/27/66 15,323	
Kansas Park & Resources Authority	94 D	Manhattan	Construct 20 picnic shelters.	3/10/66-7/1/67	10/27/66 7,558	10/27/66 7,558	
City of Topeka	55 A	Topeka	Acquire 7.73 acres for a multiple outdoor recreation use area.	7/1/66-7/1/67	10/28/66 9,965	10/28/66 9,965	
City of Wellington	57 D	Wellington	Construct a bathhouse and dressing room for the boating area.	1/1/65-12/31/66	10/28/66 12,601	10/28/66 12,601	
				SUBTOTAL	374,511	302,371	

STATE: KANSAS (Con't)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Osawatomie	59 A	Osawatomie	Acquire 114 acres of land to used for picnicking, fishing, camping, etc.	7/1/66-7/1/67	10/28/66 19,050	10/28/66 19,050	
City of Turon	64 C	Turon	Acquire one acre of land for the construction of a 30'x60' swimming pool, a 10'x10' wading pool & change house.	5/1/66-7/1/67	10/28/66 14,940	10/28/66 14,940	
City of Holton	69 D	Holton	Construct four comfort stations, roads, picnic grills, boat dock, ramp, bridge and landscaping of park area	2/1/66-4/1/71	10/28/66 6,075	10/28/66 6,075	
Kansas Park and Resources Authority	85 D	Wakeeney	To construct boat ramps, picnic shelters and tables, entrance signs, and 15-unit trailer park at Cedar Bluff State Park.	9/4/64-3/10/66	10/31/66 7,630	10/31/66 7,630	
Park and Resources Authority	82 D	Salina	Improve Kanopolis State Park including picnic shelters, water system, signs.	9/9/64-6/21/66	11/3/66 6,385	11/3/66 6,385	
City of Neodesha	67 D	Neodesha	Construct road & parking, area lighting, picnic facilities, erect center, install utilities.	1/1/65-1/1/70	11/8/66 6,054	11/8/66 6,054	
Shawnee County	74 D	Topeka	Construct basic facilities and improvements to provide for mobile-unit camping.	3/1/66-8/1/66	11/8/66 6,971	11/8/66 6,971	
Park and Resources Authority	88 D	Pittsburgh	Construct picnic facilities, maintenance headquarters and install water system at Crawford State Park.	9/9/64-11/22/65	11/10/66 9,571	11/10/66 9,571	
Park and Resources Authority	89 D	White Rock Creek	Construct picnic shelters, water system, maintenance building at Lovewell State Park	9/4/64-1/1/67	11/10/66 7,841	11/10/66 7,841	
Park and Resources Authority	90 D	Meade	Construct picnic facilities, water system, maintenance area, camp sites, grills, bulletin boards at Meade State Park.	9/4/64-6/1/66	11/10/66 7,630	11/10/66 7,630	
Park and Resources Authority	91 D	Ellsworth	Construct picnic shelters, water system, and maintenance building at Wilson State Park.	2/4/65-12/30/66	11/10/66 7,044	11/10/66 7,044	
Park and Resources Authority	92 D	Norton	Construct picnic facilities, water system, maintenance & headquarters structure at Prairie Dog State Park.	9/4/64-1/1/67	11/10/66 8,189	11/10/66 8,189	
				SUBTOTAL	107,380	107,380	

STATE: KANSAS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Park and Resources Authority	93 D	Stockton	Construct picnic facilities, water system, maintenance & headquarters building, bulletin boards at Webster State Park.	9/4/64-3/14/66	11/10/66 9,105	11/10/66 9,105	
City of St. John	98 D	St. John	Construct bathhouse facility at existing municipal swimming pool.	1/1/67-8/1/67	11/16/66 8,140	11/16/66 8,140	
City of Colby	79 D	Colby	Develop South K-25 Park for games, fishing, picnicking & playground facilities.	8/1/66-12/31/66	11/23/66 2,550		
Riley County Commission	81 D	Riley, Ogden, Leonardville, Randolph.	Develop sanitary restroom facilities and tennis courts in City parks.	1/1/67-1/1/68	11/23/66 6,388		
Park and Resources Authority	37 D	Russell	Develop Wilson State Park including park residence, picnic & camping facilities, beach, trailer park, signs, roads.	6/1/66-7/1/70	12/7/66 110,000		
Park and Resources Authority	39 D	Hill	Develop Webster State Park including campsites, beach, boat ramps, bathhouse, picnic facilities, water system, roads.	6/1/66-7/1/70	12/7/66 57,738		
Park and Resources Authority	40 D	Mankato	Develop Lovewell State Park including camping, picnicking, trailer park, beach area, water system, roads.	6/1/66-7/1/70	12/7/66 59,237		
Park and Resources Authority	41 D	Meade	Develop Meade State Park including boat marina, sanitary facilities, roads, water distribution center, signs.	6/1/66-7/1/70	12/7/66 75,725		
Park and Resources Authority	42 D	Milford	Develop Milford State Park including roads, maintenance area, sanitary facilities, camping & picnic area.	6/1/66-7/1/71	12/7/66 185,000		
Park and Resources Authority	35 D	Wichita	Develop Cheney State Park including roads, camping & picnicking areas, trailer park, water & sewer system, boat ramps, signs.	6/1/66-7/1/70	12/7/66 146,750		
Park and Resources Authority	34 D	Ottawa, Topeka	Develop Pomona State Park including road, boat ramp, picnicking & camping facilities, interior signing program.	6/1/66-6/30/68	12/7/66 33,750		
Park and Resources Authority	33 D	WaKeeney	Develop Cedar Bluff State Park including roads, camping area, landscaping, water system, picnic shelters.	6/1/66-6/30/68	12/7/66 54,750		
				SUBTOTAL	749,133	17,245	

STATE: KANSAS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Park and Resources Authority	44 D	Topeka	Develop Perry State Park including hiking riding, camping, picnicking, swimming, boating facilities, golf course, parking.	6/1/66-7/1/72	12/7/66 502,425		
City of Winfield	95 D	Winfield	Develop Cherry Street Park including access street, parking areas, tot lots, picnic shelters, sidewalks, fencing.	7/1/67-7/1/71	12/7/66 63,620		
City of Topeka	68 A	Topeka	Acquire 10.5 acres of land to develop Linn Park.	7/1/66-7/1/67	12/7/66 24,242	12/7/66 24,242	
Park and Resources Authority	43 D	Scott	Develop Scott State Park including picnicking, camping, boating, fishing, swimming facilities, access road.	6/1/66-7/1/70	12/7/66 73,925		
Park and Resources Authority	38 D	Fort Scott	Develop Crawford State Park including boat ramp, waterfront marina, roads, signs, picnic facilities.	6/1/66-7/1/70	12/7/66 64,925		
Park and Resources Authority	32 D	Manhattan	Develop Turtle Creek Park including road, campgrounds, trailer park, picnic shelters	6/1/66-6/30/68	12/13/66 20,250		
Park and Resources Authority	36 D	Norton	Develop Prairie Dog State Park including camp sites, picnic facilities, trailer park, boat ramp, marina, roads, signs.	6/1/66-7/1/70	12/14/66 152,280		
City of Osawatomie	97 D	Osawatomie	Develop city park including play equipment, picnic area, comfort station, 9-hole golf course, road paving.	7/1/66-12/31/69	12/13/66 24,331		
City of Eskridge	78 D	Eskridge	Construct cement multiple-play area at Eskridge City Park.	5/1/66-7/1/67	11/21/66 4,759		
City of Topeka	99 D	Topeka	Refurbish Ripley Park including plant materials, playground equipment, benches, tables, tennis court wire, lights.	9/1/66-7/1/67	12/6/66 15,189	12/6/66 15,189	
City of Topeka	100 D	Topeka	Replace plant materials & recreation facilities at Big Shunga Park.	9/1/66-7/1/67	12/6/66 4,742	12/6/66 4,742	
City of Topeka	101 D	Topeka	Refurbish Central Park.	9/1/66-7/1/67	12/6/66 8,127	12/6/66 8,127	
				SUBTOTAL	958,815	52,300	

STATE: KANSAS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Topeka	102 D	Topeka	Replace plant materials in Holliday and Huntoon Parks.	9/1/66-7/1/67	12/6/66 493	12/6/66 493	
Park and Resources Authority	30 D	Salina	Develop Kanopolis State Park including roads, picnic shelters, nature trails with signs, overlook shelter.	6/1/66-6/30/68	12/27/66 22,250		
Wyandotte County Park Commission	63 D	Kansas City	Develop Pierson Park including roads, lighting, water system, shelters, earth dam, picnic tables, flag poles, fencing.	1/1/67-12/31/69	12/29/66 244,110	12/29/66 109,890	
Park and Resources Authority	31 D	Fall River	Develop Fall River-Toronto State Parks including waterfront marina, camping facilities, bulletin boards.	6/1/66-6/30/68	12/28/66 104,355		
				TOTAL	3,793,433	1,569,417	

STATE: KENTUCKY 16

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Park and Resources Authority	01 P	Statewide	Prepare statewide comprehensive outdoor recreation plan.	12/1/64-10/31/65	9/15/65 29,150	9/15/65	29,150
Department of Parks	02 D	Glasgow	Develop Barren River State Park including lodge, cottages, bathhouse & beach marina, campsites, golf course, landscaping.	9/1/65-12/1/68	11/23/66 1,734,500	12/17/66 1,734,500	
				TOTAL	1,763,650	1,763,650	

STATE: LOUISIANA 17

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Parks and Recreation Commission	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-11/1/65	8/10/65 18,500	8/10/65	15,943
Parks and Recreation Commission	02.1A	Baton Rouge	Acquire approximately 644 acres of Port Hudson Civil War Battlefield for a State Park.	8/2/65-7/30/67	12/22/65 132,298	12/22/65	131,084
Parks and Recreation Commission	03 P	Statewide	Upgrade, refine and revise existing statewide plan.	9/1/65-10/31/66	1/20/66 52,438	1/20/66 52,438	
Parks and Recreation Commission	04 D	Lake Charles	Construct 4 overnight cabins for public use at Sam Houston State Park.	9/23/64-2/23/66	3/1/66 22,498	3/1/66 22,498	
Parks and Recreation Commission	05 D	Alexandria	Construct administrative building and storage and supply building at Chicot State Park.	6/18/65-2/1/66	4/15/66 6,614	4/15/66 6,614	
City of Lafayette	17.1 A	Lafayette	Acquire 30 acres of land to develop Salsman Area Park.	1/1/65- 6/30/66	7/1/66 60,600	7/1/66 60,600	
City of Lafayette	20.1 A	Lafayette	Acquire 5.89 acres of land to develop Willingham Area Park.	1/1/65- 6/30/66	7/1/66 12,625	7/1/66 12,625	
City of Lafayette	21.1 A	Lafayette	Acquire 30.32 acres for development of Saucier Area Park.	1/1/65- 6/30/66	7/1/66 30,623	7/1/66 30,623	
City of Lafayette	23.1 A	Lafayette	Acquire 17.40 acres for development of Martin Area Park.	1/1/65- 6/30/66	7/1/66 18,705	7/1/66 18,705	
City of Lake Charles	16 D	Lake Charles	Develop existing beach park including roads, parking area, playground equipment, bathhouse, utilities, picnic area.	6/1/65-7/1/68	8/20/66 106,471	8/20/66 33,183	
Wild Life and Fisheries Commission	58 A	Bogalusa	Acquire 4.4 acre tract for boat-launch access to Pearl River.	1/10/65-5/1/66	9/3/66 785	9/3/66 785	
Baton Rouge Recreation and Park Commission	60 C	Baton Rouge	Acquire 10 acre tract and develop Pride Park including road, parking area, restrooms, picnic shelter, trails.	1/1/66-12/31/67	10/18/66 17,826	10/18/66 9,595	
				SUBTOTAL	479,983	394,693	

STATE: LOUISIANA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
Parks and Recreation Commission	07 D	Lafayette	Develop combination picnic shelter - comfort station at Longfellow-Evangeline State Park.	7/1/65-1/1/66	10/5/66 6,909	10/5/66 6,909	
Parks and Recreation Commission	08 D	Alexandria	Develop combination picnic shelter-comfort station at Marksville Prehistoric Indian State Park.	4/8/65-1/1/66	10/5/66 7,423	10/5/66 7,423	
City of Lake Charles	12 C	Lake Charles	Acquire 9 acres and develop University Park including pool, bathhouse, restroom, tennis courts, playgrounds, shelters.	1/5/65-6/1/67	10/12/66 175,725	10/12/66 175,725	
Town of Bunkie	62 C	Bunkie	Acquire 2 acres and develop Lakeview including playground, picnic area, restrooms, parking area, landscaping.	11/1/65-6/1/67	10/12/66 16,267	10/12/66 16,267	
City of Alexandria	63 C	Alexandria	Acquire 11 acres and develop Frank O. Hunter Park including parking & picnic areas, playground, landscaping.	10/1/64-6/1/67	10/12/66 31,098	10/12/66 31,098	
East Baton Rouge Recreation & Park Commission	65 C	Baton Rouge	Acquire 16 acres and develop Laurens Henry Cohn Memorial Arboretum.	9/28/65-9/28/67	11/7/66 73,805	11/7/66 73,805	
City of Lafayette	22 A	Lafayette	Acquire 5.9 acres of land for future development of Peck Area Park.	6/15/65-11/10/66	11/23/66 8,585	11/23/66 8,585	
Caddo Parish Police Jury	66 D	Oil	Develop Caddo Lake Park including signs, roads, trailer & tent sites, fishing pier, parking lots, boat ramp, picnic units.	2/1/65-9/15/67	11/30/66 50,206	11/30/66 50,206	
City of Lafayette	19 A	Lafayette	Acquire 9.8 acres for development of LeBlanc Area Park.	11/10/65-11/1/66	11/30/66 20,200	11/30/66 20,200	
				TOTAL	870,201	784,911	

STATE: MAINE 18

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
Park and Recreation Commission	01.2 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/30/64-12/10/66	6/24/65 20,240	6/24/65 20,240	
Park and Recreation Commission	02.1 D	South Portland	Develop Crescent Beach State Park to provide day use facilities for ocean bathing, picnicking, etc.	9/4/64-6/30/68	1/15/66 759,000	1/15/66 303,600	
Park and Recreation Commission	08.2 D	Franklin	Develop Rangeley Lake State Park including access road, camping area, boat access facilities.	9/4/64-6/30/69	1/15/66 263,120	1/15/66 263,120	
Park and Recreation Commission	07 C	Searsport	Acquire and develop land adjoining Moose Point State Park for multi-purpose outdoor recreation.	9/4/64-9/4/69	1/15/66 68,614	8/15/66 22,517	
Town of Camden	09.1D	Camden	Develop 250 acre regional winter sports area to provide skiing, tobogganing, and related activities.	9/1/65-9/1/69	1/15/66 63,250	8/9/66 40,480	
Park and Recreation Commission	05 A	Naples	Acquire approximately 100 acres to provide a boating area, camping area, and to protect park from serious encroachment.	1/ /66-12/31/66	4/11/66 37,950	12/12/66 37,950	
Park and Recreation Commission	10 C	Poland	Acquire and develop approximately 767 acres for bathing, picnicking, camping and related uses, Poland Spring State Park	9/4/65-9/4/69	4/11/66 446,616	8/6/66 42,934	
Park and Recreation Commission	06 D	Phippsburg	Construct scenic overlook, parking area, picnic sites, sanitary facilities near Fort Popham.	9/4/64-9/4/69	1/15/66 17,200	4/15/66 17,200	
Park and Recreation Commission	03 D	Prospect	Provide additional and improved sanitary facilities, control station, traffic island, reconstruct terreplain(Fort Knox)	9/4/64-9/4/69	1/15/66 54,648	4/30/66 12,144	
Park and Recreation Commission	04 A	Stockton Springs	Acquire approximately 165 acres of land having 1 1/2 miles of shore frontage on Cape Jellison in Penobscot Bay.	9/4/64-9/4/67	1/15/66 14,674	4/30/66	14,674
Park and Recreation Commission	14.1D	Brunswick	Develop 34 acre park for swimming, nature trails, picnicking, related facilities.	3/1/65-9/1/71	6/23/66 56,775	8/6/66 12,650	
City of Rockport	15 D	Rockport	Develop terraced, garden type park with walks and benches and platform for musical concerts.	7/1/65-12/31/67	6/23/66 4,048	8/6/66	3,852
				SUBTOTAL	1,806,135	791,361	

STATE: MAINE (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Park and Recreation Commission	11 P	Statewide	Maintain and update Statewide outdoor recreation plan.	3/1/66-6/30/68	6/28/66 67,804	6/28/66 6,375	
Park and Recreation Commission	17.1 D	Richmond	Develop picnicking and camping facilities for day use at Swan Island Campground.	1/1/66-6/30/68	7/23/66 25,300	7/23/66 25,300	
Park and Recreation Commission	13 C	Richmond	Acquire and develop 3 acre riverbank park and water access facility including boat launching ramp, picnic site, parking area	2/1/66-11/1/68	8/6/66 26,570	9/3/66 26,570	
Town of Boothbay	18 D	Boothbay	Develop Knickerkane Island Park including beach, wading area, picnic facilities, drinking fountains, landscaping.	1/1/66-9/31/67	8/22/66 6,072	10/4/66 6,072	
Park and Recreation Commission	12 D	Camden	Expand and improve Camden Hills State Park by construction of parking facilities at the overlook.	6/30/65-12/31/68	9/16/66 8,400	11/14/66 8,400	
Town of Dexter	19.1 D	Dexter	Install paved area for combination tennis and basketball courts at Crosby Park.	4/1/66-6/30/67	10/6/66 3,653	10/6/66 3,653	
Park and Recreation Commission	24 D	Islesboro	Develop facilities at Warren Island State Park including sanitary facilities, camping & picnicking sites, salt water pier.	1/1/66-12/31/68	10/5/66 10,626	10/5/66 10,626	
Old Town, Maine	21 D	Old Town	Develop swimming pool and picnic area at Old Town Recreation Area.	1/1/66-12/31/68	10/10/66 65,780		
Park and Recreation Commission	23 D	Weld	Expand and improve facilities at Mt. Blue State Park including recreation center, boat docks, service area, play areas.	11/1/65-6/30/70	10/10/66 58,700	10/10/66 33,391	
Town of St. George	25 D	St. George	Develop public boat launching and landing facilities in the Town of St. George.	4/1/65-7/1/69	10/10/66 29,415	10/10/66 29,415	
Town of Winter Harbor	22 D	Winter Harbor	Construct boating facility with a launching ramp & parking area.	1/1/67-12/31/68	10/14/66 10,120		
Town of Lincoln	27 C	Lincoln	Acquire & develop 3 acres for the new Prince H. Thomas Park.	4/1/66-3/31/71	11/21/66 20,240	12/15/66 20,240	
				SUBTOTAL	332,680	170,042	

STATE: MAINE (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
Park and Recreation Commission	26 D	Dover, Foxcroft, Sowerbank	Develop Peaks-Kenny State Park including day-use area for picnicking, bathing, and camping area.	9/4/64-9/4/69	11/26/66 253,000		
				TOTAL	2,391,815	961,403	

STATE: MARYLAND 19

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Department of Forests and Parks	01 A	Annapolis	Acquire 134 acres adjoining Sandy Point State Park, to be used for nature interpretation, hiking, camping facilities.	7/1/66-6/30/67	3/15/66 140,000	7/23/66 140,000	
Department of Parks and Recreation	03 D	Baltimore	Develop neighborhood park in Yale Heights with separate play areas for different age groups.	4/1/66-12/31/66	7/6/66 22,977	7/6/66 22,977	
Department of Forests and Parks	04 A	Baltimore	Acquire 953 acres at Elk Neck State Park to increase water frontage and expand camping, picnicking, swimming facilities	12/65 - 6/30/67	8/9/66 429,250	8/9/66 207,050	
Charles County	05 D	La Plata	Develop Wills Memorial Park including ball diamond, court games area, nature theatre, administration building.	5/66-10/69	9/3/66 45,450	9/3/66 15,150	
Maryland Historical Trust	13 D	Annapolis	Develop historic Governor Paca House gardens and develop Visitor Hall-Interpretation Center.	10/66-10/69	9/30/66 105,000	11/15/66 105,000	
Department of Forests and Parks	09 D	Boonsboro	Develop Washington Monument State Park including 2 comfort stations and enlarge and reconstruct water system.	10/1/66-5/31/67	9/3/66 25,250	9/3/66 25,250	
Harford County	07 D	Aberdeen	Construct 4 tennis courts & 1 multi-use court at Aberdeen High School.	7/1/66-7/1/67	9/30/66 8,080	9/30/66 8,080	
Harford County	08 D	Havre de Grace	Construct 3 tennis courts & 1 multi-use court at Havre de Grace High School.	7/15/66-7/15/67	9/30/66 7,070	9/30/66 7,070	
Harford County	10 D	Bel Air	Construct 1 multi-use court at Bel Air High School.	7/25/66-7/25/67	9/30/66 4,040	9/30/66 4,040	
Baltimore City Department of Recreation & Parks.	06 D	Baltimore	Develop John Eager Howard Playground including basketball & tennis courts, wading pool, playgrounds, landscaping.	6/1/66-6/1/67	10/15/66 79,598	10/15/66 79,598	
Carroll County	02	Westminster	Develop a recreation area and farm museum, picnic areas, 3 acre lake for fishing, renovation of existing buildings.	4/1/65-6/30/69	11/2/66 22,220		
Department of Forests and Parks	15 A	Prince Frederick	Acquire 847 acres to complete land purchases for Calvert Cliffs State Park, to be used for swimming, picnicking and etc.	7/1/67-6/30/69	11/7/66 256,641		
				SUBTOTAL	1,145,576	614,215	

STATE: MARYLAND (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Forests and Parks	14 A	Annapolis	Acquire approx. 2,000 acres of water oriented land for development of South River State Park.	7/1/67-6/30/76	11/7/66 2,626,000		
Department of Forests and Parks	21 A	Annapolis	Acquire 1,550 acres for Severn Run State Park.	1/1/67-6/30/76	11/15/66 1,565,500		
City of Baltimore	22 D	Baltimore	Develop McKim Neighborhood Playground including junior & adult areas, softball diamond, basketball court.	8/1/66-8/1/67	11/25/66 25,250	11/25/66 25,250	
Harford County	17 D	Bushs Corner	Construct 2 tennis courts at North Harford High School Recreation Center.	11/1/66-9/1/67	11/18/66 6,565	11/18/66 6,565	
Harford County	19 D	Long Bar Harbor	Develop William Longley Park including game fields, picnic area, shelter.	11/1/66-9/1/67	11/22/66 6,456	11/22/66 6,456	
Harford County	18 D	Joppatowne	Construct multi-use court and game fields for Joppatowne Community Playground.	11/1/66-9/1/67	11/22/66 5,303	11/22/66 5,303	
Department of Forests and Parks	16 A	Darlington	Acquire 375+ acres to complete Susquehanna State Park.	7/1/67-6/30/70	11/26/66 151,500		
Department of Forests and Parks	20 A	Queen Anne	Acquire 3,634+ acres to complete land purchases for Tuckahoe State Park.	1/1/67-6/30/73	11/26/66 734,068		
Mayor & Council of Snow Hill(Worcester County)	11 D	Snow Hill	Develop Byrd Park including picnicking, boating, fishing, tennis baseball, golf, shuffleboard facilities.	4/1/66-11/1/71	11/22/66 15,403	11/22/66 3,283	
				TOTAL	6,281,621	661,072	

STATE: MASSACHUSETTS 20

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Department of Natural Resources	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	7/12/65-2/12/66	7/24/65 20,000	7/24/65 20,000	
Department of Natural Resources	12 A	Mount Washington	Acquire 2,889 acres of natural wilderness-type area to expand Bashbish Falls State Forest.	3/23/66-7/1/66	6/23/66 50,000	10/6/66 50,000	
Department of Natural Resources	02 D	Hopkinton	Develop plans and specifications for the construction of park road system, parking areas, foot trails, shelters, etc.	12/1/65-7/1/66	6/24/66 21,950	6/24/66 21,950	
Department of Natural Resources	03 D	Leominster	Develop plans and specifications for the construction of entrance road, parking area and launching ramps.	11/1/65-5/1/66	6/24/66 1,500	6/24/66 1,500	
City of Boston	04 D	Boston	Preparation of a new area design and use plan for a portion of Chestnut Hill Park.	4/1/66-9/1/66	6/24/66 2,500	6/24/66 2,500	
City of North Adams	05 D	North Adams	Prepare plans and specifications for new family bathing area, spillway and drawdown improvements, access road, camping.	1/1/66-1/1/68	6/24/66 4,500	6/24/66 4,500	
City of New Bedford	06 D	New Bedford	Develop plans and specifications for the redesign and expansion of existing facilities.	1/1/66-1/1/69	6/24/66 3,000	6/24/66 3,000	
Division of Fish and Game	07 D	Belchertown	Prepare plans and specifications for the construction of a State trout hatchery.	1/1/66-6/30/66	6/24/66 30,000	6/24/66 30,000	
Metropolitan District Commission	08 D	Milton	Prepare plans and specifications for construction and enlargements at Blue Hills Reservation, Hoosicwhisick Pond.	2/1/66-4/30/66	6/24/66 12,500	6/24/66 12,500	
Metropolitan District Commission	09 D	Boston	Develop site plans and specifications for repair of sea wall and erosion control on George's Island.	4/1/66-8/31/66	6/24/66 7,500	6/24/66 7,500	
Milton Park Department	10 D	Milton	Develop plans and specifications for reconstruction of recreation facilities at John J. Kelly Athletic Field.	1/1/66-12/1/67	6/24/66 2,000	6/24/66 2,000	
Metropolitan District Commission	11 D	Boston	Prepare plans and specifications for roads, parking, and recreational facilities at Middlesex Fells Reservation.	4/1/66-6/30/66	6/24/66 9,000	6/24/66 9,000	
				SUBTOTAL	164,450	164,450	

STATE: MASSACHUSETTS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Department of Natural Resources	14 D	Deerfield	Construct visitor's center at Mt. Sugarloaf State Reservation.	3/1/66-7/1/68	10/18/66 25,000	10/18/66 25,000	
				TOTAL	189,450	189,450	

STATE: MICHIGAN 21

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Conservation	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	7/1/65-6/30/66	9/15/65 30,259	9/15/65 30,259	
Department of Conservation	02 D	Brighton	Construct shower-toilet buildings and other facilities at Bishop Lake Unit of Brighton State Recreation Area.	11/1/65-6/30/67	4/30/66 67,100	4/30/66 67,100	
Department of Conservation	03 A	Port Huron	Acquire 199.7 acres to provide recreational opportunities in vicinity of Lakeport State Park.	7/1/65-7/1/66	4/30/66 125,000	4/30/66 125,000	
City of Detroit	11 D	Detroit	Develop 1.9 mile circular, all weather bicycle trail on Belle Isle Park.	6/1/66-7/1/67	7/15/66 20,000	7/15/66 20,000	
Department of Conservation	09 A	Gould	Acquire 37+ acres in Point Patterson State Park to add 1,400 feet of Lake Michigan shoreline to the park.	7/1/65-6/30/66	9/3/66 6,300	9/3/66 6,300	
Department of Conservation	07 A	Manistique	Acquire 240 acres for development of Seul Choix State Park.	7/1/65-6/30/66	9/16/66 1,800	9/16/66 1,800	
Department of Parks and Recreation	14 A	Tecumseh	Acquire 22 acres including a 4 acre pond to develop "The Pit" Park.	1/67 - 7/67	10/6/66 17,500	10/6/66 17,500	
Kent County Road Commission	19 1A	Rockford	Acquire 60 acres adjacent to existing Wabasis Park.	5/1/66-3/1/67	10/6/66 30,000	10/6/66 30,000	
Kent County Roads and Park Commission	20 A	Wyoming, Grand Rapids	Acquire 60 acre addition to Douglas Walker Park.	5/66 - 11/66	10/6/66 13,750	10/6/66 13,750	
Huron-Clinton Metropolitan Authority	25 D	Belleville	Develop sanitary facilities at Woods Creek Picnic Area.	9/1/65-12/31/67	10/6/66 22,000	10/6/66 22,000	
Huron-Clinton Metropolitan Authority	22 D	Rochester	Develop the West Branch of Winter Cover Picnic Area at Stoney Creek Metro Park.	9/1/65-12/31/67	10/15/66 198,050	10/15/66 198,050	
Department of Conservation	21 D	Flint, Detroit	Construct camping, picnic and beach area facilities at Metamora-Hadley Recreation Area.	8/1/66-12/31/67	10/19/66 133,100	10/19/66 133,100	
				SUBTOTAL	664,859	664,859	

STATE: MICHIGAN (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
Department of Conservation	06 A	Pontiac	Acquire 665 acres for development of Bald Mountain Recreation Area.	7/1/65-6/30/68	12/23/66 482,250	12/23/66 139,750	
				TOTAL	1,147,109	804,609	

STATE: MINNESOTA 22

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	 Completed
Department of Conservation	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-9/30/65	6/23/65 25,000	6/23/65	24,884
Department of Conservation	02 P	Statewide	Implement and update inventory, and publish preliminary plan.	10/1/65-6/30/66	6/23/66 12,500	6/23/66 12,500	
Department of Conservation	03 D	Bemidji	Construct a portion of an overall sewage system at Itasca State Park.	10/15/65-11/1/66	9/3/66 45,821	9/3/66 45,821	
Department of Conservation	04 D	Statewide	Construct 14 wells for campgrounds in 9 State forests.	11/21/64-3/15/66	9/3/66 7,920	9/3/66 7,920	
Department of Conservation	07 D	New Ulm	Renovate dam and related structures and replace part of dike on Cottonwood River at Flandrau State Park.	6/1/66-9/1/67	9/8/66 61,763	9/8/66 61,763	
Department of Conservation	06 D	St. Paul	Construct a neighborhood public park & recreation center, ballfields, site work fencing and restroom & shelter.	4/1/66-12/30/66	11/2/66 33,810	11/2/66 33,810	
Department of Conservation	05 D	Sandstone	Develop Banning State Park including campground, picnic area, park entrance road, landscaping.	2/1/65-6/1/67	12/20/66 10,822	12/20/66 10,822	
				TOTAL	197,636	197,520	

STATE: MISSISSIPPI 23

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Mississippi Research and Development Center	12 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	4/1/66-12/1/66	5/14/66 11,040	5/14/66 11,040	
Park System	05 D	Morton	Construct a duplex overnight cabin at Roosevelt State Park.	3/1/65-3/30/66	6/10/66 7,036	6/10/66	7,036
Game and Fish Commission	11 D	Magee	Develop 20 acres of land on Legion Lake including service building, picnic area, and campsites.	1/1/66-3/1/67	7/23/66 6,980	7/23/66 6,980	
Park System	03 D	McComb	Develop 95 site camping area in Percy Quin State Park including raods, service center, water well, water system.	6/1/65-6/30/67	8/6/66 32,644	8/6/66 32,644	
Park System	02.1D	Greenville	Develop 47 acres of Winterville Indian Mounds in to recreational and historical site including picnic and parking areas.	2/1/65-7/30/67	8/24/66 37,606	8/24/66 37,606	
Park System	06 D	Biloxi	Develop Magnolia State Park including marina, camping area, boat access to gulf waters.	4/1/65-6/30/68	9/16/66 52,187	9/16/66 45,937	
Park System	13 D	Tishomingo	Develop J.P.Coleman State Park including roads, parking facilities, camping area, service center for elderly & handicapped.	10/1/64-6/30/67	12/1/66 86,089	12/1/66 86,089	
				TOTAL	233,582	227,332	

STATE: MISSOURI 24

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Conservation Commission	04 A	Vienna	Acquire six acres for public fishing and boating access to the Gasconade River.	10/64-7/65	11/16/65 1,500	11/16/65	1,500
Conservation Commission	06 D	Caruthersville	Construct boat launching ramp and auto parking lot on the Missisiippi River.	9/64-12/65	11/16/65 6,036	11/16/65 6,036	
Conservation Commission	07 A	Springfield	Acquire five acres on the James River to provide public fishing and boating access.	9/64-6/65	11/16/65 1,392	11/16/65	1,392
Kansas City Board of Park Commissioners	13 A	Kansas City	Acquire 131 acres which will be added to existing holdings to create a 210 acre Hidden Valley Park.	8/65-1/67	11/16/65 52,400	11/16/65 52,400	
Kansas City Board of Park Commissioners	14 D	Kansas City	Develop Line Creek Park for community park and archaeological preserve.	8/65-1/67	11/16/65 66,700	11/16/65 66,700	
Jackson County Board of Park Commissioners	20 A	Kansas City	Acquire 98 acres on Missouri River for river park and marina to provide facilities for boating, fishing and picnicking.	9/65-12/66	11/16/65 59,500	11/16/65 59,500	
St. Louis County Department of Parks and Recreation	24 A	St. Louis	Acquire 188 acres of land adjacent to Missouri River for use as a public outdoor recreation area.	10/65-12/65	12/9/65 120,000	12/9/65	120,000
State Park Board	26 D	Statewide	Install and expand water and sewer facilities at State parks.	4/16/65-12/31/66	1/15/66 477,371	1/15/66 477,371	
Conservation Commission	25.1 D	St. Joseph, Lake Giradeau	Construct restroom and concession facilities at Pony Express Lake area and Lake Giradeau.	1/65-12/66	2/11/66 30,500	2/11/66 30,500	
Conservation Commission	01 D	Jefferson City	Develop a public fishing lake and recreation area near Jefferson City.	12/1/64-3/1/67	2/23/66 107,459	2/23/66 107,459	
Conservation Commission	09 A	Boonville	Acquire a 9.5 acre tract for public stream access to Missouri River.	9/4/64-9/1/65	2/23/66 2,945	2/23/66	2,945
Conservation Commission	19 D	St. Louis	Develop two lakes and supporting facilities to provide additional public fishing waters.	9/64-12/66	2/23/66 40,402	2/23/66 40,402	
				SUBTOTAL	966,205	966,205	

STATE: MISSOURI (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Park Board	17.1 D	Kansas City	Construct a year-round group camp at Watkins Mill State Park.	11/65-9/66	2/23/66 20,000	2/23/66 20,000	
Jefferson City Park Board	15 A	Jefferson City	Acquire 644 acres of land to be used for public recreation plus flood easement.	1/1/65-12/31/65	3/11/66 114,525	3/11/66 114,525	
State Park Board	28 A	Cameron	Purchase additional acreage to increase size of Wallace State Park.	10/15/65-1/30/66	4/22/66 7,375	4/22/66	7,375
City Park Board of New Haven	30 D	New Haven	Construct swimming pool and related facilities on a city park tract.	12/1/65-1/1/67	5/14/66 40,000	8/8/66 40,000	
Macon County Park and Recreation Board	31 A	Macon	Acquire 46 acres of land to be developed as a county park and outdoor recreation area.	8/1/65-12/31/66	6/10/66 21,300	8/6/66	21,300
St. Louis Department of Parks, Recreation, and Forestry	41 D	St. Louis	Develop site plan, prepare site and develop Garrison-Brantner-Webster Park.	1/1/65-12/31/66	6/10/66 37,096	8/8/66 37,096	
St. Louis Department of Parks, Recreation, and Forestry	42 D	St. Louis	Develop site plan, prepare site and develop Tandy Park.	9/3/65-12/31/66	6/10/66 51,370	8/8/66 51,370	
Kansas City Board of Park Commissioners	43 A	Kansas City	Acquire 13.5 acres to provide for expansion of north end of Line Creek Park.	1/27/66-1/1/67	6/10/66 9,500	8/9/66 9,500	
Park and Recreation Board, City of Brentwood	49 A	Brentwood	Acquire 32 acres to enlarge City of Brentwood park system.	1/1/66-7/1/67	6/10/66 79,000	11/15/66 79,000	
Hermann Park Board	35 D	Hermann	Develop 10 acre addition to existing city park.	1/1/65-7/1/67	7/11/66 40,000	7/11/66 40,000	
Dexter City Park Board	44 D	Dexter	Construct swimming pool and related facilities at Airport Park.	1/1/66-12/31/66	8/9/66 50,000		
Conservation Commission	12 A	Ashburn	Acquire 80 acre addition to Dupont Reservation to be used for hunting, access to Mississippi River, scenic drives.	9/4/64-6/30/65	8/6/66 1,500	8/6/66 1,500	
				SUBTOTAL	471,666	421,666	

STATE: MISSOURI (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
State Park Board	48 A	St. Louis	Acquire 52.07 acres of land adjacent to Trail of Tears State Park for public outdoor recreation use.	11/1/65-11/1/66	8/9/66 10,900	8/9/66	10,900
Crystal City	46 D	Crystal	Develop Crystal City Municipal Park including swimming pool, parking and playground facilities, landscaping	1/1/66-7/1/67	8/9/66 147,751	8/9/66 147,751	
Inter-Agency Council for Outdoor Recreation	77 P	Statewide	Develop comprehensive statewide outdoor recreation plan.	4/1/66-5/1/67	8/9/66 39,925	8/9/66 39,925	
Department of Conservation	51 A	Monroe	Acquire 40 acres of land as addition to Hunnewell Multiple Use Area.	2/1/66-12/31/66	9/3/66 3,000	9/3/66 3,000	
City of Joplin	54 D	Joplin	Develop Spiva Park including camping area, playground facilities, picnic tables, baseball diamond.	1/1/66-12/31/66	9/3/66 14,600		
University City	47 A	University	Acquire 4.35 acre tract of open land to be used as a public recreation park.	5/1/66-6/1/67	9/3/66 21,175		
University City	45 A	University	Acquire 6.6 acre tract of land to be developed for public outdoor recreation.	3/1/66-6/1/67	9/3/66 45,375		
City of Bourbon Park Board	55 A	Bourbon	Acquire 9.7 acres of land to be developed for a public park.	3/1/66-10/1/66	9/16/66 3,750	9/16/66 3,750	
Conservation Commission	32 A	Statewide	Acquire 72 acres of land to provide public access to streams and lakes at 12 different locations.	10/1/65-12/31/67	9/30/66 18,000	9/30/66 18,000	
City of Webster Groves	57 A	Webster Groves	Acquire 12 acres for development of Southwest Park.	5/3/65-12/31/66	10/18/66 44,687	10/18/66 44,687	
City of Independence	53 D	Independence	Construct creative playground for intensive use in Fairmont Park.	10/19/64-12/1/66	10/18/66 37,523	10/18/66 37,523	
Conservation Commission	52 A	Marshall	Acquire 1,110 acres of land for development of Saline County Lake Site.	1/20/66-6/30/68	10/19/66 153,750	10/19/66 153,750	
				SUBTOTAL	540,436	459,286	

STATE: MISSOURI (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Conservation Commission	33 D	Statewide	Develop 11 stream access sites including access roads, boat ramps, parking area, fences, signs, & provide trash barrels.	9/4/64-12/3/67	11/10/66 58,500	11/10/66 58,500	
City of Olivette City Council & Park Commission	102 A	Olivette	Acquire 5 acres of land to be developed as a public park & recreation area.	8/1/66-8/1/67	11/30/66 32,500		
State Park Board	110 A	Akers	Acquire 242 acres as addition to Montauk State Park.	10/1/66-3/1/67	12/23/66 37,500		
				TOTAL	2,106,807	1,905,657	

STATE: MONTANA 25

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Department of Fish and Game	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/69	12/11/65 27,500	12/11/65 27,500	
Department of Fish and Game	03.[2] A	Kalispell	Acquire addition to West Shore State Park.	10/1/65-12/31/66	12/16/65 50,985	12/16/65 50,985	
Department of Fish and Game	04 D	Missoula	Rehabilitate one existing State Park and add needed facilities.	10/15/65-6/30/67	12/16/65 9,940	12/16/65 9,940	
Department of Fish and Game	06 D	Malta, Halena, Chester, Lewistown	Rehabilitate three existing State Parks and recreation areas and add new facilities.	10/1/65-12/31/67	12/16/65 58,195	12/16/65 58,195	
Department of Fish and Game	07 D	Shawmut	Rehabilitate one existing State Park and add needed facilities.	10/15/65-6/30/67	12/16/65 9,450	12/16/65 9,450	
Department of Fish and Game	10.1 D	Statewide	Develop eleven fishing access sites.	9/4/64-12/31/65	1/15/66 22,249	1/15/66	22,249
City of Townsend	11 C	Townsend	Acquire and develop Townsend City Park.	9/4/64-12/31/67	1/29/66 43,692	1/29/66 43,692	
Department of Fish and Game	08 D	Fort Peck, Malta	Rehabilitate Nelson Reservoir Recreation Area and Rock Creek State Park.	10/15/65-12/31/67	4/2/66 13,312	4/2/66 13,312	
Department of Fish and Game	09 D	Jordan	Rehabilitate and add facilities at Hell Creek State Park.	10/15/65-12/31/67	3/17/66 5,305	3/17/66 5,305	
City of Malta	12 D	Malta	Install water line, sanitary disposal tanks, electrical outlets, landscape, erect toilet facility at Trafton Park.	10/1/65-9/30/70	4/22/66 6,695	4/22/66 6,695	
City of Great Falls	13 D	Great Falls	Develop Jaycee and Water Tower City Parks including swimming pools and related facilities.	8/9/65-7/1/67	4/22/66 59,946	4/22/66 59,946	
Billings Park Commission	14 D	Billings	Develop ball fields, play areas, picnic tables at Optimist Park.	7/1/65-12/31/67	4/22/66 16,943	4/22/66 16,943	
				SUBTOTAL	324,212	324,212	

STATE: MONTANA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Fish and Game	02.1 D	Statewide	Rehabilitate and add new facilities at eight State Parks.	7/1/65-12/31/67	106,089	106,089	
City of Laurel	21 D	Laurel	Develop 5 1/2 acres of picnicking and camping area.	3/1/65-3/1/70	6,695	6,695	
City of Billings	22 D	Billings	Construct tennis courts and shrub planting at Rose Park.	7/1/65-12/31/67	6/28/66 16,995	6/28/66 16,995	
City of Billings	23 D	Billings	Construct tennis courts, picnic area, play area at Lillis Park.	7/1/65-12/31/67	6/28/66 23,458	6/28/66 23,458	
Hill County	16 D	Havre	Construct picnicking and camping facilities at Hill County Beaver Creek Park.	9/1/65-12/31/68	6/28/66 66,301	6/28/66 66,301	
City of Columbia Falls	20.2 D	Columbia Falls	Construct swimming pool and bathhouse in existing city park.	2/1/66-7/31/67	5/14/66 47,500	5/14/66 47,500	
City of Polson	17.1 D	Polson	Construct additional park and recreational facilities.	9/4/64-7/31/67	5/14/66 12,000	5/14/66 12,000	
City of Cascade	15.1 C	Cascade	Develop regional park, picnic areas, playgrounds, trailer facilities	8/1/65-2/1/69	5/14/66 43,826	5/14/66 43,826	
City of Hobson	29.1C	Hobson	Acquire land for city park and construct swimming pool and bathhouse.	3/1/66-12/31/67	7/6/66 14,575	8/6/66 14,575	
Custer County	30 D	Miles	Develop picnicking facilities at Woodruff Park.	8/1/65-12/31/68	7/6/66 12,051	8/6/66 12,051	
Department of Fish and Game	24 D	Statewide	Construct basic sanitary units and improvements of access to 8 State Water Conservation Board Reservoirs.	2/1/65-6/30/67	6/28/66 10,918	7/11/66 10,918	
Lewis and Clark County Fairboard	25 D	Helena	Develop camping and picnicking facilities.	3/1/66-12/31/66	6/28/66 58,638	7/11/66 58,638	
				SUBTOTAL	419,046	419,046	

STATE: MONTANA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
City of Three Forks	18.1 D	Three Forks	Develop camping and picnicking facilities.	9/4/64- 9/30/67	6/28/66 3,000	8/6/66 3,000	
Department of Fish and Game	27.2 D	Statewide	Construct picnicking facilities in 20 fishing access sites throughout the State.	10/1/65-12/31/67	6/28/66 39,335	8/6/66 39,335	
City of Columbus	26 C	Columbus	Acquire 100 acres and develop picnicking facilities.	8/1/65-8/1/70	6/28/66 25,287	8/6/66 25,287	
Town of Plains	19 C	Plains	Acquire 130 acres of land and develop golf course, with picnicking, camping, playground, and rifle range facilities.	1/31/65-10/1/67	8/6/66 29,844	8/6/66 29,844	
Department of Fish and Game	05 D	Three Forks	Rehabilitate Missouri River Headwaters State Monument and construct picnicing and camping facilities on the site.	10/15/65-6/30/67	8/20/66 5,150	8/20/66 5,150	
Department of Fish and Game	34 A	Three Forks	Acquire 500 acres for further access, river frontage, recreation facilities on headwaters of Missouri River.	7/15/66-9/1/67	9/3/66 19,274	9/3/66 19,274	
Department of Fish and Game	35 A	Ovando	Acquire 33 acres of land to extend the present fishing access site and add river frontage to Blackfoot River Junction.	8/1/66-9/1/67	9/3/66 2,060	9/3/66 2,060	
Department of Fish and Game	36 A	Choteau County	Acquire 3 parcels of land to provide access and frontage on the Missouri River in three different locations.	8/15/66-8/15/67	9/3/66 2,832	9/3/66 2,832	
City of Fairfield	33 D	Fairfield	Develop picnicking and tennis facilities at Fairfield City Park.	7/1/66-7/1/71	9/9/66 6,695	9/9/66 6,695	
City of Sidney	32.1 D	Sidney	Improve 5 parks in City of Sidney including construction of restrooms, tennis court, landscaping, playground.	9/1/66-12/31/67	9/16/66 15,450	9/16/66 15,450	
Lewistown City	31 D	Lewistown	Renovate Conrad Swimming Pool.	7/1/66-6/1/67	9/16/66 10,300	9/16/66 10,300	
Lewistown City	37 D	Lewistown	Construct Lewistown Municipal Pool.	3/15/66-7/1/67	9/16/66 60,000	9/16/66 60,000	
				SUBTOTAL	219,227	219,227	

STATE: MONTANA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
City of Ekalaka	41 C	Ekalaka	Acquire 4 1/2 acres and develop Ekalaka Memorial Park including picnic area, campground, restroom.	6/1/66-6/1/71	11/1/66 7,210	11/1/66 7,210	
City of Bozeman	28 D	Bozeman	Develop Kirk Park including picnicking facilities, playground equipment, park sidewalks, landscaping.	5/1/65-6/30/69	11/25/66 32,066	11/25/66 32,066	
City of Glendive	39 D	Glendive	Develop River Avenue Park including ice skating rinks, snow play area, sprinkler system, basketball courts.	8/15/66-6/30/67	11/25/66 3,357	11/25/66 3,357	
				TOTAL	1,005,118	1,005,118	

STATE: NEBRASKA 26

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game, Forestation and Parks Commission	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	10/15/64-1/15/66	11/24/65 13,000	11/24/65	9,297
Game, Forestation and Parks Commission	02 A	Lincoln, Omaha	Acquire approximately 2,075 acres for major State park in southeast Nebraska.	9/4/64-12/31/68	11/16/65 69,588	11/16/65 35,000	
Game, Forestation and Parks Commission	03 A	Lincoln	Acquire 1,009 acres around Salt Creek Dams and Reservoirs #10 and #13 for water-based recreation.	9/5/64-12/31/67	11/16/65 101,499	11/16/65 101,499	
Game, Forestation and Parks Commission	05 A	Chadron	Acquire 640 acres of land for multi-purpose recreation development.	11/1/65-12/31/68	1/20/66 23,700		
City of Alliance	06 D	Alliance	Construct olympic size swimming pool and supporting facilities.	1/1/66-12/31/68	1/20/66 76,550		
Village of Mullen	07 D	Mullen	Develop swimming pool, bathhouse, small children's park, picnic facilities, and parking lot.	1/1/66-1/1/67	1/20/66 25,000		
Village of Howells	08 D	Howells	Develop 25 acre site as a community park and camp area.	1/1/66-1/1/70	1/20/66 68,875		
Village of Table Rock	09 D	Table Rock	Develop 3 acre park to improve facilities including play equipment, picnic and sanitary facilities.	1/1/66-1/1/70	1/20/66 3,485		
City of Alliance	10 A	Alliance	Acquire 30 acres of land to be used as a municipal park and recreation area.	1/1/66-12/31/68	1/20/66 30,000		
City of Scottsbluff	11.1 A	Scottsbluff	Acquire 1 acre to be developed as a neighborhood park with playground equipment and small tot area.	10/1/66-12/31/66	1/20/66 4,250	8/6/66	4,250
Game, Forestation and Parks Commission	04 A	Ponca	Acquire 415 acres adjacent to existing Ponca State Park to develop additional camping areas, waterfront access.	12/1/65-9/1/68	3/1/66 18,187	3/1/66 18,187	
Kimball City and County Park and Recreation Board	16 D	Kimball	Develop regional park and recreation area including tennis courts, play fields, picnic areas, and other facilities.	1/1/65-1/1/69	3/2/66 138,550	8/23/66 65,806	
				SUBTOTAL	572,684	234,039	

STATE: NEBRASKA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game, Forestation and Parks Commission	18 D	Dorchester, Hastings	Develop 2 State wayside areas for day-use and camping.	5/1/66-12/31/67	3/2/66 5,258	8/20/66 5,258	
Park Department, City of Hastings	19 A	Hastings	Acquire 8.9 acres adjacent to Lake Hastings to be developed for picnicking, games and sports, and playfields.	11/15/65-7/1/66	3/2/66 12,500	8/9/66	9,500
City of Milford	22 A	Milford	Acquire 13 acres for development of a municipal park including swimming pool, play fields, and picnic sites.	12/1/65-12/31/66	3/19/66 10,000	3/19/66	10,000
City of Milford	23 D	Milford	Construct swimming pool and related facilities at Milford Municipal Park.	10/1/65-12/31/67	4/11/66 52,380		
Game, Forestation and Parks Commission	20 A	Lincoln	Acquire 37 tracts of lands (3,154.5 acres) adjacent to Salt Creek Dam and Reservoir No. 18.	12/1/65-3/1/67	4/30/66 349,000	4/30/66 349,000	
Village of Mullen	13 A	Mullen	Acquire one-half block, on which to develop swimming pool and facilities.	1/1/66-12/1/67	1/20/66 1,600	6/10/66	1,600
City of Millard	21 A	Millard	Acquire 15.2 acres of land for future development as a city park.	12/1/65-12/1/66	3/2/66 22,791	6/21/66	22,741
Kimball City and County Park and Recreation Board	15 A	Kimball	Acquire 270 acres for development of city/county park, including golf course, ballfields, picnic areas, etc.	1/1/65-10/31/66	3/2/66 20,250	6/6/66	20,250
City of Genoa	25 D	Genoa	Develop picnic areas, trailer park, sanitary and other facilities at Genoa Municipal Park.	5/1/66-1/1/70	4/15/66 19,744		
City of Valentine	31 D	Valentine	Develop 6 acres for a municipal park which will include a swimming pool with supporting facilities.	10/1/66-12/31/68	6/23/66 50,000	11/9/66 50,000	
City of North Platte	32.1A	North Platte	Acquire 130 acres for a municipal park which will include facilities for baseball, camping, picnicking, swimming.	12/65-6/66	6/23/66 42,320		
Game, Forestation and Parks Commission	28 A	Crawford	Acquire 10,295 acres for development of Fort Robinson State Park.	3/1/66-12/31/67	5/27/66 650,000	11/25/66 575,000	
				SUBTOTAL	1,235,843	1,043,349	

STATE: NEBRASKA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Omaha	29 A	Omaha	Acquire 340 acres for development of a regional metropolitan park.	6/1/66-12/30/68	5/31/66 193,494	8/23/66 193,494	
City of Omaha	30 A	Omaha	Acquire 193.4 acres for development of a metropolitan park.	3/1/66-12/30/68	5/31/66 116,715	9/3/66 116,715	
City of Millard	39 A	Millard	Acquire 58 acres for development of a city park.	5/1/66-12/31/68	6/23/66 55,660		
Village of Howells	14 A	Howells	Acquire twenty-five acres for a community park.	12/1/65-12/31/67	1/23/66 3,350	6/28/66 3,350	
City of Scottsbluff	24 D	Scottsbluff	Develop 7 acre tract of land to provide camping facilities, picnic sites, play areas.	1/1/66-12/31/67	3/2/66 12,750	7/11/66 12,750	
City of Omaha	44 D	Omaha	Develop 90 mile all weather urban bikeway system along existing streets, railroad right-of-way, and other areas.	7/1/66-12/31/66	1/23/66 35,000	7/15/66 35,000	
City of Omaha	33 A	Omaha	Acquire 35 acres for use as a community park.	1/1/65-1/1/70	1/23/66 26,250	7/1/66 26,250	
Village of Crofton	12 A	Crofton	Acquire 16.7 acres for a village park and recreation area including picnic facilities, landscaping, etc.	3/1/66-3/31/67	1/23/66 4,500	7/11/66 4,500	
Village of Henderson	17.1 A	Henderson	Acquire 71 acres for future development of a new village park.	1/1/66-12/31/68	3/2/66 21,675	7/23/66 15,675	
City of Papillion	26.1 A	Papillion	Acquire 77 acres for development of a municipal park and recreation area.	11/1/65-12/31/67	6/23/66 52,814	7/23/66 52,814	
City of Scottsbluff	34 D	Scottsbluff	Develop 1 acre neighborhood park and playground by removal of a junk yard, landscaping, seeding.	1/1/66-7/1/67	6/13/66 3,750	8/6/66 3,750	
Game, Forestation and Parks Commission	41 A	Merriman	Acquire 73.8 acres of land adjacent to Cottonwood Lake State Recreation Area for park expansion.	7/1/66-12/31/67	8/23/66 3,350		
				SUBTOTAL	529,308	464,298	

STATE: NEBRASKA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
City of Lincoln	35.1 D	Lincoln	Develop Holmes Park including road system, parking area, playground, landscaping, water & irrigation system, boat marina.	1/1/66-12/31/69	9/3/66 113,025	9/3/66 63,400	
Game, Forestation and Parks Commission	38 D	Columbus, Omaha	Develop Ponca State Park including cabins, picnic & camping facilities, roads, central building.	1/1/66-12/31/70	10/15/66 150,000	10/15/66 18,000	
Village of Ewing	40 A	Ewing	Acquire 7 acres as addition to City Park.	5/1/66-12/31/67	11/16/66 2,000	11/16/66 2,000	
Hall County Board of Supervisors	27 C	Grand Island	Acquire 6 acres of land and develop Land of the Prairie Pioneer Recreation Area.	9/1/66-12/31/70	12/8/66 63,316		
				TOTAL	2,666,176	1,825,086	

STATE: NEVADA 27

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
Department of Conservation and Natural Resources	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/67	9/27/65 109,434	9/27/65 109,434	
Department of Conservation and Natural Resources	02.1 A	Carson City	Acquire 12,157 acres of land adjacent to Lake Tahoe for outdoor recreation use and preservation of natural beauty	12/15/65-1/1/70	1/26/66 3,000,000	1/26/66 3,000,000	
Nevada Fish and Game Commission	03 D	Elko	Develop a State trout hatchery on the Ruby Lake National Wildlife Refuge.	6/1/66-6/30/67	7/5/66 282,076	11/11/66 282,076	
				TOTAL	3,391,510	3,391,510	

STATE: NEW HAMPSHIRE 28

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Resources and Economic Development	01 C	Moultonboro	Acquire and develop up to 700 acres at Winnipesaukee State Park.	10/1/65-6/30/68	11/16/65 500,000	11/16/65 25,000	
Department of Resources and Economic Development	03 D	Rye	Plan and construct a 125 boat marina at Rye Harber State Park.	10/1/65-6/30/68	11/16/65 210,935	11/16/65 12,000	
Department of Resources and Economic Development	04 C	Errol	Acquire and develop approximately 227 acres of Lake Umbagog.	10/1/65-10/1/70	11/16/65 100,000	11/16/65 32,500	
Department of Resources and Economic Development	06 D	Newbury	Plan and construct a major skiing facility at Mt. Sunapee State Park.	10/1/65-11/30/68	11/16/65 241,500	11/16/65 66,500	
Department of Resources and Economic Development	08 P	Statewide	Maintain comprehensive statewide outdoor recreation plan.	11/1/65-6/30/67	11/26/65 134,500	11/26/65 53,800	
Department of Resources and Economic Development	05 C	Ossipee	Acquire 1,000 acres bordering Ossipee Lake and develop a State park for swimming, picnicking, boating, nature study.	10/1/65-6/30/69	12/27/65 500,000		
Department of Resources and Economic Development	09 C	Nottingham	Acquire and develop Pawtuckaway State Park.	9/4/64-12/31/73	8/12/66 1,539,616	8/12/66 621,111	
				TOTAL	3,226,551	810,911	

STATE: NEW JERSEY 29

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Division of Fish and Game	18 D	Canton	Construct small boat ramps and parking areas to provide public access to Mad Horse Creek Fish and Game Tract.	10/1/65-6/30/67	5/21/66 7,500	11/30/66 7,500	
Division of Fish and Game	21 D	Dennisville	Construct boat ramp and parking area to provide public access to Dennis Creek Fish and Game Tract.	8/1/66-1/31/67	5/21/66 10,000		
Department of Conservation and Economic Development	22 D	Statewide	Construct 450 picnic tables for distribution to 13 State parks.	7/1/65-8/31/65	5/21/66 8,225	9/3/66 8,225	
Department of Conservation and Economic Development	25.1 P	Statewide	Evaluate and study recreation sites and prepare sketch plans to strengthen State Plan.	11/1/65-4/30/67	5/26/66 17,000	9/3/66 17,000	
Department of Conservation and Economic Development	24.1 D	New York	Develop Wawayanda State Park including facilities for swimming, boating, camping.	7/1/65-6/30/70	6/16/66 1,302,116	8/9/66 379,000	
Department of Conservation and Economic Development	26 D	New York	Expand ocean bathing facilities at Sandy Hook State Park.	9/5/64-6/30/75	6/23/66 733,500	12/14/66 200,000	
Department of Conservation and Economic Development	28 D	Somerville	Develop extensive day use and camping facilities at Round Valley Reservoir.	3/1/65-12/31/69	7/23/66 2,340,000		
Department of Conservation and Economic Development	19 D	Clinton	Develop camping, bathing, boating, hiking, picnicking facilities at Spruce Run Reservoir.	9/5/64-6/30/69	8/6/66 1,134,225	11/18/66 660,000	
City of Perth Amboy	33 D	Perth Amboy	Construct boat launching ramp with appurtenant facilities.	7/1/66-1/31/67	11/14/66 6,075	11/14/66 6,075	
Monmouth County	34 D	Freehold	Construct lake of approximately 15.7 acres in the Turkey Swamp County Park.	10/1/66-4/30/67	11/16/66 10,320	11/16/66 10,320	
Department of Conservation and Economic Development	44 D	Forked River	Redevelop Forked River State Marina including berth for boats, lighting, parking areas, water system, gas dock.	7/1/67-12/31/69	11/26/66 353,654		
Department of Conservation and Economic Development	35 D	Freehold	Develop Monmouth Battlefield Park including roads, trails, cleanup, stream development, picnic & camping & nature areas.	12/1/65-6/30/71	12/6/66 1,242,000	12/6/66 14,650	
				TOTAL	7,164,615	1,302,770	

STATE: NEW MEXICO 30

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
State Planning Office	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/65	6/24/65 4,987	6/24/65	4,908
State Park and Recreation Commission	02 D	Roswell	Construct swimming pool, wading pool, bathhouse, and renovate existing facilities (Bottomless Lakes State Park).	9/15/65-7/30/66	2/11/66 126,250	2/11/66 126,250	
State Planning Office	05 P	Statewide	Prepare and publish comprehensive statewide outdoor recreation plan.	7/1/65-1/15/66	3/1/66 4,652	3/1/66 4,652	
Park and Recreation Commission	03.1 D	Tucumcari	Construct 30 covered boat slips at Conchas Lake State Park.	1/1/66-12/31/66	4/30/66 24,451	4/30/66 24,451	
Park and Recreation Commission	04.1 D	Aztec	Install 40 covered boat slips at Navajo Lake State Park.	2/1/66-12/31/66	4/30/66 28,574	4/30/66 28,574	
Park and Recreation Commission	50 D	Farmington	Construct access road with parking lot at Navajo Lake State Park.	1/1/66-6/30/67	11/28/66 14,860	11/28/66 14,860	
County of Los Alamos	28 D	Los Alamos	Develop family picnic area, parking space and provide additional restrooms at Camp May Community Park.	7/1/66-6/30/67	4/11/66 10,100	8/24/66 10,100	
Village of Dexter	33 A	Dexter	Acquire Lake Van Park to provide facilities for fishing, swimming, picnicking, etc.	3/1/66-5/1/66	4/22/66 95,362	10/15/66 95,362	
Animas Public School District	12.1D	Animas	Construct public tennis courts and fence.	1/3/66-6/1/66	5/14/66 1,238	5/14/66 1,238	
Village of Ruidoso	13 D	Carrizozo	Develop swimming pool, tennis courts, ball field and other recreational facilities.	10/4/65-12/1/67	3/2/66 69,109	5/14/66 69,109	
Park and Recreation Department	06 D	Albuquerque	Develop camping and picnicking facilities near downtown Albuquerque.	7/1/65-12/1/67	3/2/66 30,300	6/23/66 30,300	
Santa Fe Recreation Department	24.1 D	Santa Fe	Develop playground on one-half acre of land.	3/1/66- 7/31/67	3/15/66 505	6/23/66 505	
				SUBTOTAL	410,388	410,309	

STATE: NEW MEXICO (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Santa Fe Recreation Department	25.1D	Santa Fe	Develop basic recreational facilities and irrigation system at Agua Fria Park.	1/1/66- 7/31/67	3/15/66 3,030	6/23/66 3,030	
Town of Estancia	20 D	Estancia	Develop picnic facilities, fishing area, foot paths, and other facilities.	1/1/66-12/31/71	3/15/66 6,843	6/28/66 6,843	
Village of Grady	21 D	Grady	Develop tennis courts, picnic facilities, and swimming pool improvement.	5/1/66-6/30/66	3/15/66 2,020	5/14/66 2,020	
City of Clovis	34 D	Clovis	Develop small lake, picnic and play areas, tennis courts, and other facilities	1/1/65-11/1/68	6/28/66 45,450	6/28/66 45,450	
Village of Moriarty	30 A	Moriarty	Acquire land for expansion of existing community park.	3/1/66-12/31/66	6/6/66 505	6/6/66	480
City of Santa Fe	08.1D	Santa Fe	Develop Lower Alto Street Park including clearing, grading, and installation of irrigation system.	1/1/66-7/31/67	3/15/66 5,050	7/12/66 5,050	
City of Santa Fe	11.1D	Santa Fe	Develop Upper Canyon Road Park including clearing, grading, seeding, installation of irrigation system.	1/1/66-7/31/67	3/15/66 4,040	7/12/66 4,040	
City of Santa Fe	27.1D	Santa Fe	Develop Carlos Re Park including grading, seeding, installing irrigation system.	1/1/66-12/31/67	3/15/66 10,100	7/12/66 10,100	
City of Santa Fe	07 A	Santa Fe	Acquire 9.9 acres to be developed as neighborhood park.	1/1/66-12/31/66	3/15/66 9,090	7/12/66 9,090	
City of Santa Fe	10.1A	Santa Fe	Acquire 4 1/2 acres for neighborhood park.	1/1/66- 7/31/67	3/15/66 17,675	7/12/66 17,675	
City of Santa Fe	26.1A	Santa Fe	Acquire 12 acres to expand existing neighborhood park.	1/1/66-12/31/67	3/15/66 18,180	7/12/66 18,180	
Hobbs Municipal Schools	29 D	Hobbs	Construct and provide lighting for tennis courts.	4/1/66-10/1/66	3/15/66 5,302		
				SUBTOTAL	127,285	121,958	

STATE: NEW MEXICO (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Planning Office	37.1P	Statewide	Update Statewide Comprehensive Outdoor Recreation Plan.	1/15/66-1/31/67	9/3/66 4,075	9/3/66 4,075	
Raton Public Schools	23 D	Raton	Construct public park including picnic areas, tennis courts, football field, landscaping.	6/1/65-1/31/67	9/30/66 17,170	9/30/66 17,170	
Village of Logan	38 D	Logan	Develop picnic area at Logan Park.	4/1/65-8/31/67	9/30/66 20,175	9/30/66 20,175	
City of Eunice	35 A	Eunice	Acquire & develop Eunice Municipal Park.	10/18/65-3/15/69	9/30/66 107,000	9/30/66 24,180	
Park and Recreation Commission	42 D	Fort Sumner	Develop Alamogordo Lake State Park including camping units, shelters, tables, sanitary facilities, landscaping.	5/1/66-7/30/67	10/21/66 22,755	10/21/66 22,755	
State Park and Recreation Commission	41 D	Clayton	Construct camping, parking, domestic water and sanitary facilities in Clayton Lake State Park.	4/1/66-7/30/67	10/28/66 15,594	10/28/66 15,594	
City of Albuquerque	47 D	Albuquerque	Develop Albuquerque Rio Grande River Parkway including grading & paving roads, parking areas, campsite parking.	9/1/66-5/1/67	11/7/66 24,997	11/7/66 24,997	
Park and Recreation Commission	40 D	Tucumcari	Install 18 covered boat slips at Conchas Lake State Park.	1/1/66-12/15/66	11/3/66 15,150	11/3/66 15,150	
City of Santa Fe Recreation Department	55 D	Santa Fe	Develop Carlos Rey Park including access road, landscaping, parking area, softball little league field & backstop.	1/1/67-12/31/67	11/21/66 24,240	11/21/66 24,240	
City of Santa Fe Recreation Department	62 A	Santa Fe	Acquire 20 acres for development of Larragoite Park.	1/1/67-12/31/68	11/21/66 31,310	11/21/66 31,310	
State Game Commission	45 D	Antonito	Develop picnic units and fence Rio de les Pinos Recreation Area.	1/1/67-10/30/67	11/16/66 14,140	11/16/66 14,140	
Raton Public Schools	48 D	Raton	Construct picnic facilities, tot lot, baseball field, landscaping, roads, tennis court.	1/1/67-1/1/68	11/16/66 17,170	11/16/66 17,170	
				SUBTOTAL	313,776	230,956	

STATE: NEW MEXICO (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
City of Santa Fe Recreation Department	54 D	Santa Fe	Develop Agua Fria Youth Center including playground equipment, landscaping, parking, fencing.	1/1/67-12/31/67	11/18/66 7,979	11/18/66 7,979	
City of Santa Fe Recreation Department	56 D	Santa Fe	Develop Lower Alto Street Park including softball field, horseshoe courts, picnic tables, access road, parking.	1/1/67-12/31/67	11/16/66 3,838	11/16/66 3,838	
City of Santa Fe Recreation Department	57 D	Santa Fe	Develop Upper Canyon Road Park including softball field, picnic tables, access road, parking, ball court.	1/1/67-12/31/67	11/16/66 2,727	11/16/66 2,727	
City of Albuquerque	51 C	Albuquerque	Acquire 3 acres and develop land adjacent to Riverview Public School.	9/1/66-6/30/68	12/7/66 31,310	12/7/66 31,310	
City of Santa Fe Recreation Department	58 A	Santa Fe	Acquire 10 acres for picnicking and camping.	1/1/67-12/31/67	12/12/66 25,250	12/12/66 25,250	
City of Los Alamos	49 D	Los Alamos	Develop Camp May Community Park including access road, picnic sites, amphitheater with benches.	11/1/66-6/30/68	12/13/66 11,110	12/13/66 11,110	
City of Santa Fe Recreation Department	59 A	Santa Fe	Acquire 12 acres of land adjacent to Alta Vista Park.	1/1/67-12/31/67	12/14/66 36,360	12/14/66 36,360	
City of Santa Fe Recreation Department	60 A	Santa Fe	Acquire 5.4 acres to develop Cerro Gordo Park.	1/1/67-12/31/67	12/13/66 6,818	12/13/66 6,818	
City of Santa Fe Recreation Department	61 A	Santa Fe	Acquire 30 acres to develop Ragle Airport Park Site.	1/1/67-12/31/67	12/14/66 37,875	12/14/66 37,875	
Park and Recreation Commission	52 D	Santa Fe	Develop Hyde Memorial State Park including comfort station, shelters, tables, grills, water line, pump house, landscaping.	8/1/66-8/30-67	12/29/66 17,271	12/29/66 17,271	
				TOTAL	1,031,987	943,761	

STATE: NEW YORK 31

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Conservation Department	01.2 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-1/31/67	7/23/65 200,000	7/23/65 200,000	
Conservation Department	03 D	South Jamesport	Develop a boat launching site and parking area.	9/65-5/66	11/16/65 57,038	11/16/65 57,038	
Conservation Department	02 D	Fairhaven	Develop boat launching site and parking area at Fairhaven State Park.	9/65-5/66	12/16/65 35,725	12/16/65 35,725	
Conservation Department	18 D	Brooklyn	Rehabilitation of Prospect Park.	6/30/65-3/1/67	4/22/66 614,970	5/12/66 614,970	
Conservation Department	19 D	Binghamton	Reconstruction of bathing area at Chenango Valley State Park.	4/1/66-12/1/66	6/23/66 314,365	6/23/66 114,365	
Conservation Department	17 D	Sherburne	Develop Rogers Conservation Education Center for nature study, conservation education, outdoor photography.	4/1/66-11/1/68	6/10/66 45,950	8/6/66 45,950	
New York City	20 D	New York	Develop 1.25 miles of hiking and nature trail on Inwood Hill Park.	7/1/66-10/1/67	7/15/66 30,000	7/15/66 30,000	
Conservation Department	06 D	Moreau	Develop campsite on Moreau Lake, including tent and picnicking sites, sanitary facilities, beach.	4/9/65-3/31/67	7/23/66 73,250	7/23/66 73,250	
Conservation Department	05 D	Inlet	Pave roads in Limekiln Lake Public Campsite thus completing campsite development	4/9/65-3/31/66	8/3/66 17,703	8/3/66 17,703	
Conservation Department	07 D	Clifton	Expand existing campsite at Cranberry Lake State Park including road system, expanded beach, picnic facilities.	4/9/65-3/31/68	8/3/66 91,500	8/3/66 47,500	
Conservation Department	04 D	Webb	Develop Nicks Lake Public Campsite to provide tent sites, bathing beach.	4/19/65-3/31/67	8/6/66 55,900	8/6/66 55,900	
Conservation Department	08 D	New York	Develop Rockland Lake State Park including golf course, bathhouse, picnic and parking areas, bathhouse, boat dock.	11/1/65-11/1/66	9/3/66 2,564,390	9/3/66 264,390	
				SUBTOTAL	4,100,791	1,556,791	

STATE: NEW YORK (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Conservation Department	11 D	Geneva	Develop Seneca Lake State Park including parking area, maintenance building, utilities, landscaping.	11/65 - 12/31/66	9/3/66 341,161	9/3/66 146,161	
Conservation Department	12 D	Rochester	Develop Hamlin Beach State Park including tent and trailer camping area, shelters, road system, picnic and parking areas.	10/27/65-5/1/71	9/3/66 1,250,000	9/3/66 56,826	
Conservation Department	14 D	Manhattan	Develop East Bathhouse swimming pools at Jones Beach State Park.	3/18/66-5/15/67	9/3/66 988,173	9/3/66 988,173	
Broome County	22 D	Binghamton	Develop Hawkins Lake Park including dam, beach, bathhouse, boatdock, parking and camping areas, landscaping, trails, roads.	5/1/66-5/1/69	9/9/66 206,000	9/9/66 79,000	
Conservation Department	13 D	Chautauqua	Develop Long Point on Lake Chautauqua including beach complex, boat marina, picnic areas, hiking trails, fencing.	6/22/65-6/1/71	9/16/66 877,494	9/16/66 237,494	
Conservation Department	21 D	Buffalo	Develop Fort Niagara State Park including interior roads, parking areas, bathing area, bathhouse, pool, boardwalk, tables.	5/15/66-10/15/70	9/30/66 994,045	9/30/66 66,850	
Steuben County	23 D	Almond	Improve Almond Dam Recreation Area by addition of water lines, electric lines, playground equipment, latrines.	9/1/66-9/1/67	10/6/66 10,000	10/6/66 10,000	
City of Oswego	31 D	Oswego	Develop Kingsford Park including ice skating rink.	8/15/66-2/15/67	10/5/66 55,000	10/5/66 55,000	
Town of East Greenbush	30 D	East Greenbush	Develop new Town Park including dam, swimming beach, bathhouse, water supply, interior roads, parking lots, boat dock.	10/1/64-12/31/67	10/10/66 31,122	10/10/66 31,122	
Taconic State Park Commission	09 D	Yorktown	Complete development of Mohansic State Park including landscaping, picnic areas, roads, comfort stations, shelters.	3/1/65-10/1/70	10/15/66 934,690	10/15/66 130,790	
Palisades Interstate Park Commission	10 D	Haverstraw	Develop High Tor State Park including bathhouse, swimming pool, picnic areas, entrance road.	1/19/66-7/1/66	10/15/66 165,700	10/15/66 165,700	
Conservation Department	35 D	Franklin	Develop public campsite at Buck Pond including clearing, grading, picnic tables & fireplaces, roads, garage.	4/9/65-3/31/67	10/14/66 35,000	10/14/66 35,000	
				SUBTOTAL	5,888,385	2,002,116	

STATE: NEW YORK (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
Long Island State Park Commission	15 D	New York	Develop Heckscher State Park including boating facilities, swimming pools, golf courses, operations building, parking lot	1/10/66-7/1/71	10/15/66 3,347,500	10/15/66 76,692	
Town of Hamburg	24 D	Hamburg	Develop Osborne Heights Recreation Area including playfields, clearing, grading, sewer & water lines, landscaping.	6/30/66-12/1/66	10/14/66 25,000	10/14/66 25,000	
Town of Lancaster	33 D	Lancaster	Develop Meadowlea Neighborhood Park including clearing, grading, bathhouse, fencing, ticket booth, garage.	7/1/66-10/15/67	10/14/66 31,500	10/14/66 31,500	
Conservation Department	36 D	Luzerne	Develop Luzerne Public Campsite including access road & culvert, service building, water & sewer lines, game area.	4/9/65-3/31/67	10/14/66 36,875	10/14/66 36,875	
Conservation Department	34 D	Rockland	Develop public campsite at Mongaup Pond.	4/9/65-3/31/67	10/21/66 45,000	10/21/66 45,000	
				TOTAL	13,475,051	3,773,974	

STATE: NORTH CAROLINA 32

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Department of Administration	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	10/1/64-1/1/68	10/24/65 39,775	10/24/65 39,775	
Department of Conservation	03 A	Goldsboro	Acquire 56+ acres for Cliffs of the Neuse State Park to protect watershed for the park lake & expand camping area.	12/2/65-6/6/66	9/30/66 8,543	9/30/66 8,543	
Department of Conservation & Development	09 A	Jefferson	Acquire 65 acre addition to Mount Jefferson State Park.	3/18/65-4/6/65	10/10/66 6,000	10/10/66 6,000	
Department of Conservation & Development	04 D	Winston	Construct 35 unit campground, blacktop 5,808 feet of park road, install underground power cable.	9/29/64-6/1/66	11/2/66 26,021	11/2/66 26,021	
Department of Conservation & Development	10 D	Fayettsville	Construct interpretive center, nature trails, road, parking lot at Weymouth Woods, Sandhill Nature Preserve.	8/1/65-12/31/67	11/7/66 55,853	11/7/66 55,853	
Wildlife Resources Commission	07 A	Scotland Neck	Acquire 4.8 acres of land for access to Roanoke River.	10/11/65-6/30/67	11/23/66 1,207	11/23/66 1,207	
Department of Conservation & Development	32 D	Durham, Raleigh	Construct road and parking area for William B. Umstead State Park - Reedy Creek Section.	7/26/65-10/22/65	11/23/66 8,758	11/23/66 8,758	
Department of Conservation & Development	31 D	Charlotte	Construct camping facilities at Morrow Mountain State Park.	9/19/64-6/15/66	11/22/66 16,714	11/22/66 16,714	
Department of Conservation & Development	34 A	Goldsboro	Acquire 75 acres to expand Cliffs of the Neuse State Park.	10/1/66-10/1/67	11/22/66 14,825	11/22/66 14,825	
Wildlife Resources Commission	37 A	Raeford	Acquire 5.8 acres of land for access to Lumber River.	11/1/64-6/30/67	11/22/66 1,160	11/22/66 1,160	
Department of Administration	36 P	Statewide	Update comprehensive statewide outdoor recreation plan.	6/10/66-6/30/68	12/1/66 72,960	12/1/66 72,960	
Wildlife Resources Commission	06 D	Tuckaseigee	Construct boat launching ramp and parking lot at Cedar Cliff Reservoir.	5/1/65-6/20/65	11/30/66 1,750	11/30/66 1,750	
				SUBTOTAL	253,566	253,566	

STATE: NORTH CAROLINA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Wildlife Resources Commission	05 C	Sylva, Albemarle, Winston-Salem	Acquire 15.8 acres and develop water access areas at 4 locations in State.	9/29/64-3/1/67	12/7/66 34,682	12/7/66 34,682	
				TOTAL	288,248	288,248	

STATE: NORTH DAKOTA 33

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
State Outdoor Recreation Agency	03 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-9/3/65	9/24/65 25,300	9/24/65	25,300
Village of Epping	04 C	Epping	Acquire one acre of land for the development of tennis, volleyball, and other playground facilities.	9/1/65-10/31/66	3/15/66 1,650	5/21/66 1,650	
City of Minot Park District	09 D	Minot	Develop an additional 9 holes at existing 9-hole Souris Valley golf course	6/1/66-7/31/67	3/15/66 85,000	5/21/66 85,000	
Forest Service, Bottineau	10 A	Bottineau	Acquire 4,350 acres of land for camping, picnicking and hunting.	1/1/65-1/31/68	6/23/66 54,375	9/30/66 54,375	
Forest Service, Bottineau	11 D	Bottineau	Develop Turtle Mountain State Recreation Forest including fencing, trails and roads, campgrounds, swimming beach.	1/1/65-1/31/68	6/23/66 17,882	9/30/66 17,882	
Drayton Park Board	17.1 D	Drayton	Construct swimming pool in Drayton City Park.	6/1/66-7/31/67	5/6/66 30,000	10/5/66 30,000	
City of Rolla	18 D	Rolla	Construct swimming pool and bathhouse in Rolla Municipal Park.	4/1/66-7/31/67	6/23/66 40,000	11/30/66 40,000	
City of McClusky	21 D	McClusky	Construct swimming and wading pool, and bathhouse in Silbaugh Park.	5/1/66-11/1/66	6/23/66 26,750	8/15/66 26,750	
Devils Lake Park District	19 D	Devils Lake	Construct swimming pool and attendant facilities at Roosevelt Park.	12/7/66-9/1/67	6/23/66 83,650	9/30/66 83,650	
Park Service	22 D	Grand Forks	Construct swimming and wading pool at Turtle River State Park.	5/1/66-11/1/66	6/23/66 75,000	8/15/66 75,000	
City of Tioga	25.1 D	Tioga	Construct swimming pool and related facilities in Tioga Municipal Park.	7/1/65-12/31/67	6/23/66 37,500	8/9/66 37,500	
City of New England	28 D	New England	Develop golf course, boat dock, picnic area and other facilities.	12/1/65-1/1/67	5/26/66 3,745	12/13/66 3,745	
				SUBTOTAL	480,852	480,852	

STATE: NORTH DAKOTA (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Fargo Park Board	42 A	Fargo	Acquire a 17.24 acre tract to be developed into a park.	9/1/65-9/15/70	6/23/66 9,844	12/6/66 9,844	
Fargo Park District	43 D	Fargo	Develop a park with picnic area, playgrounds, swimming pool, ball fields, skating rink, and tennis courts.	9/1/65-5/30/69	6/23/66 127,175		
City of New England	46 A	Hettinger	Acquire 62 acres for development of New England Recreation Park.	12/1/65-1/1/67	5/26/66 2,945	12/13/66 2,945	
Lidgerwood Park Board	47 A	Lidgerwood	Acquire a 37 acre tract.	5/1/66-8/1/66	6/23/66 3,000	9/9/66 3,000	
Lidgerwood Park Board	48 D	Lidgerwood	Develop swimming pool, picnic area, and golf course.	5/1/66-5/1/67	6/23/66 16,250	9/3/66 16,250	
North Dakota Park Service	51 D	Bottineau	Construct 100 tent and trailer sites with facilities at Lake Metigoshe.	5/1/66/10/31/67	5/27/66 92,500	8/15/66 92,500	
Columbus Park District	55 D	Columbus	Develop 9-hole golf course.	1/1/65-9/30/68	6/23/66 4,463	8/15/66 4,463	
Powers Lake Park Board	59 D	Powers Lake	Develop pier, dock, and ramp.	3/28/66-7/30/66	5/26/66 4,924	7/23/66 4,924	
Village of Arthur	86 C	Arthur	Acquire 1/2 acre and construct tennis court, fencing and landscaping.	9/1/66-12/1/66	9/3/66 1,500	9/3/66 1,500	
State Outdoor Recreation Agency	66 P	Statewide	Update and maintain State Outdoor Recreation Plan.	9/4/65-1/20/68	9/3/66 39,025	9/3/66 28,825	
Game and Fish Department	07 A	Lisbon	Acquire 230 acres near Fort Ransom for hunting, camping, fishing, hiking.	6/1/65-9/30/65	9/3/66 3,750	9/3/66	3,750
Belfield Park Board	33 D	Belfield	Construct swimming and wading pool, bathhouse, and allied facilities, and landscaping.	9/1/66-6/30/67	9/3/66 25,000	9/3/66 25,000	
				SUBTOTAL	330,376	193,001	

STATE: NORTH DAKOTA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
Finley Park Board	82 D	Finley	Construct swimming and wading pool, bathhouse, ice skating rink, combination tennis and basketball court.	9/1/66-7/31/67	9/3/66 31,610	9/3/66 31,610	
City of Steele	34 D	Steele	Develop camping area at Steele Roadside Park including picnic tables, parking area, restrooms.	5/1/66-9/1/66	9/16/66 1,250	9/16/66 1,250	
Bismarck Park District	08 A	Bismarck	Acquire 70 acres of land to expand Sertoma Riverside Park.	6/1/65-8/5/66	9/16/66 13,980	9/16/66 13,980	
Bismarck Park District	41 D	Bismarck	Develop Sertoma Riverside Park including golf course, tennis courts, playground, picnic areas, parking lots, nature trails.	6/1/65-7/1/70	9/16/66 125,000	9/16/66 125,000	
Game and Fish Department	74 A	Valley City	Acquire 345 acres of land for fishing lake and to provide for wildlife habitat and hunting.	12/1/64-6/30/70	9/20/66 11,775		
Game and Fish Department	75 D	Valley City	Develop Clausen Springs Dam and Recreation Area to provide facilities for picnicking, boating, hunting, fishing.	12/1/64-6/30/70	9/20/66 45,000		
Game and Fish Department	76 C	Harvey	Acquire and develop Harvey Dam Recreation Area to provide facilities for wading & boating, games, picnicking.	10/1/64-7/1/67	9/20/66 60,000		
Mayville Park Board	83 C	Mayville	Acquire 80 acres and develop Mayville Golf Course.	9/15/66-10/15/67	9/30/66 40,500	9/30/66 40,500	
Park Service	77 D	Pick	Develop water system at Garrison State Park.	9/1/66-12/31/67	9/30/66 29,400	9/30/66 29,400	
Beach City Park Board	60 A	Beach	Acquire 3,417 square feet of land for use as public playground.	5/3/65-6/2/65	10/4/66 250	10/4/66	250
Beach City Park Board	61 D	Beach	Develop Beach City Park to provide restroom facilities.	3/8/65-6/2/65	10/4/66 627	10/4/66	627
City of Steele	36 D	Steele	Construct swimming & wading pool, bathhouse, softball field, and install playground equipment	5/1/66-9/1/66	10/13/66 21,100	10/13/66 21,100	
				SUBTOTAL	380,492	263,717	

STATE: NORTH DAKOTA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Game and Fish Department	39 A	Finley	Acquire 456.8 acres of land to raise water elevation of North Golden Lake.	10/64-10/66	10/21/66 18,000		
Game and Fish Department	40 D	Finley	Develop North Golden Lake including construction of outlet works & control structures, signs, sanitary facilities.	10/64-10/66	10/21/66 37,500		
City of Steele	35 A	Steele	Acquire 1.8 acres of landto develop a swimming-wading pool and bath house.	5/1/66-9/1/66	10/28/66 4,200	10/28/66 4,200	
Wahpeton Park Board	23 D	Wahpeton	Construct concrete block building with restroom & shower facilities in Hughes Field area of Chahinkapa Park.	9/1/65-5/30/66	10/28/66 2,285	10/28/66 2,285	
City of Southwest Fargo	58 D	Southwest Fargo	Develop Elmwood Park including ball field, restrooms, toboggan slide, shelters, fireplaces, picnic tables.	9/4/64-11/30/68	11/8/66 14,381	11/8/66 14,381	
Game and Fish Department	06 A	Walhalla	Acquire 720 acres to be managed as a public hunting area.	3/1/66-12/31/66	11/16/66 13,800	11/16/66 13,800	
Standing Rock Sioux Tribe	12 A	Fort Yates	Acquire 400 acres of land for the Long Soldier Coulee Park.	10/1/64-9/30/67	10/31/66 3,950	10/31/66 3,950	
Game and Fish Department	49 C	McGregor	Acquire 224 acres and develop McGregor Dam and Recreation Area.	10/1/64-6/1/67	12/7/66 48,600	12/7/66 48,600	
City of Beulah	14 D	Beulah	Construct low-head dam at Colt Dam and Recreation Area.	4/1/65-8/31/65	12/12/66 22,217	12/12/66 22,217	
Game and Fish Department	68 A	Esmond	Acquire 777.8 acres of land for development of Buffalo Lake.	6/1/65-12/31/67	12/13/66 14,064	12/13/66 14,064	
City of Sykeston	87 D	Sykeston	Develop Lake Hiawatha Park including roads, shelter, boat landing & dock, beach, landscaping, picnic & sanitary facilities.	4/1/67-10/1/68	12/13/66 2,463	12/13/66 2,463	
State Historical Society	78 D	Pembina	Develop Pembina State Park including picnic pavilion, restroom, boat dock, access road, barbecue pits.	5/1/67-10/1/67	12/6/66 7,500	12/6/66 7,500	
				SUBTOTAL	188,960	133,460	

STATE: NORTH DAKOTA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
City of Kindred	92 D	Kindred	Construct fenced swimming pool, wading pool and change house.	2/1/67-8/31/67	12/20/66 21,000	12/20/66 21,000	
				TOTAL	1,401,680	1,092,030	

STATE: OHIO 34

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Department of Natural Resources	02 A	Columbus	Acquire 250 acres adjacent to the Delaware Reservoir State Park.	6/1/66-6/1/67	7/6/66 45,000		
Department of Natural Resources	04 A	Archbold	Acquire 320 acres for development of Goll Woods State Park.	9/3/65-3/11/66	10/15/66 100,000	10/15/66 100,000	
Department of Natural Resources	06 D	Wilmington	Develop Cowan State Park including boat docks, swimming beach, cabins, campsite, water & sewage systems.	7/1/65-6/1/68	10/27/66 773,253	10/27/66 773,253	
				TOTAL	918,253	873,253	

STATE: OKLAHOMA 35

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
Muskogee Park and Recreation Department	01 A	Muskogee	Acquire 14.5 acres for an addition to Honor Heights Park to expand facilities and enhance and preserve natural beauty.	2/1/66-4/1/66	3/2/66 10,875	3/2/66	10,868
Industrial Development and Parks Department	04 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-11/1/65	4/2/66 15,941	4/2/66 15,941	
Industrial Development and Parks Department	05 D	Muskogee	Develop group camp facilities at Sequoyah State Park.	4/15/66-4/15/68	6/10/66 45,175	8/23/66 45,175	
Industrial Development and Parks Department	06 D	Muskogee	Construct 10 group cabins, sanitary and service facilities at Beaver Bend State Park.	5/1/66-5/1/68	6/10/66 45,175	8/23/66 45,175	
Muskogee Park Recreation Department	02.1 D	Muskogee	Construct picnic, playground, restrooms, and parking facilities at Honor Heights Park.	4/1/66-4/1/67	6/28/66 4,125	6/28/66 4,125	
City of Yukon	08 D	Yukon	Construct parking area and other basic recreational facilities.	2/1/66-7/1/67	6/28/66 2,586	6/28/66 2,586	
City of Moore	11 C	Moore	Acquire 20 acres and develop for recreational facilities at Telephone Road Park.	2/1/66-12/31/66	6/28/66 73,297	6/28/66 73,297	
Industrial Development and Parks Department	07 D	Muskogee	Construct swimming pool and bathhouse at Tenkiller State Park.	7/1/66-6/30/67	7/12/66 48,760	7/12/66 48,760	
Syre Park Commission	09 D	Sayre	Develop restroom, showers and pavillion at Sayre City Park.	7/1/65-12/31/66	7/12/66 13,566	7/12/66 13,566	
Industrial Development and Parks Department	14 P	Statewide	Update Statewide comprehensive outdoor recreation plan.	11/1/65-6/30/67	10/3/66 27,897	10/3/66 27,897	
City of Yukon	13 D	Yukon	Construct facilities for baseball, softball, tennis, archery, parking, football.	2/1/66-3/1/67	10/25/66 37,863	12/7/66 37,863	
				TOTAL	325,260	325,253	

STATE: OREGON 36

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
State Highway Department Parks and Recreation Division	02 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-9/3/69	9/24/65 83,750	9/24/65 83,750	
State Highway Department Parks and Recreation Division	03 A	Portland	Acquire 110 acres of land for addition to Ainsworth State Park.	9/4/64-12/31/68	11/1/65 25,000	11/1/65 —	10,375
State Highway Department Parks and Recreation Division	04 D	Portland	Develop an addition to Ainsworth State Park.	9/4/64-12/31/68	11/1/65 150,000	11/1/65 150,000	
State Highway Department Parks and Recreation Division	05 D	Coos Bay and North Bend	Construct a bathhouse and sewage treatment system at Sunset Bay State Park.	9/4/64-12/31/67	11/1/65 40,000	11/1/65 40,000	
State Highway Department Parks and Recreation Division	06 D	Medford	Develop new trailer camping area and expand water storage at Valley of the Rogue State Park.	9/4/64-12/31/67	11/1/65 90,000	11/1/65 90,000	
State Highway Department Parks and Recreation Division	07 A	Culver	Acquire additional lands for The Cove Palisades State Park.	9/1/65-12/31/68	11/1/65 10,000	11/1/65 10,000	
State Highway Department Parks and Recreation Division	08 D	Culver	Develop The Cove Palisades existing State Park.	9/4/64-12/31/68	11/1/65 125,000	11/1/65 125,000	
Josephine County	10 D	Grants Pass	Develop Schroeder Park for camping, fishing, water sports, picnicking.	1/1/66-7/1/68	4/30/66 29,018	8/6/66 10,925	
City of Klamath Falls	11 D	Klamath Falls	Develop electrical system, footbridge, picnic and parking facilities at Moore Park Lake.	7/1/66-10/1/67	5/27/66 15,000	8/9/66 15,000	
Douglas County Park Department	12 D	Winchseter	Develop camping and picnicking facilities at Winchester River Access.	3/1/66-6/30/68	6/28/66 16,436	8/20/66 16,436	
Pendleton Park System	13.1A	Pendleton	Acquire an inholding to permit full development of city park.	1/1/66-12/30/67	6/28/66 2,500	8/20/66 2,500	
Eugene Parks and Recreation Department	14 D	Eugene	Develop picnic and shelter area, wading pool, paths and other facilities.	3/1/66-6/1/67	6/28/66 11,750	10/26/66 11,750	
				SUBTOTAL	598,454	565,736	

75-489 O - 67 - pt. 2 - 10

STATE: OREGON (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Columbia County	15 A	Vernonia	Acquire six acres of land to be added to Big Eddy Park.	6/1/66-7/31/67	7/23/66 1,250	9/3/66 1,250	
Columbia County	16 D	Rainier	Develop restrooms at Hudson Park.	6/1/66-7/31/67	7/23/66 4,000	9/3/66 4,000	
County of Lane	17 D	Eugene	Construct picnicking, facilities, ski dock, landscaping at Orchard Point.	1/1/66-12/30/67	8/23/66 23,250	10/10/66 23,250	
City of Albany	26 A	Albany	Acquire 2.2 acres to be added to Bowman Park for passive recreation and beautification of Willamette River Waterfront.	5/1/66-8/31/67	8/23/66 1,225	10/26/66 1,225	
County of Lincoln	18 D	Depoe Bay	Develop sanitary facilities, fishing boat access at Depoe Bay Park.	7/1/66-7/1/67	8/24/66 2,993	9/3/66 2,993	
City of Bend	19 D	Bend	Develop Columbia Park including fishing, picnicking, playground activities, sports and passive recreation.	1/1/66-11/1/67	8/24/66 5,793	11/3/66 5,793	
County of Hood River	09 D	Parkdale	Develop picnicking and camping facilities at Toll Bridge Park.	1/1/66-7/1/67	9/8/66 7,627	10/26/66 7,627	
County of Multnomah	20 A	Portland	Acquire 28.88 acres of land to be added to Blue Lake Park.	7/1/66-12/31/66	9/8/66 89,901	10/15/66 89,901	
Marion County	29 A	Salem	Acquire 22 acres of stream and forested land known as Salmon Falls for sightseeing, nature study, picnicking.	9/1/66-6/30/67	9/16/66 12,500	10/26/66 12,500	
County of Curry	22 D	Brookings	Develop overnight camping, picnicking, surf fishing and other water sports facilities at Sporthaven County Park.	7/1/66-7/31/69	9/30/66 7,567	10/26/66 7,567	
County of Lincoln	23 D	Siletz	Develop swimming, fishing, boating facilities & restoration of natural environment at Strome Park.	7/1/66-7/1/67	9/30/66 2,525	10/26/66 2,525	
City of Fossil	25 C	Fossil	Acquire 1 acre and develop Arthur Glover Park including picnic and playground facilities.	9/1/66-9/1/67	10/28/66 1,800	10/28/66 1,800	
				SUBTOTAL	160,431	160,431	

STATE: OREGON (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Polk County	32 D	Salem	Develop Brush College Park including pave roadway, sanitary facilities, paths, footbridge, signs, fire places.	9/1/66-6/30/67	10/26/66 4,200	10/26/66 4,200	
Linn County	31 D	Lebanon	Develop Waterloo Park including facilities for camping, picnicking, fishing, swimming, hiking, nature study, sight seeing.	8/1/66-8/30/67	11/1/66 950	11/1/66 950	
Linn County	33 D	Crawsfordsville	Develop McKercher Park for camping, picnicking, fishing, swimming.	8/1/66-10/31/67	11/1/66 675	11/1/66 675	
Marion County	30 D	Salem	Develop Joryville Park including road paving, parking lot, drainage, paths.	9/1/66-6/30/67	11/1/66 5,000	11/1/66 5,000	
Linn County	34 D	Albany	Develop Peoria Park including sanitary & water systems, parking lots & roads, picnic area, trails.	8/1/66-9/30/68	11/1/66 7,087	11/1/66 7,087	
City of McMinnville	35 D	McMinnville	Rehabilitate & extend existing walks & stairs within the City Park.	10/1/66-10/30/67	11/1/66 2,000	11/1/66 2,000	
City of Sheridan	36 D	Sheridan	Provide new restrooms at Sheridan Park.	6/6/66-1/1/69	11/1/66 750	11/1/66 750	
Linn County	37 A	Crawsfordsville	Acquire 2.09 acres for development of MdKercher Park.	8/1/66-8/30/67	11/1/66 2,500	11/1/66 2,500	
Marion County	40 A	Salem	Acquire 21 acres for addition to Wheatland Ferry Park.	9/1/66-2/28/67	11/1/66 6,000	11/1/66 6,000	
City of Dallas	43 D	Dallas	Place rip-rap on Rickreall Creek and construct roadway.	7/1/66-6/30/67	11/1/66 4,000	11/1/66 4,000	
City of Sweet Home	38 A	Sweet Home	Acquistion of 6,600 square feet lot for picnic areas, and nature trails.	8/1/66-6/31/67	11/4/66 2,000		
City of Stayton	50 D	Stayton	Plow, fill in, level, roll, fertilize, reseed and establish the turf and grass in Pioneer Park.	9/1/66-10/31/67	11/4/66 1,036	12/1/66 1,036	
				SUBTOTAL	36,198	34,198	

STATE: OREGON (CONTINUED)

					ASSISTANCE AMOUNTS		
						Awarded	
Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	Qualified	Active	Completed
Woodburn Recreation and Park Board	51 D	Woodburn	Installation of drainage tile at Settlemier Park.	6/1/66-6/30/67	11/4/66 1,200	12/23/66 1,200	
City of Amity	46 D	Amity	New construction of fence around part of ball park also four or five out-door fire places.	9/1/66-9/1/67	11/2/66 500	12/5/66 500	
City of John Day	44 C	John Day	Acquire 16,500 square feet of land and develop facilities for picnicking and cooking in John Day City Park.	7/1/66-7/1/68	11/2/66 6,705	12/1/66 6,705	
Marion County	42 D	Falls City	Develop park land for picnicking, fishing and other activities in Teal Creek Wayside.	11/1/66-6/30/67	11/2/66 800		
City of Lake Oswego	41 D	Lake Oswego	To construct landing and launching facilities on the Willamette River, for the Lake Oswego Marina.	3/1/67-9/30/67	11/2/66 10,000	12/23/66 10,000	
County of Clackamas	39 D	Portland	To develop fishing, boating and picnicking facilities in Riverside Park.	7/1/66-6/30/68	11/2/66 8,157	12/1/66 8,157	
County of Morrow	28 D	Heppner	Development of camping, fishing, picnicking, and water sports facilities in Wright Memorial Park.	8/1/66-10/31/67	11/2/66 2,775	11/2/66 2,775	
County of Morrow	27 D	Heppner	Development of camping, fishing, winter sports and picnicking facilities in Cutsforth Forest Park.	8/1/66-10/31/67	11/2/66 2,790	11/2/66 2,790	
Yamhill County	48 A	McMinnville	Acquire 120 acres for fishing & camping.	2/1/67-10/31/67	11/2/66 4,200	12/1/66 4,200	
City of West Linn	45 D	West Linn	Construct access road & trails, picnic facilities for West Linn Wilderness Park.	9/1/66-9/30/67	11/7/66 7,000		
Baker County	24 D	Richland	Develop Hewitt Park including landscaping, parking area, boat ramp, pump house.	8/1/66-7/1/67	11/2/66 7,864	11/2/66 7,864	
Malheur County	54 D	Vale	Construct portion of irrigation system, restroom building, landscaping at Vale City Park.	4/1/66-7/1/67	11/16/66 1,712	12/23/66 1,712	
				SUBTOTAL	53,703	45,903	

STATE: OREGON (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Marion County	47 D	Silverton	Pave section of raodway at Scotts Mills Park.	9/1/66-6/30/67	11/17/66 1,400	11/17/66 1,400	
City of Independence	49 D	Independence	Level, clear, install picnic tables, stoves, restrooms at Polk Marine Park.	8/1/66-7/31/67	11/30/66 1,657		
Yamhill County	52 D	McMinnville	Develop Yamhill County Park including boat ramp, dock facility, water line.	10/1/66-10/31/67	12/2/66 2,500		
City of Nyssa	56 D	Nyssa	Construct restroom, lawn surface, drinking fountain at North Park.	1/1/66-6/1/67	12/2/66 2,031		
State Game Commission	58 A	Clatskanie	Acquire Mayger Landing Site (17 acres) to provide public boat launching access to Columbia River.	6/1/66-7/1/67	12/23/66 12,750		
City of Corvallis	57 D	Corvallis	Develop Pioneer Boat Basin including launching ramp, parking area.	1/1/66-9/1/67	12/23/66 12,618		
City of Ontario	55 A	Ontario	Acquire .17 acres to expand Lions Park.	7/10/66-1/10/69	12/27/66 5,590		
				TOTAL	887,332	807,668	

STATE: PENNSYLVANIA 37

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Fairmount Park Commission	06 D	Philadelphia	Develop approximately 3.8 miles of new bicycle trails in Fairmount Park.	9/1/66-9/31/67	7/15/66 30,000	11/7/66 30,000	
Department of Forests and Water	05 D	Patton	Design and construct 750 tent and trailer sites and supporting facilities in Prince Gallitzin State Park.	1/1/66-1/1/69	7/23/66 836,686	10/15/66 836,686	
City of Reading	11 D	Reading	Improve Angelica Park including toilet & storage, boating facilities, parking area, lighting, benches, fireplaces, tot lot.	10/1/66-12/30/69	11/15/66 100,000	11/15/66 48,730	
Borough of Elizabeth	12 D	Elizabeth	Develop playground including slides, swing sets, merry-go-round, ball courts.	6/1/66-10/1/66	12/28/66 5,500	12/28/66 5,500	
				TOTAL	972,186	920,916	

STATE: PUERTO RICO 52

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified	Active	Completed
Parks and Recreation Administration	01 D	Maricao	Develop Maricao State Forest Vacation Recreational Area including, cabins, pool, bathhouse, trail system, landscaping.	9/1/66-12/1/68	9/13/66 612,479	9/13/66 612,479	
Parks and Recreation Administration	02 D	San Juan	Develop Escambron Beach Recreational Area including fill, walkway, fishing pier, picnic shelters and pads, utilities, rafts.	1/7/66-7/1/68	9/13/66 106,377	9/13/66 106,377	
Institute of Puerto Rico Culture	03 D	Utuado	Develop Indian Ceremonial Park including administration building, picnic shelters, trails, water & power systems.	11/1/66-11/1/67	10/18/66 25,000	10/18/66 25,000	
				TOTAL	743,856	743,856	

STATE: RHODE ISLAND 38

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Natural Resources	02.2 A	Newport	Acquire 77 acres for future development of Ocean Drive State Park.	9/1/65-12/31/68	11/16/65 170,074	11/16/65 170,074	
Department of Natural Resources	04.2 A	Smithfield	Acquire 120 acres for development of Stillwater State Park.	10/1/65-12/31/68	11/16/65 154,371	11/16/65 154,371	
Department of Natural Resources	01.2 A	South Kingstown	Acquire approximately 37 acres of land for salt marsh protection and enlargement of East Matunuck State Beach area.	9/1/65-12/31/68	12/22/65 62,147	12/22/65 62,147	
Department of Natural Resources	03.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	7/1/65-6/30/67	5/21/66 53,203	5/21/66 28,203	
Town of Foster	05 A	Foster	Acquire 8 acres of land to preserve natural state of land and to create a swimming and picnic area.	11/29/65-11/29/66	3/24/66 1,150	3/24/66 1,150	
Department of Natural Resources	06.2 A	Cranston	Acquire 15 lots for future development.	12/15/65-12/31/68	6/28/66 151,025	6/28/66 151,025	
Department of Natural Resources	07 A	North Kingstown	Acquire 37 parcels of land for development of large multipurpose park.	2/1/66-6/30/67	6/28/66 369,463		
City of Providence	10.1 D	Providence	Construct swimming pool and supporting facilities in Roger Williams Park.	10/1/65-1/1/67	8/6/66 118,668	8/6/66 118,668	
				TOTAL	1,080,101	685,638	

STATE: SOUTH CAROLINA 39

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Complete
Wildlife Resources Department	02.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-2/10/67	9/24/65 145,191	9/24/65 145,191	
Commission of Forestry	06 D	Chester	Construct multi-purpose shelter to permit year-round use of recreation facilities at Chester State Park.	2/1/65-11/5/65	4/15/66 12,000	4/15/66	11,70
City of Spartanburg	03 D	Spartanburg	Develop City Park including parking area, picnic area, playground, picnic shelter, comfort station, and tennis courts	9/4/64-7/1/67	6/10/66 28,170	6/10/66 28,170	
City of Florence	09 A	Florence	Acquire 48 acres for development of a City Park.	4/1/65-5/31/66	6/10/66 18,650	6/10/66	18,57
Wildlife Resources Department	11 D	Columbia	Construct retaining wall and remove fill dirt at Calhoun Access Area on Lake Marion.	6/21/66-6/20/67	10/7/66 1,804	10/7/66 1,804	
Wildlife Resources Department	16 D	Charleston	Construct 33 navigational & safety channel markers in Lakes Marion & Moultrie.	5/23/66-5/23/68	11/9/66 27,750	11/9/66 27,750	
City of Aiken	17 D	Aiken	Construct multi-use asphalt pad at Smith-Hazel Recreation Center.	9/1/66-6/30/67	11/22/66 3,050	11/22/66 3,050	
Commission of Forestry	19 D	Walhalla	Construct restroom at Oconee State Park.	11/1/66-7/30/67	12/3/66 3,400	12/3/66 3,400	
Commission of Forestry	20 D	Beaufort	Construct restroom with showers at Hunting Island State Park.	2/1/66-8/10/66	12/3/66 3,246	12/3/66 3,246	
Wildlife Resources Department	10 D	Chester	Construct boat launching ramp & access road on Lake Oliphant.	4/1/67-4/1/68	12/9/66 5,400	12/9/66 5,400	
City of Spartanburg	12 D	Spartanburg	Develop tennis courts in 2 city parks.	1/1/65-5/1/67	12/21/66 31,487	12/21/66 31,487	
Wildlife Resources Department	18 D	Orangeburg	Construct access road, boat launching ramp, parking lot.	12/1/66-11/30/67	12/23/66 13,612	12/23/66 13,612	
				TOTAL	293,760	293,387	

STATE: SOUTH DAKOTA 40

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Industrial Development Expansion Agency	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/7/64-1/15/65	9/13/65 696	9/13/65 696	
Town of Kennebec	04 A	Kennebec	Acquire 9.7 acres of land to replace land lost by highway construction.	5/1/66-5/31/66	10/28/66 970	10/28/66	970
Town of Kennebec	05 D	Kennebec	Develop 3 hole golf course, lighted base-ball & football field combination, picnic area, parking lots.	6/1/66-9/30/67	10/28/66 8,713	10/28/66 8,713	
Game, Fish and Parks Department	10 A	Madison	Acquire 28 acres for development of Lake Herman State Park.	10/27/64-2/4/65	11/3/66 3,731	11/3/66 3,731	
Game, Fish and Parks Department	03 D	Sturgis	Construct fencing, gates and sign at Bear Butte State Park.	9/5/64-12/31/66	11/3/66 1,749	11/3/66 1,749	
Game, Fish and Parks Department	02 A	Sturgis	Acquire 100 acres for an addition to Bear Butte State Park.	6/29/65-12/31/66	11/8/66 2,500	11/8/66 2,500	
Game, Fish and Parks Department	11 A	Sisseton	Acquire 80 acres for use as a State park.	2/12/65-12/31/66	11/10/66 1,113	11/10/66 1,113	
Game, Fish and Parks Department	18 A	Wilmot	Acquire 324.95 acres as an addition to Hartford Beach State Park.	5/1/66-6/9/66	12/7/66 25,834	12/7/66 25 834	
State Planning Agency	21 A	Redfield	Acquire 237 acres of land adjacent to Fisher Grove State Park.	9/18/64-12/31/66	11/16/66 10,231	11/16/66 10,231	
City of Rapid City	24 D	Rapid City	Construct warming building, tennis courts & practice area at Sioux Park.	10/15/64-12/14/65	11/16/66 10,869	11/16/66 10,869	
City of Yankon	20 D	Yankon	Develop facilities at Memorial Park and Riverside Park including shelter houses, tennis courts, boat ramp.	6/1/66-6/1/68	12/13/66 14,999	12/13/66 14,999	
City of Webster	14 D	Webster	Develop Haase Recreation Area including water & sewer lines, lighted ball field, tennis courts, ice skating rink.	3/1/66-7/30/67	12/6/66 9,990	12/6/66 9,990	
				SUBTOTAL	91,395	91,395	

STATE: SOUTH DAKOTA (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
City of Huron	16 D	Huron	Develop additional camping facilities at Huron Memorial Park.	1/1/67-12/31/68	12/6/66 10,600	12/6/66 10,600	
City of Brookings	15 D	Brookings	Install sprinkler system, grass seeding, fertilizing in Medary Park.	8/1/66-11/15/66	12/6/66 13,356	12/6/66 13,356	
Town of Long Lake	22 D	Long Lake	Develop Long Lake Park including well, restrooms, playground equipment, picnic facilities, softball area.	4/1/67-12/31/70	12/6/66 4,796	12/6/66 4,796	
				TOTAL	120,147	120,147	

STATE: TENNESSEE 41

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Department of Conservation	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-3/1/66	10/6/65 32,376	10/6/65 32,376	
				TOTAL	32,376	32,376	

STATE: TEXAS 42

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Parks and Wildlife Department	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-10/31/65	11/1/65 27,074	11/1/65 27,074	
Parks and Wildlife Department	02 D	Dallas	Develop camping, picnicking, utilities, and sanitary facilities at Meridian State Park.	1/1/65-12/31/66	4/15/66 52,753	4/15/66 52,753	
Parks and Wildlife Department	03 D	El Paso	Develop camping, lodging, picnicking areas, administration and service facilities at Davis Mountain State Park.	1/1/65-12/31/67	4/15/66 515,776	4/15/66 515,776	
Parks and Wildlife Department	04 D	Kerrville	Complete redevelopment of Kerrville State Park including trailer & tent camping units, shelters, playground.	1/1/65-12/31/67	8/6/66 206,974	8/6/66 206,974	
Sabine River Authority	06 C	Lone Oak	Acquire and develop Wind Point on Lake Tawakoni.	11/1/65-8/31/67	9/3/66 120,440	9/3/66 120,440	
City of Wichita Falls	14 D	Wichita	Develop Lucy Park including restrooms, camping and picnic units, fencing, road & parking facilities, children's zoo.	1/1/66-9/31/68	9/20/66 133,562		
Parks and Wildlife Department	07 D	Denison	Develop Eisenhower State Park including tent and trailer camping units, shelters, picnic units, fencing, utilities.	1/1/65-12/31/67	9/30/66 301,726	9/30/66 301,726	
Parks & Wildlife Department	09 D	Amarillo	Develop Palo Duro State Park including water supply, trailer & tent camping units, picnic units, roads, parking.	9/1/65-12/1/67	10/15/66 271,494	10/15/66 271,494	
City of Copperas Cove	13 D	Copperas Cove	Develop Copperas Cove City Park No. 1 including roads, parking, bathhouse & restroom building, playground, courts.	9/4/64-9/30/68	10/18/66 56,425	10/18/66 56,425	
Brazos River Authority	11 A	Granbury	Acquire 255 acres of land in 7 sites around DeCordova Bend Reservoir.	4/1/66-3/31/70	10/18/66 55,285	10/18/66 55,285	
Parks and Wildlife Department	16 D	Houston	Construct facilities at Stephen F. Austin State Park including restrooms, swimming pool, nature trail.	1/1/65-12/1/67	10/19/66 166,457	10/19/66 166,457	
Parks and Wildlife Department	10 D	Austin	Develop facilities at Bastrop State Park including restrooms, trailer & tent camping units, roads, picnic units.	1/1/65-12/1/67	10/19/66 286,606	10/19/66 286,606	
				SUBTOTAL	2,194,572	2,061,010	

STATE: TEXAS (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
City of Port Lavaca	12 C	Port Lavaca	Acquire 4 acres of land and develop Port Lavaca Fishing Pier Park.	1/1/65-12/1/67	10/21/66 51,500	10/21/66 51,500	
Schleicher County Commissioner's Court	08 C	Eldorado	Acquire 7 acres and develop Schleicher County Park.	3/1/65-6/1/67	10/21/66 14,917	10/21/66 14,917	
City of Dallas	15 A	Dallas	Acquire 37.01 acres of land to develop Woodland Springs Park.	10/1/66-12/31/67	10/28/66 18,239	10/28/66 18,239	
City of Brady	17 D	Brady	Develop Brady Lake Park including fishing barge, boat docks, beach, picnic facilities, trailer & tent campsites, roads, utilities.	10/1/64-12/1/68	12/7/66 119,650	12/7/66 119,650	
Parks and Wildlife Department	18 D	Dallas, Shreveport	Develop Tyler State Park including restrooms, interpretative center, nature trails, beach, picnic & camp shelters.	1/1/65-12/1/67	12/22/66 225,941		
				TOTAL	2,624,819	2,265,316	

STATE: UTAH 43

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded	
						Active	Completed
State Planning Coordinator	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/66	1/15/66 24,100	1/15/66 24,100	
Department of Fish and Game	02 A	Farmington	Acquire water rights in Jordan River for use on Farmington Bay Waterfowl Management Area.	3/31/65-7/1/67	8/9/66 15,600	8/9/66 15,600	
Department of Fish and Game	03 D	Beaver	Develop wildlife habitat to provide forage and perpetuate game hunting.	11/1/64-12/31/66	8/9/66 6,226	8/9/66 6,226	
Department of Fish and Game	04 D	Brigham	Construct access road, parking lot, boat slip at West Bear River Bay.	9/1/66-5/31/67	8/9/66 10,692	8/9/66 10,692	
City of Wellsville	06 A	Wellsville	Acquire 2.26 acres of land for development of Wellsville Park.	4/1/66-3/31/67	10/7/66 995	10/7/66 995	
Vernal City Council & Uintah County	08 D	Vernal	Develop community park including ball fields, utilities systems, parking, picnic facilities, landscaping, signs.	9/4/64-12/31/67	11/21/66 26,612	11/21/66 26,612	
Fillmore City	09 D	Fillmore	Develop community park including picnic facilities, parking area, lighting, restroom, landscaping.	9/4/64-12/31/67	12/7/66 12,500	12/7/66 12,500	
Bountiful City	11 D	Bountiful	Develop 4 city park including picnic shelters, tot lot areas, restroom, tennis court, parking lots, landscaping.	9/4/64-12/31/66	12/15/66 17,448	12/15/66 17,448	
				TOTAL	114,173	114,173	

STATE: VERMONT 44

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Fish and Game Department	01.2 A	Groton	Acquire 200 acres of timberland, including 27-acre Levi Pond, for fishing, hiking, nature study, etc.	9/4/64-10/15/66	12/27/65 7,827	12/27/65 7,827	
Fish and Game Department	02.1 A	Barnet	Acquire 80 acre Jewett Pond and 420 acres of surrounding land for fishing, hiking, nature study, etc.	10/1/65-7/1/67	12/27/65 9,847	12/27/65 9,847	
Fish and Game Department	09.2 C	Fairfield	Acquire 26 acres of land and construct a dam to stabilize water levels and provide a trout fishery.	7/1/65- 12/1/67	2/11/66 17,844	2/11/66 1,010	
Hardwick Recreation Board	10.3 D	Hardwick	Develop a 4 acre tract of land for day-use purposes such as swimming and picnicking on the shores of Mackville Pond.	9/1/65-11/1/67	2/11/66 2,020	2/11/66 2,020	
Fish and Game Department	05.1 A	Barton	Acquire 106 acres to provide access to fishing on the Willoughby River.	5/1/65-7/1/67	4/2/66 10,706	4/2/66 10,706	
Fish and Game Department	06.1 A	Coventry	Acquire 200 acres to provide parking and public access to fishing on Black River.	1/1/66-12/30/67	4/2/66 20,200	4/2/66 5,050	
Fish and Game Department	07.1 A	Barton	Acquire 375 acres to provide public access for fishing on the Barton River.	5/1/66-7/1/67	4/2/66 18,180	4/2/66 18,180	
Bristol Recreation Board	11.1 D	Bristol	Develop park including trails, bridges, fencing sanitary and picnic facilities, parking area.	7/1/65-11/1/66	4/2/66 2,546	4/2/66 2,546	
Burlington Harbor Commission	12 A	Burlington	Acquire 1/2 acre of land to expand car and boat parking facilities at Burlington Municipal Pier.	8/1/65-1/1/66	4/2/66 5,353	4/2/66	5,353
City of Newport	13.2 D	Newport	Develop site on Lake Memphremagog including grading, picnic and parking area, ball fields, bathhouse, shelter building.	6/1/65-11/1/68	4/2/66 50,500	4/2/66 25,865	
Department of Forests and Parks	17 D	St. Albans	Dredge portions of boat basin site and construct breakwater pier for protection and additional space at Burton Island.	9/4/64-6/30/66	4/20/66 29,709	4/20/66 29,709	
Department of Forests and Parks	19 D	Stowe	Addition of 9,500 square feet to expand Mt. Mansfield State Ski Shelter, expand and improve water and sewage system.	9/4/64-9/30/66	4/20/66 82,997	4/20/66 82,997	
				SUBTOTAL	257,729	201,110	

STATE: VERMONT (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Fish and Game Department	14.1 A	Hardwick	Acquire acres on portions of Lamoille River stream bank for public access.	1/1/66-12/30/67	4/2/66 21,210	4/2/66 5,346	
Department of Water Resources	03.1 C	Barton	Acquire and repair outlet structure that controls water level of Crystal Lake and acquire water rights to this lake.	9/1/65-10/31/66	4/15/66 17,523	4/15/66 17,523	
Department of Water Resources	04.1 C	Groton	Acquire and reconstruct outlet structure of Groton Pond and acquire water rights to entire pond.	9/1/65-11/30/66	4/15/66 23,482	4/15/66 23,482	
Fish and Game Department	08.1 D	Vernon	Develop impoundment for swimming and fishing.	1/1/66-12/30/66	4/20/66 19,948	4/20/66 8,105	
Department of Forests and Parks	15 D	East Burke	Addition of 800 square feet to Burke Mountain State Ski Shelter to provide shelter, restaurant, and toilets.	3/1/65-9/30/66	4/20/66 7,879	4/20/66 7,879	
Department of Forests and Parks	16 D	Rutland	Addition of 8,700 square feet to Killington State Ski Shelter with expansion and improvement of water and sewage system.	9/4/64-9/30/66	4/20/66 82,997	4/20/66 82,997	
Department of Forests and Parks	18 A	Ferrisburg	Acquire Button Point and adjacent island for natural area with public access.	7/1/65-2/28/67	6/9/66 28,000	6/9/66 28,000	
Department of Forests and Parks	20.1 D	Statewide	Expansion of camping facilities at 12 State parks throughout the State.	9/4/64-6/1/68	6/2/66 345,208	6/2/66 345,208	
Pittsford Recreation Commission	21 D	Pittsford	Develop 27-acre town park including a one-acre pond, natural area and parking lot.	1/1/66-8/30/67	6/28/66 1,641	6/28/66 1,641	
Vergennes Recreation Board	23 D	Vergennes	Develop community swimming pool in the City Park.	4/1/65-8/30/67	5/26/66 25,250	5/26/66 25,250	
West Rutland Recreation Board	22.1C	West Rutland	Develop six acres on the Clarendon River including beach area, bathhouse, picnic shelter, and fireplaces.	3/1/65-7/30/69	7/12/66 4,731	7/12/66 4,731	
Burlington Park Commission	24.1 D	Burlington	Develop 30 new campsites with tables, fireplaces, utilities, and sanitary facilities.	1/15/65-1/1/67	7/11/66 9,090	7/11/66 9,090	
				SUBTOTAL	586,959	559,252	

STATE: VERMONT (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
Brattleboro Recreation Department	25 A	Brattleboro	Acquire 63 acres of land adjacent to Brattleboro Memorial Park for camping, nature trails and study.	4/1/66-9/30/66	8/23/66 3,500		
Fish and Game Department	26.1 A	Rutland	Acquire approximately 30 miles of streambank and 24 access areas along Otter Creek.	7/1/65-6/30/68	9/16/66 104,424	9/16/66 64,397	
Department of Forests and Parks	31.1A	Weybridge	Acquire 108 acres of land to protect Weybridge Cave.	5/1/66-1/1/67	9/16/66 9,393	9/16/66 9,393	
Fish and Game Department	27.1 A	Woodstock	Acquire 202 acres along Ottauquechee River for future water development, access, stream protection, beautification.	7/1/66-6/30/68	9/30/66 17,273	9/30/66 12,638	
Fish and Game Department	29.1 A	Woodstock	Acquire 384 acres along West River for "wild river" preservation & enhancement, stream protection, access.	7/1/66-6/30/68	9/30/66 34,996	9/30/66 5,050	
Fish and Game Department	28.1 A	Manchester	Acquire 19 miles of streambank, 6 access areas, 240 acres of land for future water development at Battenfill River Basin.	7/1/65-6/30/68	10/5/66 25,250	10/5/66 12,095	
Fish and Game Department	30 A	White River	Acquire 41 miles of streambank.	7/1/66-6/30/68	10/5/66 43,177	10/5/66 3,838	
City of Burlington	32 D	Burlington	Develop Perkins Municipal Peir including retaining wall, utility lines, docks, lighting, surfacing dock & parking area.	10/1/66-6/30/67	11/3/66 15,907	11/3/66 15,907	
Fish and Game Department	33 D	Statewide	Install pedestrian passes in boundary fences, remove trees, erect boundary fence, excavate stock water ponds.	9/1/66-7/1/67	11/16/66 11,267	11/16/66 11,267	
Fish and Game Department	34 A	West Bernet	Acquire 496 acres for an extension to Jewett Pond.	8/1/66-12/30/67	12/6/66 8,585	12/6/66 5,580	
				TOTAL	1,118,460	900,527	

STATE: VIRGIN ISLANDS

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed

STATE: VIRGINIA 45

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Conservation and Economic Development	01 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-11/1/66	6/24/65 48,000	6/24/65	46,254
Department of Conservation and Economic Development	02. 2 A	Independence	Acquire approximately 5,449 acres for a new State park for future development of outdoor recreation facilities.	11/1/65-11/1/67	3/2/66 211,690	3/2/66 211,690	
Department of Conservation and Economic Development	03 D	Richmond	Construct 80 tent campsites and 2 central washhouses at Pocahontas State Park.	10/21/64-11/26/65	3/4/66 14,171	3/4/66	14,171
Department of Conservation and Economic Development	06 D	Marion	Construct 12 additional tent campsites in an existing campground at Hungry Mother State Park.	10/1/64-9/1/65	3/22/66 3,098	3/22/66	3,098
Department of Conservation and Economic Development	04 D	Dublin	Construct 30 additional tent campsites and central washhouse in an existing campground at Claytor Lake State Park.	9/4/64-6/8/65	6/10/66 13,409	6/10/66	13,409
Arlington County	13 D	Arlington	Develop 4 miles of walkway and bikeway along Four Mile Run and acquire 2 parcels for construction of hiking trail.	6/15/66-7/1/67	7/15/66 35,000	7/15/66 35,000	
Department of Conservation and Economic Development	12 D	Roanoke	Rehabilitate Fairy Stone State Park swimming area including removal of silt and dredging.	9/1/66-5/1/67	8/20/66 100,000	8/20/66 100,000	
Department of Conservation and Economic Development	09 D	Norfolk	Construct water-oriented facilities at Seashore State Park including dock, pier, comfort station, walks, parking area.	3/1/66-1/1/67	9/3/66 15,000	9/3/66 15,000	
Commission of Game and Inland Fisheries	14 C	Wytheville	Acquire 225 acres for development of Wythe County Public Fishing Lake including camping & picnicking & parking areas.	6/1/66-11/1/67	9/16/66 33,000		
Department of Conservation and Economic Development	15 A	Washington D.C.	Acquire 1,800 acres for development of Mason Neck State Park.	9/1/66-7/1/70	9/30/66 1,620,000	9/30/66 750,000	
Department of Conservation and Economic Development	07 D	Dublin	Develop water access facilities at Claytor Lake State Park.	9/1/66-1/1/68	10/21/66 51,781	10/21/66 51,781	
Department of Conservation and Economic Development	18 A	Gate	Acquire 800 acres for a new State park at Natural Tunnel.	1/9/66-1/9/68	12/20/66 115,000		
				TOTAL	2,260,149	1,240,403	

STATE: WASHINGTON 46

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Interagency Committee for Outdoor Recreation	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-6/30/66	9/9/65 58,280	9/9/65 58,280	
Department of Game	02.1 A	Statewide	Acquire 5 miles of easements on streams and approximately 8 boat launching sites on lakes, streams and salt water.	7/1/65-6/30/66	2/3/66 72,500	2/3/66 72,500	
Department of Game	06.1 A	Olympia	Acquire approximately 150 acres within the proposed Nisqually Delta Waterfowl Range for public hunting and fishing area	7/1/65-6/30/67	1/20/66 60,000	1/20/66 60,000	
Department of Game	07.2 A	Olympia	Acquire approximately 150 acres of land adjacent to Scatter Creek Multi-Purpose Hunting Area.	7/1/65-6/30/67	1/20/66 17,500	1/20/66 17,500	
Department of Game	09 A	Ellensburg	Acquire approximately 10,000 acres to be incorporated into the Colockum Game Range for big game and upland game bird hunting	7/1/65-6/30/66	3/1/66 50,000	3/1/66 50,000	
State Parks and Recreation Commission	03.1 D	Ilwaco	Construct road, sanitary and camping facilities at Fort Canby State Park.	2/15/66-12/31/66	4/30/66 59,100	4/30/66 59,100	
State Parks and Recreation Commission	04 D	Chelan	Construct a retaining wall to protect camping area and enhance beauty at Lake Chelan.	4/1/66-6/30/67	5/27/66 26,000	5/27/66 26,000	
Department of Natural Resources	10 A	Statewide	Acquire 14 recreational sites for outdoor recreation facilities.	9/4/64-6/30/67	5/11/66 41,125	5/11/66 41,125	
Department of Natural Resources	11 D	Statewide	Develop camping, picnicking, boating, fishing at 14 sites.	9/4/64-6/30/67	5/11/66 54,525	5/11/66 54,525	
State Parks and Recreation Commission	12 A	Blaine	Acquire 2.38 acres of property to be used for parking and a buffer zone.	1/1/66-6/30/67	6/23/66 9,950	6/23/66 9,950	
State Parks and Recreation Commission	13 D	Ocean City	Construct day use and overnight comfort stations at Ocean City State Park.	3/30/65-6/30/65	6/23/66 15,370	6/23/66 15,370	
State Parks and Recreation Commission	14 D	Tacoma	Construct 28 trailer and 24 tent campsites at Dash Point State Park.	9/15/64-1/1/65	6/23/66 14,303	6/23/66 14,303	
				SUBTOTAL	478,653	478,653	

STATE: WASHINGTON (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
University of Washington	25 D	Seattle	Develop waterfront trail on the Arboretum of the University of Washington.	6/1/66-6/30/67	7/15/66 45,000	7/15/66 45,000	
Benton County Park and Recreation Board	17 D	Kennewick	Construct facilities at Columbia Park including picnicking, boating, and tennis court facilities.	1/1/66-12/31/66	7/23/66 29,374	7/23/66 29,374	
State Parks and Recreation Commission	05 D	Grayland	Prepare land fill and construct 50 unit camp loop with water and electrical outlets in Twin Harbors State Park.	12/1/65-6/30/67	6/10/66 29,550	7/23/66 29,550	
State Parks and Recreation Commission	16 A	Battleground	Acquire approximately 277.5 acres surrounding Battleground Lake for recreational development.	4/1/66-6/30/67	7/29/66 275,000	7/29/66 68,750	
City of Port Angeles	23 A	Port Angeles	Acquire Hollywood Beach Park.	1/1/66-1/1/67	6/28/66 27,500	6/28/66 27,500	
Spokane County	21 A	Spokane	Acquire 2,930 acres for future development including winter sports, youth camp, picnicking facilities.	1/1/66-1/1/67	6/23/66 125,000	6/23/66 125,000	
State Parks and Recreation Commission	15 A	Port Townsend	Acquire 410 acres around Anderson Lake.	4/1/66-6/1/70	8/4/66 235,000	8/4/66 65,800	
Metropolitan Park District of Tacoma	18 A	Tacoma	Acquire 152 acres in Swan Creek Canyon for hiking, nature study, day camping, picnicking.	4/1/66-6/30/67	8/9/66 76,000	8/9/66 76,000	
City of Lynnwood	22 A	Lynnwood	Acquire 5 acres of land for addition to Lynnwood City Park.	5/1/65-1/1/67	9/3/66 5,500	9/3/66 5,500	
City of Seattle	28 A	Seattle	Acquire 0.8 acres of waterfront property adjacent to Armeni Boat Launching Ramp on Elliott Bay.	3/1/66-3/1/68	10/13/66 49,550	10/13/66 49,550	
City of Mountlake Terrace	20 A	Mountlake Terrace	Acquire 47.6 acres of Central Valley Lands for development into a city park.	4/1/66-5/30/67	10/18/66 47,500	10/18/66 47,500	
State Parks and Recreation Commission	30 A	Washougal	Acquire 35 acres adjacent to Beacon Rock State Park.	6/30/66-6/30/67	11/21/66 15,000	11/21/66 15,000	
				SUBTOTAL	959,974	584,524	

STATE: WASHINGTON (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Parks and Recreation Commission	31 A	Chehalis	Acquire 11.4 acres of land adjacent to Mayfield Lake State Park.	6/30/66-6/30/67	12/1/66 12,000	12/1/66 12,000	
Whatcom County	33 A	Bellingham	Acquire 250 acres of land on Portage Island.	1/1/66-1/1/67	12/28/66 187,500	12/28/66 187,500	
				TOTAL	1,638,127	1,262,677	

STATE: WEST VIRGINIA 47

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Completed
Department of Commerce	01.2 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-8/31/65	9/20/65 48,603	9/20/65 48,603	
Wheeling Park Commission	02.1 D	Wheeling	Develop swimming pool, tennis courts, and building to service swimming pool, tennis courts, and golf course.	5/1/65-12/31/66	3/14/66 255,625	3/14/66 255,625	
Wheeling Park Commission	03.1 D	Wheeling	Construct service building at Oglebay to provide maintenance and construction services for the Wheeling Park system.	7/1/65-6/30/67	3/14/66 63,906	3/16/66 63,906	
City of New Martinsville	04.1 D	New Martinsville	Construct swimming pool and related facilities at Wetzel Park.	10/1/64-12/31/66	7/23/66 48,226	7/23/66 48,226	
Department of Natural Resources	09.1 A	Webster Springs	Acquire and 85 acre inholding at Holly River State Park.	11/1/65-6/30/67	10/4/66 3,067	10/4/66 3,067	
Department of Natural Resources	12.1 A	Marlinton	Acquire 183 acre inholding at Seneca State Forest.	10/1/64-6/30/70	6/16/66 7,669	6/16/66 7,669	
				TOTAL	427,096	427,096	

STATE: WISCONSIN 48

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Department of Conservation	01.1 P	Statewide	Prepare comprehensive statewide outdoor recreation plan.	9/4/64-2/28/66	12/2/65 9,107	12/2/65 9,107	
Department of Conservation	02 A	Statewide	Acquire 4,000 acres to provide frontage and access to streams and lakes.	11/65-11/68	1/20/66 198,000		
Department of Conservation	03.1A	Statewide	Acquire 8,000 acres to provide opportunity for public hunting and associated forms of outdoor recreation.	11/65-11/68	1/20/66 380,000	12/6/66 63,462	
Department of Conservation	04 A	Statewide	Acquire 11,677 acres to provide swimming, boating, camping, sightseeing, picnicking facilities.	11/65-11/68	1/20/66 1,055,350		
Department of Conservation	05.3 A	Statewide	Acquire 3,880 acres for swimming, boating, picnicking, camping, hunting and fishing.	11/65-11/68	1/20/66 222,100	7/23/66 90,805	
Department of Conservation	08.1 D	Hilbert	Develop picnic area with water and sewer facilities at High Cliff State Park.	1/1/66-1/1/69	2/16/66 29,222	2/16/66 29,222	
Department of Conservation	09 D	Waukesha	Develop sanitary facilities at Greenbush Group Camping Area in Kettle Moraine State Forest.	1/1/66-1/1/69	2/16/66 5,000	2/16/66 5,000	
Department of Conservation	10.1D	Fish Creek	Develop sanitary and water facilities at Peninsula State Park.	1/1/66-1/1/69	2/16/66 21,725	2/16/66 21,725	
Department of Conservation	11.1D	Whitewater	Develop sanitary and water facilities at Kettle Moraine State Forest (Southern Unit).	1/1/66-1/1/69	2/16/66 8,165	2/16/66 8,165	
Department of Conservation	12.1D	Dundee	Develop sanitary facilities, water and sewer lines in Kettle Moraine State Forest, Long Lake Camp Area (northern unit).	1/1/66-1/1/69	2/16/66 78,916	2/16/66 78,916	
State Historical Society	06 A	Prairie du Chien	Acquire 7 acres adjacent to the Villa Louis National Historic Landmark.	12/1/65-12/1/70	6/23/66 25,000	6/23/66 25,000	
Milwaukee County Park Commission	27 A	Oak Creek	Acquire 223.39 acres of land at Oak Creek on Lake Michigan for development of a new park.	1/1/66-1/1/68	6/23/66 303,310	6/23/66	
				SUBTOTAL	2,335,895	331,402	

STATE: WISCONSIN (Cont.)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
Kenosha County Park Commission	28 A	Kenosha	Acquire 244 acres on Silver Lake to be developed as a multipurpose park.	1/1/66-1/1/71	6/23/66 53,248		
Wood County Park Department	13 D	Pittsville	Construct bathhouse with water system and sanitary facilities at Dexter Park.	1/1/66-1/1/67	7/11/66 9,142	7/11/66 9,142	
Eau Claire County	14 A	Eau Claire	Acquire 220 acres for scenic values, future parking, access and picnic facilities.	1/1/66-1/1/67	7/12/66 6,050	7/12/66 6,050	
Eau Claire County	15 A	Fairchild	Acquire 40 acres in the Eau Claire County Forest for future fishing and canoeing.	2/3/66-12/31/66	7/12/66 406	7/12/66 406	
City of Oconto	18 D	Oconto	Develop artificial lake and bathhouse on the Cith of Oconto public park property.	12/10/65-12/10/67	7/12/66 24,545		
Milwaukee County Park Commission	44 D	Milwaukee	Construct 4.6 miles of scenic bicycling trails in parks along the shore of Lake Michigan.	7/1/66-7/1/67	7/15/66 46,800	7/15/66 35,000	
City of Whitewater	19 D	Whitewater	Develop 12 acre city park on Tripp Lake including parking area, boat launching ramp, sanitary facilities.	2/1/66-2/1/68	8/6/66 14,685	8/6/66 14,685	
Clark County	20 D	Humbird	Construct picnic shelter, boat launching ramp, parking area, picnic tables, well, playground equipment in Humbird Park.	5/1/66-5/1/67	9/30/66 2,337	9/30/66 2,337	
City of Fond du Lac	32 D	Fond du Lac	Construct 10 boat docks at Lakeside Park.	1/1/66-1/1/67	10/6/66 4,680	10/6/66 4,680	
La Crosse County	24 D	La Crosse	Develop Dam #7 Park by relocating public access road & filling in, leveling, and seeding down the area.	4/1/66-4/1/67	10/6/66 156	10/6/66 156	
La Crosse County	26 D	La Crosse	Develop Upper French Island Park by constructing & surfacing boat launching ramps & filling in & seeding picnic area.	4/1/66-4/1/67	10/6/66 780	10/6/66 780	
La Crosse County	25 D	La Crosse	Develop Neshonoc Park by constructing shelter building, well, surface parking area.	4/1/66-4/1/67	10/6/66 3,276	10/6/66 3,276	
				SUBTOTAL	166,105	76,512	

STATE: WISCONSIN (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
						Awarded	
					Qualified 12/14/66	Active 12/14/66	Completed
Conservation Department	54 D	Mellen	Develop sanitary facilities at Copper Falls State Park.	1/1/66-1/1/68	10,580	10,580	
				TOTAL	2,621,173	508,137	

STATE: WISCONSIN (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
City of Fond du Lac	33 D	Fond du Lac	Construct 3 boat launching ramps at Lakeside Park to provide better access for boaters using Lake Winnebago.	1/1/66-1/1/67	10/6/66 1,560	10/6/66 1,560	
Dodge County	36 D	Columbus	Develop Astigo Park by constructing road, double pit toilet, picnic and camping facilities.	3/1/66-11/1/67	10/6/66 4,056	10/6/66 4,056	
Dodge County	37 D	Columbus	Develop Derge Park by constructing road, sanitary facilities, playground equipment, picnic tables, stoves, fire rings.	6/1/66-6/1/67	10/6/66 3,692	10/6/66 3,692	
Langlade County Board	45 A	Antigo	Acquire 33 acres on Jack Lake to expand Veterans Memorial Park.	4/1/66-4/1/68	10/6/66 6,396	10/6/66 6,396	
Township of Shelby	22 D	Shelby	Protect Shelby Park by sloping, grading, and riprapping 3,000 feet of stream bank.	4/1/66-4/1/67	10/10/66 7,280	10/10/66 7,280	
Kenosha County Park Commission	29 D	Kenosha	Develop Old Settlers Park by providing parking lot, benches, and picnic tables.	1/1/66-1/1/67	10/10/66 5,143	10/10/66 5,143	
City of Alma	35 D	Alma	Construct campsites, playground improvement and access to Rieck's Lake Park.	6/1/66-6/1/67	10/13/66 1,716	10/13/66 1,716	
Middleton Park Board	38 D	Middleton	Develop Middleton Community Park with facilities for picnicking, trails, participant sports, nature study.	12/15/65-12/15/70	10/13/66 28,028	10/13/66 9,078	
City of Oshkosh	16 A	Oshkosh	Acquire 1,463 acres of land including 510' of frontage on Lake Winnebago	1/1/66-1/1/67	11/1/66 12,750	11/1/66 12,750	
Conservation Department	07 D	Princeton	Renovate Princeton Dam.	12/1/65-12/1/68	11/25/66 30,000	11/25/66 30,000	
Portage County	50 A	Stevens Point	Acquire 6 acres as an addition to Collins County Park.	3/1/66-3/1/67	12/2/66 1,560	12/2/66 1,560	
Conservation Department	63 D	Cassville	Construct sanitary facilities at Nelson Dewey State Park.	1/1/66-1/1/68	12/14/66 6,412	12/14/66 6,412	
				SUBTOTAL	108,593	89,643	

STATE: WYOMING 49

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	Awarded Active	Awarded Completed
State Land and Water Conservation Commission	14 P	Statewide	Develop interim Statewide comprehensive outdoor recreation plan.	9/4/64-1/31/66	5/21/66 18,133	5/21/66	18,133
Town of Evansville	04.1D	Evansville	Develop double tennis court and parking area in the town park.	7/1/65-9/30/67	8/1/66 4,516	8/1/66 4,516	
Town of Guernsey	15 D	Guernsey	Develop campground and picnic area, restroom facilities, water system, fencing, and other facilities in Guernsey.	5/1/65-12/31/70	8/1/66 25,300	8/1/66 7,700	
Town of Guernsey	16 D	Guernsey	Improve city park with the construction of restrooms, picnic facilities and sprinkler system.	6/1/66-6/30/69	8/1/66 5,500	8/1/66 1,375	
City of Cody	19 D	Cody	Construct picnic shelter, picnic tables, basketball and tetherball courts, and playground equipment in three city parks.	9/4/64-11/1/65	8/1/66 3,840	8/1/66	3,840
City of Laramie	20 D	Laramie	Install picnic tables, benches, playground equipment and other facilities at Harbon Park.	4/1/65-9/30/66	8/1/66 2,570	8/1/66 2,570	
City of Casper	33 D	Casper	Develop Washington Park including picnic and parking areas, shelter, wading pool, sprinkler system.	2/1/65-6/30/67	9/3/66 8,492	9/3/66 3,116	
City of Cheyenne	18 D	Cheyenne	Develop Smally, Lions, and Holliday Parks including shelterhouses, and fireplaces.	7/1/65-10/30/65	9/16/66 525	9/16/66	525
City of Worland	09 A	Worland	Acquire 5 acres of land to enlarge Worland's Municipal Park.	1/1/66-12/31/66	9/30/66 672	9/30/66 672	
Worland Recreation Board	11 D	Worland	Develop Kiwanis City Park including irrigation system, grading, picnic shelters & tables, grills.	9/4/64-6/30/67	9/30/66 2,220	9/30/66 2,220	
City of Powell	26 D	Powell	Develop Wood Sub-Division Park including landscaping, wlaks, playground equipment and irrigation system.	9/4/64-6/30/69	9/30/66 3,859	9/30/66 3,364	
City of Powell	27 A	Powell	Acquire 22+ acres to develop Homesteader's Park.	9/4/64-1/30/65	9/30/66 7,095	9/30/66	7,095
				SUBTOTAL	82,722	55,126	

STATE: WYOMING (CONTINUED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS		
					Qualified	Awarded Active	Awarded Completed
Town of Afton	29 D	Afton	Develop double tennis court in city park	1/5/66-9/30/66	9/30/66 4,168	9/30/66 4,168	
City of Cody	42 D	Cody	Develop 4 baseball diamonds in city park	9/4/64-6/30/66	9/30/66 18,492	9/30/66 18,492	
City of Riverton	43 D	Riverton	Develop municipal swimming pool and bathhouse in city park.	1/1/65-1/10/66	9/30/66 40,256	9/30/66	40,256
Land and Water Conservation Commission	44 P	Statewide	Update and revise Statewide Outdoor Recreation Plan.	2/1/66-6/1/69	10/11/66 77,827	10/11/66 42,118	
City of Casper	22 D	Casper	Develop Adams Park including clearing, grading, picnic facilities, irrigation system, seeding, foot bridge.	2/1/65-6/30/68	10/10/66 4,258	10/10/66 3,265	
City of Casper	23 D	Casper	Develop Mike Sedar Park including irrigation system, tennis courts, playground equipment, horseshoe courts.	2/1/65-6/30/68	10/12/66 13,488	10/12/66 8,430	
City of Casper	21 D	Casper	Develop Southridge Park including picnic shelter, tables, benches, irrigation system, landscaping.	2/1/65-6/30/68	10/10/66 3,777	10/10/66 2,686	
City of Powell	31 D	Powell	Develop Scout Cabin Park including tree planting, seeding, irrigation system, picnic & restroom facilities.	9/4/64-6/30/67	10/13/66 4,469	10/13/66 1,568	
City of Worland	06 D	Worland	Improve Municipal Park including road, parking, ice skating pond, picnic shelters.	1/1/66-12/31/66	10/13/66 23,362	10/13/66 23,362	
County of Natrona	13 D	Casper	Construct access road, restroom facilities, signs at Casper Mountain/Beartrap Meadow Parks.	9/4/64-11/30/65	11/4/66 9,863	11/4/66 9,863	
State Board of Charities and Reform	32 D	Thermopolis	Improve Hot Springs State Park including campground area, comfort station, parking lots, picnic tables, landscaping.	9/4/64-9/1/66	11/9/66 45,712	11/9/66 45,712	
City of Powell	25 D	Powell	Develop Veteran's Park including canopy with base & lighting, picnic facilities, playground equipment, tennis court.	9/4/64-6/30/71	11/10/66 5,826	11/10/66 908	
				SUBTOTAL	251,498	200,828	

STATE: WYOMING (CON ED)

Sponsor	Number and Type 1/	Nearest City or Town	Project Purpose	Project Period	ASSISTANCE AMOUNTS Qualified	ASSISTANCE AMOUNTS Awarded Active	ASSISTANCE AMOUNTS Awarded Completed
City of Laramie	40 D	Laramie	Develop LaBonte Park including sprinkler system, parking area & landscaping, picnic facilities.	9/4/64-12/31/68	11/10/66 6,556	11/10/66 6,556	
City of Evanston	34 C	Evanston	Acquire 75.6 acres and develop 9 hole Evanston Golf Course.	7/1/65-12/31/67	12/7/66 48,400	12/7/66 48,400	
City of Lusk	45 D	Lusk	Develop swimming pool, ice rink, picnic facilities, entrance road, parking lot, storage building, playground equipment.	11/1/66-12/31/69	12/7/66 44,243	12/7/66 44,243	
Upton School District # 7	47 D	Upton	Construct municipal swimming pool and related facilities.	3/1/66-12/31/67	12/7/66 31,928	12/7/66 31,928	
City of Powell	28 D	Powell	Develop Washington Park including landscaping, picnic facilities, lighting, playground equipment, fencing.	9/4/64-6/30/70	12/13/66 4,844	12/13/66 4,844	
City of Laramie	46 D	Laramie	Develop Undine Park including sprinkler system, landscaping, parking area, wading pool, playground equipment.	9/4/64-6/30/67	12/13/66 3,005	12/13/66 3,005	
County of Natrona	12 D	Casper	Improve Alcova Lake including, signs, safety buoys, curbwalk, access road,dump	9/4/64-12/31/65	12/7/66 13,343	12/7/66 13,343	
Parks Commission	35 D	Glendo	Construct picnic shelters, water system, at Glendo Reservoir Recreation Area.	9/4/64-12/31/65	12/7/66 5,362	12/7/66 5,362	
Parks Commission	41 D	Red Hills	Develop Seminoe Reservoir Recreaion Area including well, pump, picnic shelters.	9/4/64-12/31/65	12/7/66 4,752	12/7/66 4,752	
				TOTAL	496,653	418,387	

TIME LAPSE BETWEEN ALLOCATION AND AVAILABILITY OF FUNDS

Chairman HAYDEN. How much time elapses between the time an allocation is made to a State and the time the funds are actually made available?

Mr. CRAFTS. This can be anywhere from about a month to 3 years because under the terms of the act, when the money is appropriated by the Congress we then allocate the funds to the States and this money is available to the States for 3 years.

So sometimes it is obligated immediately, the State has money, they have approved projects pending, on the waiting shelf. Other times it can rest for 3 years before the State utilizes it.

Chairman HAYDEN. Does the State or the Federal Government expend the Federal grant?

Mr. CRAFTS. The State expends it.

Chairman HAYDEN. Once an apportionment has been made to a State, how long does it remain available?

Mr. CRAFTS. For 3 years.

BASIC FACILITIES

Chairman HAYDEN. The information furnished in your justification shows that of the amount apportioned to the States approximately 58 percent is for development and somewhat less than this is for actual land acquisition. Other portions of your narrative indicate that the States are to give attention to basic outdoor recreation facilities.

How do you define "basic"?

Mr. CRAFTS. This is a judgment interpretation. There is no legal definition of basic. I know of no legislative history definition of basic. Our general concept of what is meant by basic facilities is that these are the simpler and more common type of recreational facilities and generally do not encompass luxury-type facilities, complex facilities, large hotels, resorts, this type of thing. They are the simpler type of thing like recreation, picnicking, development of swimming areas, boat launching ramps, this type of thing.

Chairman HAYDEN. Would the developments approved include such construction as ski lodges, swimming pools, and golf courses? If so, what is the justification of paying for such facilities as these?

FUNDING OF PROJECTS WITH TENNIS COURTS

Mr. CRAFTS. They could. Under the terms of the law they could cover all those things. We have financed quite a number of swimming pools, mostly public pools in small communities, often in the arid portions of the country. We have financed or aided in the improvement of some public golf courses. You did not ask, but we have done the same thing with respect to some tennis courts. We can submit for you, if you would like it, a record of what we have done to this type of project.

Chairman HAYDEN. I think it might be well to do that.

Mr. CRAFTS. All right.

(The information follows:)

Roughly, the Bureau has funded 56 projects that contained tennis courts. Fifty-two of these projects were multi-purpose with the tennis court portion of the cost varying in percentage. Construction costs for tennis courts varies substantially from a low of about $2,000 to a high of $8 to $10 thousand per individual court. The higher figure would include courts with lighting to permit playing at night.

SKI LIFTS

Senator BIBLE. Might I ask a question at this point, Mr. Chairman? You mentioned ski lodges. How about ski lifts?

Mr. CRAFTS. We can finance ski lifts. Lodges, I don't know whether we have or not. Normally, I would say we would not because this would come within the types of facility that we do not look with favor on. A basic ski facility to house the lift or a simple type of facility for the skiers to get started would better qualify. But a fancy lodge, with overnight facilities and dining rooms and this sort of thing; no, we would not normally do this.

Senator BIBLE. Let me ask you a specific question. I was in Ely, Nev., just 2 weeks ago. There is a group of skiing enthusiasts there that are very interested in developing a ski facility. The local chamber of commerce and the junior chamber of commerce in this area. Now, if I understand you correctly they could go to the Department of Natural Resources in the State of Nevada, and if the State agency would authorize it as a project in eastern Nevada for $100,000, say, the land water conservation fund would participate in that?

Mr. CRAFTS. It could participate in it if the sponsorship was by a public body, by the town.

If the sponsorship was by a private body, we are not authorized to give matching aid to private corporations or businesses. Our matching assistance is to the States or to instrumentalities of the States.

Senator BIBLE. If $100,000 is the price tag for the development of a ski lift in eastern Nevada and the State department of natural resources has $100,000, you make available how much on $100,000?

Mr. CRAFTS. We make available $100,000, 50–50.

Senator BIBLE. You make available $50,000 to the State of Nevada?

Mr. CRAFTS. If it was a $200,000 job and they had $100,000 we could make available $100,000.

Senator BIBLE. After you make the $100,000 available to the State of Nevada, the State of Nevada in turn can match $100,000 and can participate in the building of the ski lift, is that correct?

Mr. CRAFTS. Yes, sir.

CONTROL OF ALLOCATED FUNDS

Senator BIBLE. How far do you trace it after you turn the $100,000 over to the State of Nevada?

Mr. CRAFTS. We have a system of both program inspections and fiscal audits. This came up last year. We inspect—I think I am right on this—we inspect every project at various stages during its development. Projects above a certain size we always inspect upon completion. We have going on continually, not under our immediate direction but under the direction of the Office of the Secretary auditing of the State books and the fiscal records. The State of Nevada has been audited.

So this is going on constantly, both fiscal inspections and program inspections.

PARTICIPATION BY NEW PUBLIC BODY

Senator BIBLE, I doubt if I asked the question correctly. Once you make the $100,000 available to the State of Nevada as its share, then the State of Nevada says to the White Pine County Ski Club "We will make $200,000 available to you for building the ski lift," how far do you as an agency of the Federal Government go to see whether that is a public body or whether this is a private club?

Mr. CRAFTS. I would like to ask Mr. Underhill, who is handling this part of the program, to answer that for me, if I may, Senator.

Senator BIBLE. Certainly.

Mr. UNDERHILL. Senator, we would make that determination actually before the grant is made. That is, we would not give $100,000 to Nevada just because they said they were going to develop a ski lift. The project would have to show who was going to administer the ski lift, on whose land it was located, and whether or not it was a public agency that was actually going to expend the money.

Senator BIBLE. That answers my question. If it was then proved that the White Pine County Ski Club was a private club of local skiing enthusiasts, then you would not make the $100,000 available to them?

Mr. UNDERHILL. That is correct.

Senator BIBLE. But if they said this is a White Pine County recreational activity and the White Pine County——

Mr. UNDERHILL. And the recreation commission will run it and it will.

Senator BIBLE. And it will be run by the recreational commission of the White County Board of County Commissioners, then you would make it available, other things being met?

Mr. UNDERHILL. Yes, sir.

Senator BIBLE. Thank you. You have given me my answer.

AMOUNTS ALLOCATED FOR ACQUISITION AND DEVELOPMENT

Chairman HAYDEN. Of the total projects approved through February 1967, how much has been allotted for acquisition and how much for development?

Mr. CRAFTS. You are referring to the State aspects of the program, I believe, because all of the Federal moneys are for acquisition. With respect to the State aspect about two-thirds or $36.9 million of it has gone for development and about one-third or $20 million for acquisition.

Chairman HAYDEN. What, in your opinion, is the reason for the States submitting such a high percentage of projects for development?

Mr. CRAFTS. There are several reasons for this. One is that the States are under pressure from the citizens of the State to develop areas that are under their jurisdiction, that have heretofore been undeveloped or underdeveloped.

Another reason is that the States often find it easier to move on development projects than to go through the process of acquiring new areas. In the Western States where there is a lot of public land and Alaska, Nevada and so on, you get a feeling that they do not want more land in public ownership. So, some of those States are reluctant to move in the direction of acquisition. The fourth reason is that a number of the Eastern States have passed bond issues which are entirely for acquisition purposes and which they finance completely on their own and do not ask for Federal participation.

These are the four basic reasons.

Chairman HAYDEN. Wasn't the principal objective of the land and water conservation fund act to make moneys available to buy needed recreation lands before such lands are lost forever, rather than the extensive use being made of the fund for development?

Mr. CRAFTS. I think in general that is correct, Senator, that the basic and most fundamental purpose was to obtain lands, either for present or future development before they were either committed to other uses or priced out of the market.

POLICY ON USE OF LAND AND WATER CONSERVATION FUNDS

Chairman HAYDEN. What guidelines have been issued to the States by the Bureau of Outdoor Recreation concerning priorities and use of land and water conservation moneys?

Mr. CRAFTS. I could submit those for the recrod. We have our manual. We have strongly urged the States to give more emphasis to acquisition than they have been to development in the past. There has been some response to that.

(The information follows:)

PRIORITIES

Guidelines have been issued both for program formulation and the submission of specific projects:

1. Part 630 of the Outdoor Recreation Grants-in-Aid Manual contains guidelines on the development of State Outdoor Recreation Plans. Several sections in Part 630 directly concern priorities. 630.2.6 contains a summary of ORRRC recommendations, many of which directly affect overall program priorities. 630.4.3H cites several specific areas to which priority attention should be given. Numerous other sections also influence priority in smaller degrees. Using the broad guidelines of Part 630, the States are expected to develop their own specific program priorities.
2. Guidelines on types of projects have been issued in both Manual and memorandum form. These emphasize that the intent of the Act is to first provide for land acquisition, and consequently that acquisition projects should generally be given top priority. 600.3.10 of the *Manual* summarizes the principal priority guides. Priority should be given to:
    - Acquisition over development where there is a scarcity of recreation lands.
    - Activities of the general public over those of a limited group.
    - Meeting urban needs.
    - Basic over elaborate facilities.
    - Active over spectator type facilities.
    - Projects for which other funds are not available.

Using these guidelines, the State assigns specific priorities to projects using the following procedures:

Priority A—Includes all projects for which action is needed immediately.

Priority B—Includes those projects on which action must be taken in the near future or an opportunity to preserve a valuable resource will be lost or the needs of a broad segment of the public will not be met.

Priority C—Includes those projects on which action must be taken in the future to meet needs that exist now.

Priority D—Includes those projects for which, although immediate action is desirable, financing can be deferred for a period. Such projects would generally be designed to meet foreseeable future needs that do not fully exist at the time of submission of a proposal.

The priorities assigned individual proposals are subject to concurrence by the Bureau.

OBLIGATION RATE

Chairman HAYDEN. The information which you furnished with your justification indicates that $147,500,000 has been apportioned to the several States and territories. Of this amount, $51,500,000 approximately has been obligated and $94 million has been qualified on the basis of applications made by the States.

Have the $51,500,000 which you show as obligated actually been matched by State funds?

Mr. CRAFTS. The answer is "Yes."

Chairman HAYDEN. How much, if any, of the $94 million has been matched by the States?

Mr. RICE. Senator, the same amount $51.5 million. The projects are qualified first and then they are obligated. So, the $51 million is a part of the $94 million which has been qualified.

Chairman HAYDEN. How much of the unmatched portion allocated to the States do you expect the States to match during the coming fiscal year?

Mr. CRAFTS. Well, the States are really just beginning to get into high gear. I would expect, and it is only a judgment estimate, that they would greatly accelerate their activity and that they would match most or all of this money during the coming fiscal year.

Chairman HAYDEN. All of the above questions have been based upon apportionments made through fiscal year 1967. Of the approximately $62 million to be apportioned in the coming fiscal year, how much of that do you expect to be matched by the States?

Mr. CRAFTS. I would say, maybe half of that. Here again this is a judgment estimate. I say not more than half of it because in fairness to the States we should bear in mind that the money that becomes available next July to those States under the law is available to those States for 3 years. They won't necessarily allocate it all in the initial year.

FEDERAL PROGRAM

Chairman HAYDEN. For the Federal program, you propose a sum of $74,225,000 to be divided among the National Park Service, the Forest Service, and the Bureau of Sport Fisheries and Wildlife.

Would you please discuss briefly the needs of the three Federal land acquiring services?

NATIONAL PARK SERVICE PROGRAM

Mr. CRAFTS. With the National Park Service first, we have made available to the committee the details of how that money would be spent by individual units of the park system. Most of it would be spent to implement recent authorizations of the Congress, such as the acts that have been passed since 1961 for new areas. The Park Service needs this money urgently because of the escalation in the price of recreation land that is going on about the country.

Senator BIBLE. Might I ask at that point, Mr. Chairman, where that is broken down, Mr. Craft? I can't seem to put my hand on it. Is it in this justification?

Mr. CRAFT. No; I think Mr. Eaton has it.

Senator BIBLE. This shows how much money you will make available for acquisition at each of the various parks?

Mr. CRAFTS. For the Park Service, Forest Service, and Sport Fisheries and Wildlife. You can look on page 45 of this green book.

Senator BIBLE. Thank you, Mr. Chairman.

FOREST SERVICE PROGRAM

Mr. CRAFTS. In the material that I have just supplied you the details of the Forest Service acquisitions are likewise shown although they are not spelled out in the green justification that you have. Basically the Forest Service recommendations are a continuation of the same level as last year. They involve several hundred individual tracts that are proposed for authorization all of which recreation is a primary purpose.

BUREAU OF SPORT FISHERIES AND WILDLIFE PROGRAM

For the Bureau of Sport Fisheries and Wildlife, the recommendation is for a small amount of money, $3 million for three purposes.

Mr. Gottschalk, Director of the Bureau is here, and he could give you the details better than I can but they are for land acquisition of the Key deer refuge in Florida, for development of a research facility for endangered species at Patuxent, Md., and for the purchase of land in connection with the preservation of the Columbia white tailed deer in the State of Washington.

SUPPLEMENTARY FUNDS FOR FEDERAL PROGRAMS

The $5 million that is shown for the Bureau of Outdoor Recreation is for a fund that can be used for immediate land appraisals, immediate planning, and some emergency acquisition following new authorizations of the Congress. This is an amount that would be transferred by us to the Park Service and the Forest Service, to allow these agencies to move more rapidly than they heretofore have been able to rather than having to wait the normal 18 months for funds to become available.

ACQUISITION OF LAND AT PATUXENT

Senator MUNDT. Mr. Chairman, while we are talking about Patuxent, I am very much interested in that as you know because it was my amendment of 2 years ago which set up the research facilities at Patuxent. I have visited it. I think the Bureau is doing a fine job at Patuxent.

It seems to me that it is very critical at this time that the land be made available to round out that project because you are in an area where prices are escalating pretty fast, not only because of inflation which tends to raise property values generally but because it is an area of the country people are beginning to develop.

I want to ask you, do you have any details which you can supply for the record which may have come up since the justification was prepared in terms of rounding this out?

Mr. CRAFTS. If it is all right with you, Senator, I would like to have Mr. Gottschalk answer that. This comes under his jurisdiction.

Mr. GOTTSCHALK. Mr. Chairman and Senators, there are two parcels of land that are currently available for immediate purchase through negotiations with the owners at Patuxent which have come into the picture as far as availability is concerned in the last few weeks, as a matter of fact. If we are able to move now I think that we can proceed with the completion of contracts with these people and acquire at least two of these tracts with a great deal of dispatch.

USE OF OPTION FOR LAND PURCHASES

Senator MUNDT. I suppose you are like all other agencies. You have to have the money to buy it, you don't have an option program where you can buy an option land and hold it?

Mr. GOTTSCHALK. Yes, as a matter of fact we do take options wherever we can. We are negotiating with these two principal owners for an option at the present time. We have to approach them however with sort of an empty pocketbook when we talk in terms of options. As you have already suggested, the escalation in real estate values is such that every month that this is postponed the more difficult it becomes to complete.

Senator MUNDT. There can't conceivably be any economy about delaying the purchase of land in that area which you ultimately are going to need. Are you discussing it? Since my name has been identified with it I get quite a little mail from my people based on some misunderstanding which maybe we can clear up for the record. They say, this facility for endangered species is a great idea but why pick a place like Patuxent where land is so expensive, why not pick an isolated area where land is cheaper? Will you please discuss this?

REASON FOR SELECTING PATUXENT AREA FOR RESEARCH CENTER

Mr. GOTTSCHALK. Thank you. Before we decided to establish this headquarters for research on endangered species at Patuxent we made a thorough survey of the possibility throughout the country with respect to the principal factors that are involved.

These include climate, soil, particularly in relation to its permeability, so that we will have good drainage to dispose of the sanitary problems, take care of the sanitary problems where we are raising a large number of different kinds of animals. We investigated the water possibilities so that we would have water for the ponds for the species that require water in their habitat.

Taking these things into consideration we finally narrowed our choice down to an area out on the west coast, in Willamette Valley, and Patuxent. But there are other things favoring Patuxent. It fits the physical criteria that we established precisely but in addition to that it is favored by virtue of the fact that we have concentrated at Patuxent perhaps the greatest single collection of professional scientific talent in the general field of wildlife management that there is in the world. In addition, we are neighbors with the Agricultural Research Center at Beltsville where perhaps the same thing could be said with respect to the general area of animal disease and animal behavior.

We feel that because of all these factors Patuxent is just a natural for this location.

Now there is the economy standpoint as well. We looked into the cost of trying to transfer this activity out to this other second alternative in the Willamette Valley and found that it would actually be less expensive to acquire this more expensive land here than to try to move all of our facilities out there and start anew with a completely new program there.

COLUMBIA WHITE-TAILED DEER

Senator MUNDT. Thank you. That certainly is a very persuasive and sound justification. I wanted to get it in the record so that if correspondence comes in on it we can point to the facts as they are.

Is the Columbia white-tailed deer hunted at present?

Mr. GOTTSCHALK. I beg your pardon.

Senator MUNDT. Is the Columbia white-tailed deer hunted at present?

Mr. GOTTSCHALK. Yes, it is.

Senator MUNDT. Will it continue to be hunted if the refuge is established?

Mr. GOTTSCHALK. The management plan for the Columbia white-tailed deer area involves a careful management program which would put hunting into the picture only when it becomes necessary to reduce the size of the herd to the carrying capacity of the range that might exist at any point in the future.

Senator MUNDT. How many deer do you expect to have there?

Mr. GOTTSCHALK. We would expect to have in the order of 400 deer in the area. Now the normal increase might be on the order of 20 percent. Obviously, if this continues year after year there comes a time when something has to be done. They are protected. So, our first recommendation would be to trap, live trap, the animals; and the first action we would take would be to live trap the animals.

Senator MUNDT. Instead of by hunting?

Mr. GOTTSCHALK. Instead of by hunting. Then these animals would be given or sold to agencies or institutions that might have a need or desire for this particular species. If that did not remove the entire excess, then we would have a very carefully controlled hunting in which the number of hunters would be limited and the number of deer taken would be very carefully limited, so that there would be no such thing as any wanton slaughter or any foolhardy management program with respect to this deer herd.

Senator MUNDT. You do not intend to inject hunting into the refuge except insofar as it is necessary to control the herd after the trapping operation has been tried?

Mr. GOTTSCHALK. That is correct.

Senator MUNDT. Thank you.

FACILITY AUTHORIZATIONS

Chairman HAYDEN. Place in the record, please, the total amounts authorized for appropriation for each of the facilities listed on page BOR–45 of your justifications.

Mr. CRAFTS. I will be happy to do so, Senator.

(The information follows:)

The newly authorized areas and inholdings in which most of these funds will be utilized and the amount authorized for each are listed below:

	Amount authorized to be appropriated
Newly authorized areas:	
Whiskeytown-Shasta National Recreation area	$18, 000, 000
Lake Mead National Recreation Area	1, 200, 000
Indiana Dunes National Lakeshore	27, 900, 000
Assateague Island National Seashore	16, 250, 000
Piscataway Park-Maryland	4, 132, 000
Pictured Rock National Lakeshore	6, 873, 000
Delaware Water Gap National Recreation Area	37, 412, 000
Fire Island National Seashore	16, 000, 000
Guadalupe Mountain National Park	1, 800, 000
San Juan Island National Historic Park	1, 873, 000
All other proposed acquisitions, less than $500,000 per unit	19, 366, 650
Subtotal	150, 806, 650
Inholdings:	
Everglades National Park	2, 000, 000
Virgin Islands	1, 250, 000
Grand Teton National Park	
All other proposed acquisitions, less than $500,000 per unit	782, 000
Subtotal	4, 032, 000
Total amount authorized	154, 838, 650

AVAILABLE AUTHORIZATION

Chairman HAYDEN. For each of these areas, how much of the authorization remains available for appropriation without considering the amount proposed for fiscal year 1968?

Mr. CRAFTS. I would like to put that in the record, too, if I could, Senator.

(The information follows:)

	Authorization remaining available for appropriation
Newly authorized areas:	
Whiskeytown-Shasta National Recreation Area	$16, 550, 000
Lake Mead National Recreation Area	783, 000
Indiana Dunes National Lakeshore	27, 900, 000
Assateague Island National Seashore	12, 290, 000
Piscataway Park—Maryland	2, 738, 900
Pictured Rock National Lakeshore	6, 873, 000
Delaware Water Gap National Recreation Area	30, 823, 000
Fire Island National Seashore	7, 330, 000
Guadalupe Mountain National Park	1, 800, 000
San Juan Island National Historic Park	1, 873, 000
All other proposed acquisitions, less than $500,000 per unit	2, 257, 450
Subtotal	111, 218, 350
Inholdings:	
Everglades National Park	1, 048, 000
Virgin Islands	511, 300
Grand Teton National Park	
All other proposed acquisitions, less than $500,000 per unit	236, 350
Subtotal	1, 795, 650
Total	113, 014, 000

PREPARED STATEMENTS

Mr. CRAFTS. If I could interject at this moment. Each of the agencies involved, Bureau of Sports Fisheries and Wildlife, Forest Service, and National Park Service, has prepared statements. I would like an opportunity for them to insert those statements in the record. They are here to answer any questions that may come up.

Chairman HAYDEN. That may be done.

Mr. CRAFTS. Thank you.

(The statements follow:)

BUREAU OF SPORT FISHERIES AND WILDLIFE

LAND AND WATER CONSERVATION FUND

STATEMENT OF JOHN S. GOTTSCHALK, DIRECTOR

This year we appear before you with clear authority to use money from the Land and Water Conservation Fund to acquire land for species threatened with extinction. The Endangered Species Preservation Act, P.L. 89-669, which became law on October 15, 1966, removed any uncertainty.

Enactment of this legislation was in response to the suggestion of the Appropriations Committee of the House of Representatives that new authorizing legislation should be obtained for acquisition of lands for endangered fish and wildlife before any funds were appropriated.

The Senate Committee concurred, and sustained the deletion of 3.1 million dollars which had been recommended in the President's budget for the fiscal year 1966—to be appropriated pursuant to the Land and Water Conservation Fund Act.

No monies have yet been appropriated from that fund to acquire land for endangered species. $172,500 was appropriated to our Bureau for the fiscal year 1967 to acquire land to serve the increasing visitor load at our National Wildlife Refuges and Fish Hatcheries.

Our request for 3 million dollars this year is entirely for endangered species. It would provide an appropriation from the Land and Water Conservation Fund to complete the acquisition of habitat needed to save the Key Deer from extinction; to commence acquisition of land needed for an Endangered Species Research Station; and to commence acquisition of land needed to save the threatened Columbia white-tailed deer from extinction.

Many species of fish and wildlife now prosper under enlightened game management, and their preservation seems assured. Other species do not enjoy so fortunate a circumstance. Some of them are now threatened with extinction.

Endangered species of fish and wildlife are valuable elelments of our native fauna. They are members of the community of living things that are essential parts of our total environment. Like other forms of fish and wildlife, they generate business based on healthy outdoor recreation of many types; they provide opportunity for education in an out-of-doors classroom; opportunity for scientific research; and give pleasure and an inner satisfaction to a broad segment of the public.

The program authorized by the Endangered Species Preservation Act is designed to prevent the extinction of any animal in our time. It is not solely a land acquisition program. Emphasis will be placed on research and administration of existing Federal and State areas. Because of varied requirements, each threatened species must receive distinct and separate consideration. No single solution can be applied to all threatened species. There is reason to look forward, however, to the continued existence of many animals which, without the support of this effort, would disappear.

The proposed acquisition for the endangered Key deer is in Monroe County, Florida, comprising 1,854 acres at an estimated cost of $1,900,000. The existing National Key Deer Refuge includes 835 acres acquired or withdrawn under special legislation. An additional 465 acres have been withdrawn within the Great White Heron Refuge. In addition, some lands are leased for Key Deer management and protection, but these can be terminated on 90 days' notice. The proposed acquisition is to preserve enough habitat to assure survival of the population in a natural environment. Though the Key deer has responded remarkably to past efforts in its behalf, the trends and patterns of real estate development point to very serious problems in the future. Development is gobbling up vast acreages of habitat. The lease program is beginning to fade in importance and effectiveness. Outright purchase in fee before the land is cleared and drained is the only means of assuring the preservation of Key deer habitat.

Since the acquisition includes generally the poorer habitat, the proposed management will include:

1. Improvement of refuge habitat to compensate as much as possible for future losses;
2. the provision of water holes where none now exists;
3. the development of elevated areas for sanctuary during storm tides;
4. the use of controlled burning and other techniques to increase the quantity and availability of preferred foods; and
5. continued protection.

The proposed acquisition for an Endangered Species Research Station is in Prince Georges County, Maryland, 15 miles northeast of Washington, D.C. The proposal includes about 470 acres, of which 253 acres are included in the fiscal year 1968 program. The estimated cost of the 253 acres is $750,000. Since this is the maximum amount allowed by the Endangered Species Preservation Act for acquisition of any one area, specific authority will be sought for the additional land needed.

The proposed area is needed for the rare and endangered species program. The Patuxent Wildlife Research Center has been determined to be the most effective center for this research program. The lands desired are in the metropolitan influence of Washington, D.C.—one of the nation's fastest growing areas. The demand and value of land are high and rapidly rising. Unless the land is acquired now, rezoning to higher density use would forestall any feasible acquisition program.

The proposed area contains five ownerships, four owner-occupied. The uplands have been used for agricultural crops and as pasture. The lands within the flood plain of the Patuxent River have been used for timber production. The uplands are in rapid transition to residential development.

Land values in the project area have increased by approximately 230 percent since 1960. This is based on actual sales which have occurred in the area. In 1960 these lands were selling for $700–$1,000 per acre. Today, most of the upland tracts suitable for residential development have a value of $2,000–$3,000 per acre.

The proposed area is needed to establish an Endangered Species Research Station. The limiting biological factors must be determined for each species before a realistic program can be developed. The Endangered Species Research Station will provide laboratory facilities for research in nutritional requirements, genetics, disease, propagation, and behavior. The Station will hold a variety of species to serve as breeding stock for testing, captive propagation, imprinting, and release. One of the major objectives of the Station is to develop techniques for propagating certain species in captivity, and reintroducing the resulting stock into the wild.

The proposed acquisition for the endangered Columbia white-tailed deer is in Wahkiakum County, Washington. It includes an area of about 2,000 acres of which 970 acres are proposed for acquisition in fiscal year 1968 at a cost of $350,000.

The range of this species is limited to the Columbia River lowlands in the vicinity of Cathlamet, Washington, and Clatskanie, Oregon. Little migrational movement of white-tails away from this bottomland habitat occurs.

Estimates of total acreage used by Columbia white-tailed deer have been made by wildlife managers. Estimates in 1940 indicate 9,000 acres of habitat in Washington and 14,000 in Oregon. Current estimates are considerably lower. The total acreage of quality white-tail habitat remaining is less than 2,000 acres. Land above the 100′ countour is not considered natural habitat for the species. White-tails which range above this level lose their identitity as a species through hybridization with black-tails. White-tails in the Roseburg, Oregon, vicinity show much evidence of hybridization.

Agricultural development in the Columbia River lowlands has had a substantial effect upon the Columbia white-tailed deer. Diking has been accomplished on most of the original white-tail habitat to prevent seasonal flooding and brush clearing and drainage have followed. A varied pattern of timber, brush and cropland seems to provide optimum habitat. The species benefits from presence of pasturelands near brushy cover since they feed extensively on clover and grasses.

However, as the percentage of timber and brush dimishes, so do the number of white-tails.

Only one area within the Columbia white-tail deer zone continues to provide good quality habitat. This area lies between Cathlamet and Skamakowa, Washington. All of the good quality habitat is within a diked area designated as Diking District 4. Total acreage within the dike is approximately 2,300 acres. Land clearing is being accomplished at an alarmingly rapid rate. Perhaps the last opportunity to preserve the endangered white-tailed deer in its natural habitat exists on this area. The present herd of about 150 white-tails present within Diking District 4 was until recently a prospering healthy herd of 300 individuals which produced a harvestable increment each year.

Preservation of the endangered Columbia white-tailed deer is dependent upon a special management program which will preserve a segment of the original habitat in optimum condition and balance for use by the species. The limited range of the species provides a unique opportunity to actually preserve and manage an endangered big game species on a tract of land only 2,000 acres in size. Possibilities of introducing this species to suitable habitat in nearby refuges will be considered. Intensified agricultural development is rapidly destroying the last remaining vestige of good habitat. Only by procuring and managing these lands specifically to benefit the species may the future of Columbia white-tailed deer be assured.

The area to be acquired is primarily important for preservation of an endangered wildlife species, the Columbia white-tailed deer.

FOREST SERVICE

STATEMENT OF M. M. NELSON, DEPUTY CHIEF

Mr. Chairman and members of the committee, the Forest Service, as this Committee knows, manages the National Forest System on the basis of multiple use, in which recreation plays an important role. As a matter of fact, the National Forests are truly the Nation's favorite outdoor playgrounds. Statistics provided to the House Appropriations Committee on February 27, 1967, by the Bureau of Outdoor Recreation, shows that in calendar year 1966 there was a total of slightly more than 375 million visitor-days' use on all of the lands and waters of the seven Federal agencies reporting. Almost one-half or 173 million of this 375 million visitor-days' use of Federal areas was on the National Forests. The use of the National Forests in 1966 increased 13 million visitor-days above the use in 1965. More such use has occurred in the last five years than in the entire previous history of the National Forests. We can see no let up in the increasing numbers of the American public using the National Forest System for recreation.

A careful analysis of needs for developed recreation sites and the person-at-one-time capacity of the National Forest System recreation areas has been made. This analysis shows that by 1972, a person-at-one-time capacity of 2.5 million in 26,400 developed sites will be required. At the beginning of fiscal year 1968, we will have only 9,500 developed sites that can accommodate only 626,500 persons-at-one-time. Additional recreation lands must be acquired for the expansion of existing recreation installations and for new areas. The Congress has recognized the ability of the Forest Service for managing recreation areas by their action in establishing the Spruce Knob-Seneca Rocks and Mt. Rogers National Recreation Areas under Forest Service administration and the Shasta-Trinity-Whiskeytown National Recreation Area in which the Forest Service has a major role in recreation. A bill for a Flaming Gorge National Recreation Area in Wyoming and Utah to be managed by the forest Service has been introduced in this Congress.

The Land and Water Conservation Fund Act provides the means of acquiring the needed recreation land to meet the growing recreation demands. The National Forests in the Eastern United States are uniquely located in relation to the major population centers but generally the best recreation lands within these forests are not now publicly owned. The Outdoor Recreation Review Commission pointed out the most urgent need for more land for recreation opportunities is in the east.

Twenty-nine units of the National Forest System have been established in the Eastern United States. All are within three hours' driving time of at least one major population center of 50,000 population or larger. Within these management units are many urgent needs for land acquisition. For example, they include two of the new National Recreation Areas, the Massanutten Mountain Area of Virginia, the proposed Eleven Point Scenic River, along with numerous opportunities for scenic highways, and many reservoir developments with fine recreation potential. All of these and many more require special attention. Particularly urgent, of course, are the needs in the areas where the land prices are continuing to escalate. Rural lands throughout the nation are continuing to sell at higher and higher prices and have increased about 50% since a base period of 1957–59. Recreation type lands are increasing in cost at even a higher rate. We have found instances where the cost has doubled or more than doubled during the last 5 years. Sharp increases in land costs occur, for example, where special areas are set up with considerable publicity. Good examples of this can be found around almost any new major recreation complex. Further delay in the land purchase program will mean increased costs and fewer acres acquired.

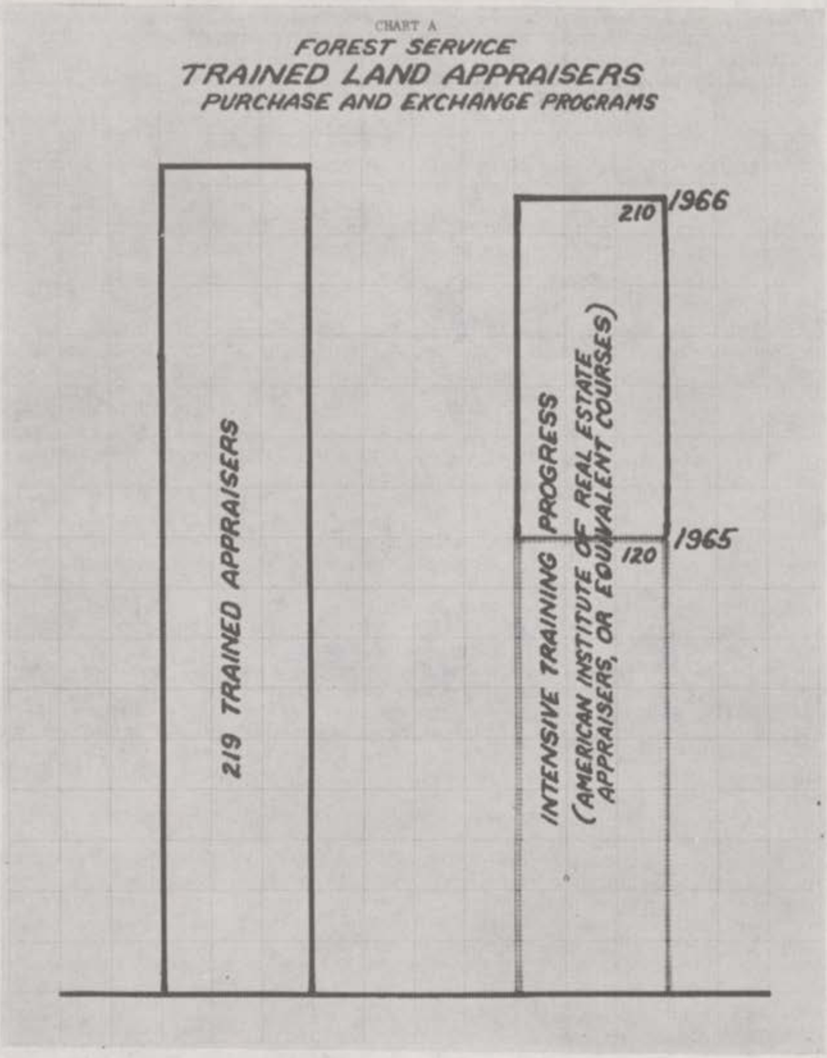
LAND APPRAISING

The Forest Service has the necessary skills in trained personnel to perform a quality acquisition program.

The need for trained land appraisers is readily apparent. The Forest Service, with the accelerating land exchange program, the Weeks Law purchase program, and the Land and Water Conservation Fund purchase program, has been quite aware of this need. Better appraisers mean better program cost estimates, higher efficiency and higher productivity.

Chart A illustrates the present status of our training program for land appraisers.

CHART A


FOREST SERVICE
TRAINED LAND APPRAISERS
PURCHASE AND EXCHANGE PROGRAMS
219 TRAINED APPRAISERS
INTENSIVE TRAINING PROGRESS
(AMERICAN INSTITUTE OF REAL ESTATE APPRAISERS, OR EQUIVALENT COURSES)
210
1966
120
1965

In the past, most of our staff appraisers have been men who became skilled wildland appraisers by the practical experience route. Most were involved in the Weeks Law purchase programs of the 30's. Largely as a part of the increased land exchange program beginning in the early 1960's, the Forest Service initiated an intensive training program to sharpen the skills of the practical-experience men and to train new appraisers. In 1965, as a part of our budget presentation, we reported that 38% of our appraisers had received special training under the American Institute of Real Estate Appraisers or similar courses. These training programs have continued. Today, of the 219 trained appraisers currently making land appraisals for purchase or exchange cases, all but 9 have received this special training. Many have taken several of the courses offered and some all. The training program will be continued and our appraiser's skills further developed.

FOREST SERVICE PROGRAMING

All of the properties included in the recommended F.Y. 1968 budget submission are properties carefully reviewed and selected to help meet the rapidly increasing demands for recreation use and enjoyment. They are priority properties recognized as desirable for acquisition to permit orderly and sound development and management of the recreation resource. Their selection for inclusion in the budget was based upon the public recreation demand—present and future—and available supply of recreation lands, in the various National Forest management units coordinated with State and other federal agency plans.

We consider that such management unit planning—keyed to accomplishment—is vital to future success in meeting the goals of the Land and Water Conservation Fund Act. This is the approach used during the 55 years of regular Weeks Law purchases. In the Weeks Law program, alternative priority acquisitions are considered. If an owner has inflated ideas of value, we shift to an equal priority alternative tract. If an owner changes his mind and decides not to sell, we can shift to an equally desirable tract. This results in the most economical buy of priority properties for National Forest administration.

For the Forest Service, the same situation exists in the Land and Water Conservation Fund Act purchase program. We prepare a five-year program. It consists of our best estimates of properties on the market or expected to be on the market, plus a minor number of "must" acquisitions during that period. Actual selection of an individual property for a particular budget year depends on a number of factors. Normally, its selection on a priority basis over an alternative high priority tract is difficult.

This five-year plan is reviewed by the Bureau of Outdoor Recreation as a part of their program review and coordination. It is reviewed to insure conformity with the criteria for qualification under the Land and Water Conservation Fund Act and with consideration of regional and national priorities in both State and Federal recreation programs and program needs. We believe that once this plan has been reviewed and approved, it seems reasonable that latitude might be given to the federal agency in accomplishing this plan. The tracts of land purchased would be equally desirable, would help achieve the recreation management objectives for the management unit and the land would be purchased at a lower total cost to the Federal Government.

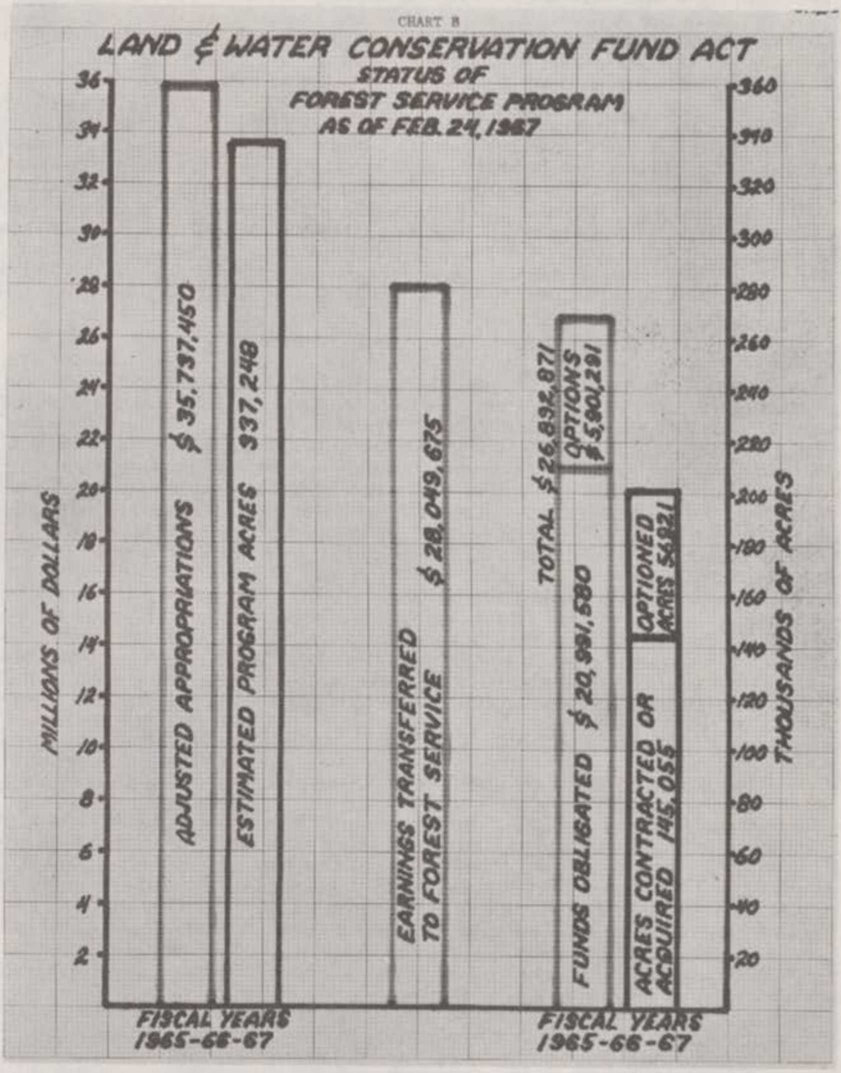
PROGRAM COST ESTIMATES

Concern has been expressed at various times about the "increased costs" for individual tracts that have occurred in the previous budgets. In view of this concern, we have summarized what has actually happened. This summary shows that of the 363 tracts acquired as of December 31, 1966, exclusive of Sylvania, 62 had increased costs over the original estimates totaling $353,365. On the other hand, 123 tracts were purchased for less than the original estimates with a total savings of $562,074. The net difference in the original cost estimates and final costs amounts to a savings of $208,709. This bears out the conclusion that when all cost estimates are taken into consideration, rather than individual tracts, the estimates are reasonably accurate. If program estimates were on a management units basis, the same results could be expected.

FOREST SERVICE ACCOMPLISHMENTS

I am pleased to report that the Forest Service has made substantial progress in meeting the objectives of the Land and Water Conservation Fund Act. This Committee has authorized a total of $35,737,450, as shown on Chart B, for use of the Forest Service in acquiring recreation lands to help meet the present and future needs. As you know, the appropriations are made available to the Forest Service only as earnings come into the Fund and are transferred to us. As of February 24, 1967, a total of $28,049,675 had been transferred to the Forest Service. Recreation lands costing $26,892,871 have already been acquired, placed under contract, or we have a firm option to acquire.

CHART B



Obligations total $20,991,580 in which 145,055 acres have been acquired or under firm contract to acquire. Purchase options are in hand totaling an additional $5,901,291 for 56,821 acres.

FOREST SERVICE LAND ACQUISITION AUTHORITY

The Land and Water Conservation Fund Act gave no new land acquisition authorities. Existing or new land acquisition authorities of each agency must be used. The Forest Service has several acquisition authorities:

1. *Weeks law.*—Since most of the purchases, by law, must be in the Eastern United States, the primary authority to be used is the Weeks Law of March 1, 1911. Each case under this authority is reviewed and must be approved by the National Forest Reservation Commission. The Commission is made up of the Secretaries of Agriculture, Army, and Interior, two Senators and two Congressmen.

2. *USDA Organic Act of August 3, 1956.*—Examples where this act will be used to acquire lands are in those States that have not passed an enabling act making the Weeks Law applicable (Arizona, Colorado, and Wyoming); lands located in watersheds of non-navigable streams such as in the Great Salt Lake Basin; lands located in designated wilderness and primitive areas; and interests in lands. This 1956 act provides acquisition authority when implemented by the appropriation process. We will use the 1956 act authority in F.Y. 1968 to acquire interests in land by purchases, exchange or otherwise, such as (a) scenic easements, (b) mineral interests needed to protect natural beauty in such projects as the Highlands Scenic Drive in West Virginia, and (c) timber cutting rights. Timber cutting rights, for example, may be outstanding on tracts of land we are acquiring for recreation purposes. We could grant timber cutting rights on other National Forest lands for these outstanding rights.

3. *Special acts.*—Examples are the Seneca Rocks-Spruce Knob, Mt. Rogers and the Shasta-Trinity-Whiskeytown National Recreation Area Acts.

PROPOSED FOREST SERVICE 1968 PROGRAM

The Forest Service and the Bureau of Outdoor Recreation have worked closely in developing programs for Forest Service acquisition. The program before you contains $18 million dollars for the Forest Service.

In F.Y. 1968, the Forest Service objective under this program is to acquire approximately 120,000 acres of recreation lands. Ninety-three percent of this will be in the Eastern United States. Included in the program are such key projects as: Seneca Rocks-Spruce Knob National Recreation Area, West Virginia 5,823 acres; Mt. Rogers National Recreation Area, Virginia, 7,436 acres; Wilderness and Primitive Areas, 2,365 acres; and the Eleven Point and Current Rivers, Missouri, 2,282 acres.

All of the properties planned for purchase are desirable lands—many will be permanently lost if prompt action is not taken. Because of this urgency, we have already optioned about 15% of the properties included in the proposed program and have started negotiating for many others. With the consent of Congress, we intend to meet our obligation of providing the necessary recreation lands for present and future generations.

SUPPLEMENTARY STATEMENT

Recreation is certainly an important part of our business now. There were over 173 million visitor-days' use of the many types of recreation in the National Forests last year. A report by the Bureau of Outdoor Recreation released this month shows that the Forest Service handled more than three times as many recreation visitor-days than any other Federal agency—and nearly one-half of all such agencies. In fact, during the past five years we have taken care of as much use as we had in the entire history of National Forests before this period. You will be interested in knowing that the National Forests of Arizona received almost 7,000,000 visitor-days' use last year.

Earlier, questions were raised about the ability of the agencies to make better cost estimates. We firmly believe that we are better situated now to make better cost estimates, appraisals, and to do a better land acquisition job. My statement points out how we have continued to use American Institute of Real Estate Appraisers and similar organizations and universities to train our people. Practically all of our 219 appraisers have had this type of training. We believe the estimates for this program are sound.

Earlier questions seemed to indicate that agencies normally underestimate the cost of lands they are acquiring. We haven't found this to be true in the Forest Service. Analysis of the 363 tracts we purchased up to the first of this year shows that only 62 tracts cost more than the amount estimated. We were able to purchase twice as many tracts for an amount less than the original estimates. Of the total dollars obligated through 1966 the value of tracts paid above the original estimate was $353,000 or less than 2 percent. We also saved $562,000 or about 3 percent on tracts on which our cost estimates were too high. Taking the program as a whole, our purchases underran our estimates by $209,000. These dollars were available to buy more land.

I am sure you will be interested in the chart in my initial statement indicating our progress in this program. This is more up to date than the Bureau of Outdoor Recreation had available when they presented their submission. Congress has authorized $36,000,000 for the Forest Service. The actual cash that has been made available to February 24, 1967, was $28,000,000. As of the same date, funds fully obligated were $21,000,000, and in addition to this we have options in hand for an additional $6,000,000. We have, therefore, only $1,000,000 uncommitted.

Earlier questioning of the Committee indicated concern about such things as condemnation, excess awards, escalating land prices, deferring purchases when prices are out of line, buying promptly when the market is right or when adverse development is imminent. These very things are also of great concern to us. I have in my statement a suggestion as to the way program planning and congressional committee review might be handled to get at some of these problems. Briefly, we suggest a programing procedure based upon a five-year acquisition plan for each of our management units keyed to the recreation resource plans for the units. These five-year plans would be prepared by the agencies and reviewed and approved by the Bureau of Outdoor Recreation. The annual budget submission to Congress would be based on these five-year plans and would indicate the level of financing planned for each of the management units for the budget year. When funds are appropriated, agencies would be allowed to acquire with funds available for each management unit any of the tracts included in the five-year plan for that unit. This will allow agencies to most economically meet the objectives of the Land and Water Conservation Fund Act.

The National Forest Reservation Commission must approve each individual tract purchased by the Forest Service under authority of the Weeks Act of March 1, 1911, as amended. This Commission is made up of two Senators, two Congressmen and the Secretaries of the Army, Interior, and Agriculture. Nearly all of the Land and Water Conservation Fund purchases are made under Weeks Act authority. For example, our proposed program for F.Y. 1968 includes 738 tracts of lands. Over 95 percent of these tracts must be reviewed and approved by the National Forest Reservation Commission prior to purchase.

The three-year limitation that Dr. Crafts suggested earlier in regard to the Forest Service land purchase program appears to be one that would be helpful. We should certainly be reconsidering our acquisition program for cases that are over three years old, keeping in mind changing priorities, land price escalation and other matters that affect our purchase program. This would help solve some of the problems we have now and certainly would eliminate much bookkeeping.

Insofar as charging for recreation use and putting money in the Land and Water Conservation Fund we think we have done very well. In 1966 we had 2,046 sites which were designated as charge areas. We collected $1,778,000; $1,263,000 of this was from the sale of the annual Golden Eagle Passport.

In 1967 we expect to add about 400 additional designated charge areas. This will put 55 percent of our developed recreation capacity under the charge system.

With respect to the wisdom of using Land and Water Conservation Fund monies to purchase State-owned lands, I agree that the acquisition provisions of the Land and Water Conservation Fund Act are intended to put private lands in public ownership rather than to just change jurisdiction from one public agency to another. There are, though, a number of different types of State lands. For example, there are State Park Lands, State Forest Lands, State Highway Lands, State School Lands, State Fish and Game Lands, State Waterboard Lands, and various types of State Administrative Site Lands. In some instances there is no legislative authority for the States to dispose of lands of some types by other than sale. They cannot be donated to other agencies Also, for some of the lands no authorities or funds are available to permit development for outdoor recreation. In summary, it is difficult to generalize a policy on such a complex subject as this. I believe there have been and there will continue to be instances in which it will be wise for the Federal Agencies to purchase State-owned lands but these instances will be few and far between. They would very rarely include lands that are being managed in a manner similar to the management they would receive if ownership passed to a Federal Agency.

Mr. Chairman, I would like to give you just one example of a purchase from a State that I think was wise. This involved a tract of 1,548 acres on the Chequamegon National Forest in Wisconsin. This tract of State school land was surrounded by National Forest land. By State law school lands, such as this tract, had to be managed for school income or sold and the funds received invested for income purposes. They could not be donated. In this case a decision was made that the lands would be sold. The State was confronted with two alternatives: (1) The lands could be sold at auction; in which case they would have become private lands and could have been developed in a manner adverse to public recreation needs; or (2) they could be sold to the Forest Service at fair market value with subsequent management in line with the recreation resources of the adjacent National Forest lands, resulting in enhancement of both. We believe the State made the proper decision in selling these lands to the Forest Service, and that this Committee and the Bureau of Outdoor Recreation acted wisely, in this case, when they agreed to the purchase of this tract of State land in our 1967 program.

NATIONAL PARK SERVICE

LAND AND WATER CONSERVATION FUND

STATEMENT OF ASSISTANT DIRECTOR HARTHON L. BILL

Mr. Chairman and members of the committee, thank you very much for this opportunity to review with you today the programs and funding requirements of the National Park Service in land acquisition for the coming year. My associates and I come to this meeting today with a genuine feeling that this Committee shares our enthusiasm and desire to solve the problems of land requirements for preserving and interpreting America's outstanding natural and cultural heritage and providing healthful outdoor recreation for the American people.

The Congress has given emphasis to the acquisition of lands in the recently authorized areas, but there are a variety of problems and circumstances of growing concern to us as we undertake the establishment of the new areas in the National Park System. The estimates before you reflect an approach to the meeting of the public desires and needs.

Increased use of facilities of the National Park Service by the public has kept pace with the overall increased demand for recreational opportunities. Visitation to park areas has increased by leaps and bounds in recent years and is expected to exceed a total of 147 million visits in 1967.

Facilities of the National Park Service will be strained to the utmost in meeting the greatly increased demand for recreation that is bound to occur in future years. Some of this demand can be met by improved planning and administration and by more intensive development and use of existing areas. Especially there is a need for recreational areas within easy reach of our great centers of population to provide for active outdoor activities to our urban millions. Of equal or greater importance from the standpoint of the assigned role of the National Park Service is the need to acquire the few remaining unspoiled sites of primitive beauty to preserve them for the generations yet to come.

The program we have before you today covers 35 different areas in 24 different states and the Virgin Islands. It is a program which gives emphasis upon the acquisition of lands in recently authorized areas as the Congress has requested nearly $44,000,000 of the requested $48,225,000 for this purpose.

It is of the approximately $4,000,000 for inholdings to which I want to address my particular remarks.

In our zeal to acquire recreational lands in these newly authorized areas, we should not overlook the granting of equal priority to the acquisition of inholdings in our older national parks.

Land acquisition should not be measured acre for acre parkland and recreation land. Natural beauty and healthful outdoor recreation are not synonymous terms.

National parklands cannot be all things to all people and Federal land acquisition priorities should be developed accordingly. A small lot with a growing trash pile and unsightly shack located like a festering sore within the boundaries of one of our beautiful natural areas, if acquired will add insignificantly to the total recreation lands of our Nation. But, if acquired and the instrusion removed, it will add most significantly to the integrity of the existing national park or monument.

In the almost 100 years in which the Congress has been evolving our National Park System, it has included within the System three distinct categories of areas: natural, historical and recreational.

At the natural areas, such as Yellowstone, Yosemite, Rocky Mountain, Great Smoky Mountains, Grand Canyon and Glacier, one may observe the slow processes that have carved and shaped our earth and clothed it with plant and animal life.

In the historical parks of our nation, we may learn of people who lived on this land long before the coming of the first Europeans. The panorama of our colonial and national history may be read on the face of our continent in the Spanish Forts of Florida; the Spanish Missions of the Southwest; Fort Raleigh, where English settlement was first attempted; Jamestown, where English settlement first succeeded; Independence National Historical Park, where our nation was born; St. Louis, Scotts Bluff, Fort Clatsop, Homestead, Edison, and other areas tell of the epic of westward expansion, the settlement and the development of our Nation and our technology. At more than 150 of these national historical parks our citizens may relive the tragedies and triumphs, the hardships and the victories, of the people who claimed this land and created a new way of life.

Assateague, Delaware Water Gap, Bighorn Canyon, Lake Mead—these, and many more national seashores, recreation areas, and scenic riverways, provide opportunities for healthful outdoor recreation for our burgeoning, largely urban populations.

Each category of areas is of prime importance in preserving the natural and cultural heritage of our land and assuring this and future generations of an opportunity for healthful, outdoor recreation. The special needs of each of these categories of areas need to be carefully weighed in the balance in establishing land acquisition priorities.

PATUXENT ENDANGERED SPECIES RESEARCH CENTER

Chairman HAYDEN. With respect to the Patuxent Endangered Species Research Center, which will cost about $1,000 an acre, what species and what quantities are to be protected in this area?

Mr. CRAFTS. Mr. Gottschalk will answer that.

Mr. GOTTSCHALK. It is very difficult to predict what may happen with respect to our animals and our animal populations in the future, but our planning involves from 70 to 100 different species that we feel we might expect to have to take care of through this facility. The number of individual animals would reach a peak at somewhere between 7,000 and, say, 10,000. But we are so far from this point now that this is a sort of crude guess.

EMERGENCY PLANNING AND ACQUISITION

Chairman HAYDEN. Included in your budget for the first time is a request for $5 million to be made available to the Bureau of Outdoor Recreation for emergency planning and for acquisition of priority tracts of land. Will you please discuss this fully?

PRICE ESCALATION PROGRAM

Mr. CRAFTS. This is an item which, as you say, is in the budget for the first time. Its purpose is to help solve in a small way the escalation problem. It would be available for areas authorized by the Congress to move immediately on land appraisals, on detailed planning, and on the actual purchase of particularly attractive areas or areas that are subject to competitive development. It would let us move on key parcels and on key areas immediately following authorization without having to wait the normal time lag of 18 months.

We have found that the price escalation seems to be most pronounced between the time that Congress authorized Federal activity and the time that appropriations normally become available. So this is the reason for this fund.

TRANSFER OF FUNDS TO ACQUIRING AGENCIES

Chairman HAYDEN. Will the Bureau of Outdoor Recreation acquire the lands, or will they be transferred to the acquiring agency?

Mr. CRAFTS. The money will be transferred to the acquiring agencies.

STATUTORY AUTHORITIES

Chairman HAYDEN. Will you please cite the statutory authority for use of this $5 million?

Mr. CRAFTS. The use of the $5 million is in the statutes of the various Federal agencies that acquire land. The specific authorities are with respect to the individual units for the National Park Service. The Week's law and other authorities that the Forest Service has would be the statutory basis.

OBLIGATIONS AND PURCHASE COMMITMENTS DIFFERENTIATED

Chairman HAYDEN. On page 49 of your justifications there is a table which shows obligations for each of the three land-acquiring agencies and purchase commitments for each of them. Would you please distinguish between these two terms?

Mr. RICE. Mr. Chairman, the term "obligation" refers to money which has actually been obligated on the books of the Federal Government, purchase contracts have been signed. The purchase commitment means that the acquiring agencies have accepted options to buy the land, but the fiscal records haven't reflected that transaction. That is the distinction between the two.

REPROGRAMING PROPOSALS

Chairman HAYDEN. In the past year there have been submitted to the committee a number of reprograming proposals made necessary because of greatly increased costs over the estimates submitted to Congress. Various reasons for the increased costs were given; such as, no on-site evaluation having been made, existence of improvements which were not known when the estimate was made, and visual examination rather than measurement of a property. The committee has approved most of your reprograming requests; however, it seems reasonable that your fiscal year 1968 programing should have taken into consideration these greatly increased costs and a portion of the fiscal year 1968 funds should have been allocated to some of the previously programed tracts which it is known will cost much more than the estimates submitted to Congress. Is it possible for the agencies to recast some of their programing to take care of those properties which have greatly increased in cost and which they still desire to acquire?

Mr. CRAFTS. I think, Senator, on the question of reprograming, which has been of concern to the agencies and at considerable personal concern to me because it goes to the heart of the ability of the agencies and the ability of the Bureau of Outdoor Recreation to present effective estimates to the Congress, is one on which we perhaps need a little policy guidance from the committees. We have endeavored in the 1968 program to reflect our best estimate of the costs of the tracts that are proposed. However, looking back over the past two and a half years for the 1966 and 1967 program, also 1965, the record shows that for both the Park Service and to a lesser extent for the Forest Service, that a greater percentage of the money has been obligated for parcels of land than originally estimated.

SUGGESTED 2- OR 3-YEAR REPROGRAMING CYCLE

This is a reflection, either that the most expensive tracts were acquired first, or that the estimates have not been very good. And there has been a great deal of reprograming. I personally think that we ought to give the agencies, the Federal agencies, either 2 years or 3 years to try to effectuate the program they have put before you, just as the States receive 3 years under the terms of the act. And then, starting, say, next July, the end of the fiscal year, that for the third year back and each subsequent July thereafter, that we should wipe the slate clean for that year that is 3 years old that has not been effectuated with respect to approved tracts. In effect, wipe those tracts out.

The residual money that is there then would be reprogramed for the tracts that are still eligible and approved and for which we know the price has gone up.

If this type of policy is acceptable, we would then submit to the committees the reprograming of the year that is 3 years old, come the first of July. In that way we would keep reasonably current.

I don't know whether I have made this clear but we have a problem. The agencies of course in submitting their estimate to you now for fiscal year 1968, do not in most cases have detailed appraisals. They make the appraisals after the money is appropriated. So what you have is judgment estimates. You also have a rising trend in land prices. There is going to be some continuing reprograming but I think we can reduce it, and I think we should systematize it by not letting too many years pile up on us. I suggest either a 2-year or a 3-year reprograming cycle.

POINT REYES AUTHORIZATION

Senator BIBLE. Mr. Chairman, might I ask a question at that point?

Would you illustrate what you say with a specific instance? Take Point Reyes or Cape Cod or any one of the parks and give us the authorized amount. Point Reyes is a can of worms.

Mr. CRAFTS. For Point Reyes the authorization is exhausted.

ASSATEAGUE AS EXAMPLE

Senator BIBLE. Take an example and tell me how it works. Take Assateague.

Mr. CRAFTS. I can take Assateague. Suppose 3 years ago there had been an approved amount of $1 million for Assateague and say in 1966 another million dollars, in 1967 another million dollars. Then suppose that when the third year comes around that all of the first million dollars had not been spent. Suppose there was $250,000 of it left. In the meantime the price has gone up. We and the Park Service working together would then decide for that $250,000 that is left, whether the greatest need for that is still at Assateague or whether by that time it is needed more critically at Whiskeytown or some other area. Then we would recommend to the committee that its 3-year-old approval for Assateague be lapsed and we would recommend that that money be reapproved for Assateague, or be approved to be transferred to another area.

Possible Nonpurchase of Inholdings

Senator Bible. This might be of some help. The question that sticks in my mind is the $250,000 that you have in fiscal year 1966 and you are going to reprogram 3 years later. If you defer Assateague it is still going to cost you that much in 1969 or 1970, is it not?

Mr. Crafts. I think in the case of Assateague there is very little question but what on that one you would recommend that you continue to spend it right at Assateague, because you would not have the job done there. But we have the situation on inholdings in parks. That is the common situation in the Forest Service on inholdings. Now it might happen that you would have inholdings which had been approved 3 years ago but which, for reasons of lack of availability or lack of price had not been purchased. And there was, say, a million dollars left for inholdings for the National Park Service. Then we would come to you and say, "Well, now, we want so much of that to continue to be available for what you originally approved," or we would recommend that the urgency is greater for the purchase of an inholding in another unit.

We would propose to either reaffirm or reprogram.

Senator Bible. I can understand that in the case of inholdings, because the inholding has been there a good many years and could probably exist for several more without the terrific acceleration in cost. What you do is hope for a better day at the bargaining table.

Mr. Crafts. Yes, or we would know that some tracts are available then that weren't before, or a tract we had estimated a year ago for a hundred thousand, we know by then it would cost $115,000 and we would ask to use $15,000 of that money from the preceding year for this.

Senator Bible. Or if an inholding estimated at $100,000 had gone up to a million dollars, you might say in balancing out our Park Service programs and forest service program and fisheries program we would leave that $1 million inholding there at the present time.

Mr. Crafts. That is right. We might not proceed. We are far enough along now. We are in the fourth fiscal year that these Federal moneys are available to these agencies. Now we are about at the time, in my judgment, where you can't have your books going back ad infinitum. By 1975 we will have books 10 years old. There has to be a cutoff date.

I am suggesting either a 2- or 3-year cutoff date and then reprograming.

Senator Bible. Mr. Chairman, this sounds to me like it might have tremendous possibilities.

Senator Mundt. Mr. Chairman, I have about four questions.

Chairman Hayden. All right, go ahead.

MISSOURI RIVER FIELD STUDY

Senator MUNDT. I would appreciate if you would send to my office a complete report on the status of the Missouri River field study discussed on page 3 of the justifications. You also mentioned the Missouri River field study on page 13. Is this the same study?

Mr. CRAFTS. The same study.

Senator MUNDT. Will you send that to me?

Mr. CRAFTS. We will be happy to do that.

BADLANDS STUDY

Senator MUNDT. Just what do you envision your results will be of the study of the Badlands mentioned on page 13 of your justification?

Mr. UNDERHILL. Senator, we have made a preliminary study of the Badlands as part of the surplus military inventory that the President asked Secretary Udall and Secretary McNamara to make. It obviously has high recreational potential. The Fish and Wildlife Service is interested in the northeast corner in connection with their preservation of the Blackfoot ferret. The Park Service is interested in the possibility of extending the Badlands National Monument into that area. As you know, the Indians are very much concerned with the return of that property and possible use both for grazing and for recreation under their auspices.

So, we met last week with Congressman Berry at his request and it was agreed that this spring when the weather is suitable the area would be restudied on the ground to try to determine whether or not the Badlands portion could be delineated and perhaps authorized for addition to the National Monument and the usable grazing land and agricultural land returned or made available for the Indians or former owners and at the same time to consider the other interests that are involved in the proposal, and then make a report and suggest legislation if this is needed.

RECREATIONAL PROPOSALS AFFECTING SOUTH DAKOTA

Senator MUNDT. Thank you. That was very informative.

Mr. Crafts, you discussed your plan of assistance to the States to give 50 percent grants-in-aid for costs of preparing and maintaining outdoor recreational plants. You mention that on page 36. Then on page 40 you have a table showing requests received from States, number qualified, and amount obligated. Will you please have sent to my office a breakdown for South Dakota of all the requests received, the amounts which are qualified, which have been obligated, and for what amount? I would also like some indication of when action might be taken on those that have not yet been qualified.

Mr. CRAFTS. We will be happy to do that.

CONSERVATION SHOWCASES

Senator MUNDT. My final question is this. Two years ago I was able, working through our Agricultural Appropriations Subcommittee, to get a study made by the Soil Conservation Service on the possibility of establishing what we alluded to as conservation showcases, here and there around the country, where people can really come and see what we have done in this business of soil conservation.

I have a copy of this report with me. I will give this to you. Then will you please have someone in your shop look into this matter and confer with the Soil Conservation Service and after that provide the committee with a report on the possibility that you might be able or might not be able, what you can do to help provide funding for such showcases and whether you feel there is any cooperative effort which should be made?

Mr. CRAFTS. We will be happy to do that.

Senator MUNDT. Thank you.

Thank you, Mr. Chairman.

TIME ALLOWANCE FOR COMMITTEE APPROVAL OF REPROGRAMING PROPOSALS

Chairman HAYDEN. The committee has been asked to approve reprograming submissions which have been brought to the attention of the committee within a matter of days in some instances before options to purchase the subject properties will expire. An adequate length of time should be made available for committee consideration of reprograming proposals and I will appreciate your assurance that such time will be afforded.

Mr. CRAFTS. Senator Hayden, I know exactly what you are referring to. I regret it. I can assure you that we will make every effort to prevent this sort of thing happening. I should say, however, that the complete control of this is not in my hands, but I will do the best I can.

Chairman HAYDEN. That is all anybody can do.

Mr. CRAFTS. Thank you, sir.

"NEWLY AUTHORIZED AREAS" DEFINED

Chairman HAYDEN. A portion of the National Park Service allotment is for acquisition in newly authorized areas. Would you please define the term "newly authorized areas," indicating how far back in time you would go?

Mr. CRAFTS. Normally, by newly authorized areas we mean areas that have been authorized since 1961. The last 5 years is our normal terminology.

OBLIGATION CAPABILITY IN EXCESS OF LAND ACQUISITION REQUESTS

Chairman HAYDEN. Are the amounts that have been requested for each of the land-acquiring services the maximum amount that they can obligate during fiscal year 1968 for each of the areas where purchases are planned?

Mr. CRAFTS. I think the answer in the judgment of the agencies would be, "No."

Chairman HAYDEN. If not, how much more can be used in each of the areas?

Mr. CRAFTS. May I go on to say, however, that the apportionment between the agencies is the most equitable that I think can be made within the overall budget request. But I would cite you an example. Part of the answer to this depends on what new authorizations Congress might pass. If, for example, Congress were to enact a Redwood National Park authorization, I am quite sure that the Park Service could obligate substantially additional moneys and effectively do so, and should do so. I think for some of these other recent authorizations in the last 5 years that the agencies are getting tooled up to the point where they could move faster. The Federal agencies as of December 31 had obligated about 70 percent of the moneys then available to them. By the end of this fiscal year I think they will be just about current. So the answer is that I think they could move faster; and, to get on top of the escalation problem, this would be desirable.

Administration Considerations

On the other hand, this is the administration's budget and its recommendation was considered in the light of all the other demands on the national capacity, and I think it is an equitable budget.

AGENCY LAND CONDEMNATIONS

Chairman Hayden. Please place in the record information showing the cases of land condemnation by each of the agencies, the amounts deposited with the court for each, and the awards made in each case. In those cases, if any, where a declaration of taking was not filed, please so indicate.

Mr. Crafts. Yes, sir; I will do that. We have prepared for the committee, and I will submit to you at this point, a record of the situation with respect to condemnations which covers all of these things.

(The information follows:)

A Report on the Exercise of Eminent Domain in the Acquisition of Lands for Outdoor Recreation and Related Public Purposes, December 31, 1966

There are pending before the Federal Courts thirty-six condemnation actions involving 114,158 acres of land. At the time the Declaration of Takings were filed, a total of $9,661,650 was deposited with the courts. Based on final awards in previous condemnation actions, it is estimated that the final awards in these cases plus interest may well exceed the amounts deposited with the courts by $30,000,000 or more. Thirteen of the thirty-six cases were filed prior to the enactment of the Land and Water Conservation Fund Act (P.L. 88-578) of September 3, 1964.

POLICY

The problems relating to the use of Condemnation Authority to acquire certain lands and interest in lands within authorized limits of National Parks, National Forests, and National Wildlife Refuges have been discussed with the Appropriations Committee on several occasions.

The National Park Service, Forest Service, and the Bureau of Sport Fisheries and Wildlife exercise the authority of Eminent Domain sparingly. Every effort is made to negotiate voluntary sales and only as the last resort are condemnation proceedings instituted. The National Park Service, due to its extra heavy acquisition program and the nature of the lands it is authorized to acquire, uses the authority more frequently than the other agencies who acquire lands with Land and Water Conservation Funds.

SETTLEMENT OF RECENT AWARDS

Two of the cases for which the courts recently made final awards can be settled within existing authorized statutory limits. Actions have been initiated to reprogram unobligated F.Y. 1967 funds to settle these cases and stop the interest which accrues on the deficiency from date of filing until settlement. The court awards in these two cases (see Part 1 Table I) were $1,486,270 or $1,416,820 in excess of the amount deposited with the court at the time the Declarations of Taking were filed. The awards shown above do not include the accumulated interest which amounts to approximately $108,000 and must also be deposited with the courts to fully satisfy the judgments.

INCREASE IN STATUTORY CEILING REQUIRED

Five of the cases for which final court awards or commissioners recommendations have been made cannot be settled without an increase in the statutory ceilings covering the management units (see Part 2 Table I). The court awards in these five cases were $7,459,676 or $5,438,020 in excess of the amount deposited with the courts at the time the Declarations of Taking were filed. This does not include interest which is accruing at the rate of approximately $27,000 per month, and must be paid before the judgment is fully satisfied.

The awards for the two Cape Hatteras cases are based on commissioners recommendations which are usually accepted by the court.

In addition, ten of the twenty-one cases listed in Table II for which court awards are expected in fiscal year 1968 are in management units which wil require an increase in the statutory funding ceiling before all pending cases can be settled (see Table IV).

AWARDS EXPECTED IN FISCAL YEAR 1968

There are twenty-one (21) cases pending before the Federal Courts for which final court awards are expected to be rendered before the end of fiscal year 1968 (see Table II). These cases involve 84,047.68 acres of land and $7,441,120 deposited in the courts at the time the Declaration of Takings were filed.

PRESENT SITUATION

Of the thirty-six cases pending before the Federal Courts, twenty-six cases are expected to be ready for final settlement before the end of fiscal year 1968 (see Part 2 Table I and Table II). This includes the five cases shown in Part 2 of Table I, three of which have final court awards and two cases with commissioner's findings and recommendations. The total amount deposited in the courts for the twenty-six (26) cases when Declaration of Takings were filed is $9,462,776.

Based on recent court awards and the history of other condemnation cases, it is estimated that the awards plus interest on the twenty-six pending cases that are likely to be decided and need funding in fiscal year 1968 may exceed the amounts deposited in the courts by approximately $25,000,000.

In addition, there are eight relatively small cases (see Table III) that are not expected to be finalized before the end of fiscal year 1968. The amount deposited in the court for these cases totaled $129,425.

UNEXPECTED DRAIN ON LAND AND WATER CONSERVATION FUND

Eleven of the pending condemnation cases initiated by the National Park Service and the two cases that are in progress of being settled through reprograming of F.Y. 1967 funds were initiated prior to the enactment of the Land and Water Conservation Fund Act. The estimated deficit award plus interest on these cases may exceed $12,500,000.

PROBLEMS

It is realized that judicious use of Condemnation Authority will continue to be necessary if lands needed for public use are to be acquired in the future.

We are seeking an equitable solution to the following problems:

1. A procedure that will make funds available for immediate settlement of court awards that will not require reprograming of funds and disruption of approved programs.
2. The source of the $25,000,000 that will probably be needed in fiscal year 1968 to settle condemnation cases that may be finally adjudicated.
3. A special provision to permit payment of court awards. If the authority to condemn is used judiciously in the future, this problem should be minimized.

It is proposed:

1. That the Department of the Interior would seek a 1968 F.Y. supplement appropriation of $25,000,000 to be funded through an advance to the Land

and Water Conservation Fund under the authority of Sec. 4(b) P.L. 88–578. Such funds would be used only to satisfy court awards.

2. That to satisfy future court awards on properties acquired through condemnation, a line item be carried in fiscal year 1969 and beyond. The amounts requested each fiscal year would be the estimated needs to cover anticipated excess awards during the year taking into consideration balances left over from previous appropriations.

Summary of condemnation cases pending in courts

Case status	Number	Court deposit	Court awards
1. Cases in process of settlement through reprograming of fiscal year 1967 funds	2	$69,450	$1,486,270
2. Cases for which court awards have been made but settlement requires increases in statutory ceilings	5	2,021,656	7,459,676
3. Cases that are expected to be handled by the courts in fiscal year 1968	21	7,441,119	(1)
4. Cases on which no court action expected in fiscal year 1968	8	129,425	(1)
Total cases pending	36	9,661,650	[2] 8,945,946

[1] Pending court action.

[2] Represents court award on 7 cases exclusive of interest.

TABLE I.—*Cases on which final court awards or Commissions' recommendation have been made*

Unit and owner	Civil No.	D.T. filing date	Acres	Deposit	Court award	Deficiency	Interest to Apr. 1, 1967	Supplemental amount needed	Monthly interest
NATIONAL PARK SERVICE									
Pt. 1, reprograming of fiscal year 1967 funds to satisfy judgment in process:									
Point Reyes National Seashore, Calif., Bolemas Palisades	41877	Oct. 29, 1963	1,120	$22,000	$1,350,000	$1,328,000	$59,760	$1,337,760	$6,640
Wright Brothers National Monument, N.C., Diane B. Frank et al.	360	Feb. 28, 1958	67	47,450	136,270	88,820	48,396	137,216	444
Total (2 cases)			1,187	69,450	1,486,270	1,416,820	108,156	1,474,976	7,084
Pt. 2, cases in management units which require an increase in statutory funding levels before judgment can be satisfied:									
Padre Island National Seashore, Tex., Virginia Mullin et al.	65-C-54	May 26, 1965	22,680	1,806,599	5,562,875	3,756,276	416,312	4,172,588	18,781
Cape Hatteras National Seashore, N.C., 55 tracts	263	June 25, 1953 Mar. 11, 1959	4,108	155,212	1,508,440	1,353,228	796,962	[1] 2,470,000	8,366
	401	May 13, 1958	1,995	44,850	364,661	319,811			
Fort Donelson National Military Park, Tenn.:									
5 tracts	3371	Dec. 14, 1962	35	13,695	21,100	7,405	1,910	9,315	37
1 tract	3397	Jan. 4, 1963	4	1,300	2,600	1,300	331	1,631	6
Total (5 cases)			28,822	2,021,656	7,459,676	5,438,020	1,215,515	6,653,534	27,190

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[1] Commissioner's recommendation to the court for final judgment.

TABLE II.—*Cases for which court awards may be finalized and funds needed to meet deficiencies during fiscal year 1968*

Unit and owner	Civil No.	D.T. filing date	Acres	Deposit
NATIONAL PARK SERVICE				
Point Reyes National Seashore,[1] Calif.:				
Boyd Stewart	41,877	Oct. 29, 1963	817.00	$110,000
Trio Lumber Co Sweet Timber Co Point Reyes Land & Development Co	41,877	do	2,032.00	166,500
Stockstill et al. and other tracts	44,465	Dec. 6, 1965	121.00	192,600
Drakes Beach Estate	41,861	June 29, 1966	200.00	1
Marin County	43,726	June 9, 1965	60.95	1
Home of Franklin Delano Roosevelt National Historic Site, N.Y	64-3,388	Oct. 2, 1964	94.00	75,200
Padre Island,[1] Tex.:				
South Padre Investment Co	66-B-1	Jan. 4, 1966	10,560.00	1,602,921
Mullen, Virginia Jones, et al	66-C-54	June 16, 1965	67,054.00	1,270,000
Yosemite National Park, Calif.:				
339 ownerships, 601 lots	8,386	Oct. 13, 1961	69.06	254,973
95 ownerships, 235½ lots, roads, and streets	8,487	May 28, 1962	89.93	117,661
Horace Meyer	8,847	Jan. 15, 1964	364.82	325,000
Juniper Land Co	9,576	Dec. 13, 1965	163.37	175,000
Cape Cod National Seashore,[1] Mass.:				
86 tracts	61-669W	Aug. 29, 1961	1,442.18	587,362
Ed Fisher	65-234F	Mar. 12, 1965	52.39	30,000
Prince Hurd	66-276W	Apr. 12, 1966	1.23	7,000
Fire Island National Seashore, N.Y.:				
6 tracts	65-CD-526	June 1, 1965	186.20	706,000
Sailor's Haven	66-CD-400	Apr. 14, 1966	21.60	558,500
Sungie Land Co., Inc	65-CD-1025	Sept. 29, 1965	30.40	375,000
8 tracts	66-C-932	Sept. 30, 1966	171.23	444,400
Subtotal (19 cases)			83,531.36	6,998,119
FOREST SERVICE				
Kaniksu National Forest, Idaho: Upper Priest Lake.	2-65-65	Oct. 4, 1964	244.25 30.75 1.20 141.00	145,300 55,900 12,000 187,300
Ashley National Forest, Utah: W. H. Mann	C-204, 66	Oct. 25, 1966	99.12	42,500
Subtotal (2 cases)			516,32	443,000
Total (21 cases)			84,047.68	7,441,119

[1] Requires increase in statutory ceiling to meet estimated deficiencies.

TABLE III.—*Cases for which court awards may be finalized after June 30, 1968*

Unit and owner	Civil No.	D.T. filing date	Acres	Deposit
NATIONAL PARK SERVICE				
Antietam National Battlefield Site, Md.—George H. Poffenburger.	16,274	Mar. 18, 1965	10.99	$5,000
Blue Ridge Parkway, Va.—A. G. Miller	E-190-W-66	Oct. 4, 1966	80.18	6,000
Manassas National Battlefield Park, Va.—1 tract	3910-M	Nov. 21, 1965	6.00	5,000
Gettysburg National Military Park, Pa.—1 tract	8933	Apr. 26, 1965	1.48	41,000
Gloria Dei Church, Pa.—2 tracts, 2 lots	34032	Aug. 11, 1963	(1)	1,825
Herbert Hoover National Historic Site, Iowa—1 tract.	66-C-28-CR	Nov. 2, 1966	.54	50,000
Colonial National Historical Park, Va.:				
1 tract	873	May 2, 1962	(1)	600
Do	941	Mar. 18, 1963	(1)	20,000
Total (8 cases)			99.19	129,425

[1] Not known.

COURT AWARDS IN CONDEMNATION CASES

Chairman HAYDEN. In condemnation cases where court awards are larger than the amount of appropriated funds or of authorized funds, what do you do about meeting the amount of the judgment?

Mr. CRAFTS. If the judgment exceeds the authorization, the legislative authorization, then of course you can't meet the judgment until or unless Congress raises the authorization. If the award exceeds the deposit but is within the limit of any overall authorization, then it must be programed out of the land and water conservation fund.

PURCHASE OF LAND OWNED BY STATES

Chairman HAYDEN. A number of tracts proposed for acquisition are owned by States or other public bodies. Why should the United States purchase land from such owners when large annual allocations are made to the States for land and water conservation fund?

Mr. CRAFTS. I think there are certain circumstances, where there are inholdings, where they are completely surrounded by Federal land or their management is integrated one way or the other with the activity of Federal agencies, where it is to the interest of both the State and local governments and Federal agencies for this to occur. Sometimes this is to be done on a land exchange basis, sometimes on a purchase basis. And occasionally I think it should be expected that the State or local governments would donate these lands. This has occurred upon occasions.

Again I cite the Redwood Park proposal, where it is hoped that the State of California would donate the State park. But in general, I would say that the thrust, the acquisition thrust of the Land and Water Conservation Fund Act, insofar as the Federal agencies go, should be directed toward the acquisition not of other public lands but of private lands.

Senator BIBLE. Without extending this hearing this morning, Mr. Crafts, would you furnish for the record the public lands that you have acquired since the creation of the land and water conservation fund?

Mr. CRAFTS. By the Federal agencies?

SUGGESTED REQUIREMENT OF STATE LAND DONATIONS

Senator BIBLE. Yes.

I thoroughly agree, that as we move into this area of outdoor recreation, be it a national park or a seashore or a Forest Service project, and we have State lands involved, it seems to me that before you would create that park you should have a requirement that they donate their State land. Because it certainly is greatly to their benefit, since it minimizes the burden that is placed on the State for recreational purposes. I would like to have you detail that for the record, if you will.

Mr. CRAFTS. We will, sir. And also we can furnish a listing of such tracts which have not yet been purchased.

(The information follows:)

List of tracts purchased by Forest Service from States and other public bodies with land and water conservation funds since inception to Dec. 31, 1966

State management unit	Acres	Cost
New Mexico: Cibola National Forest—State game commission	240	$30,000
Mississippi: Holly Springs National Forest—Marshall County Board of Supervisors	82	5,873
Washington: Snoqualmie National Forest—King County	224	588
Wisconsin: Chequamagon National Forest—State of Wisconsin	1,548	7,495

Acquisition by National Park Service of properties owned by public agencies with land and water conservation funds since inception to Dec. 31, 1966

State management unit	Acres	Cost
Virgina: Chincoteague-Assateague Bridge: Bridge and Beach Authority		$700,000
Utah: Zion National Park, State of Utah	12.58	2,500

Forest Service

Publicly owned tracts approved for acquisition not purchased, fiscal year 1966 appropriation, land and water conservation fund

State, management unit, and tract identification	Acres	Total cost
ALABAMA		
National forests in Alabama: Alabama State school land	1.5	$2,300
CALIFORNIA		
Klamath National Forest: State of California	80.0	10,000
MINNESOTA		
Superior National Forest:		
Cook County	33.0	800
Do	40.0	800
VERMONT		
Green Mountain National Forest: Town of Middlebury	200.0	7,000
WISCONSIN		
Nicolet National Forest:		
Wisconsin State Land Commission	312.5	7,200
Do	518.1	11,500

Forest Service

Publicly owned tracts approved for acquisition not purchased fiscal year 1967 appropriation land and water conservation fund

State, management unit tract identification	Acres	Total cost
Indiana: Hoosier, Tobin Township	1	$34
Minnesota:		
Chippewa National Forest:		
Cass County 2	385	13,700
Itasca County 1	100	650
Superior National Forest:		
City of Tower	156	4,600
St. Louis County	701	30,095
City of Tower	1,008	19,895
St. Louis County	1,140	37,208
New Hampshire: White Mountain National Forest, University of New Hampshire	520	165,000
Pennsylvania: Allegheny National Forest, Sheffield Township	2,844	[1] 197,700
Wisconsin:		
Chequamegon National Forest:		
Wisconsin Land Commission	120	5,520
Do	80	2,760
Wisconsin Conservation Commission	40	460
Wisconsin Land Commission	640	27,600
Nicolet National Forest: Wisconsin Land Commission	4,500	155,000

[1] Reprogramed into program by action No. 132-66.

FOREST SERVICE

Publicly owned tracts proposed for acquisition fiscal year 1968 land and water conservation fund budget

State, management unit tract identification	Acres	Total cost
California: Inyo National Forest, 68-1 Inyo County	92	$19,250
Colorado:		
Grand Mesa-Uncompahgre National Forest, 04002 (68) State of Colorado [1]	160	78,000
San Juan National Forest, 13009 (68) State of Colorado [1]	160	120,000

[1] These tracts are to be acquired through an agreement whereby the States exchange land with a private owner and the Forest Service, in turn, purchases the land from the 3d party.

LAND AND WATER CONSERVATION FUND, NATIONAL PARK SERVICE

Publicly owned tracts in the approved land acquisition programs for fiscal years 1965–67 that have not been purchased

State, management unit tract identification	Acres	Cost
Colorado: Dinosaur National Monument, State of Colorado (1966)	2,957	$69,850
Minnesota: Pipestone National Monument, city of Pipestone (1966)	.317	10,000

LAND AND WATER CONSERVATION FUND, BUREAU OF SPORT FISHERIES AND WILDLIFE

Publicly owned tracts in the approved land acquisition programs for fiscal year 1967 that have not been purchased

State, management unit, and tract identification	Acres	Total cost
WISCONSIN		
Upper Mississippi National Wild River: Wisconsin State Islands 88, 91, and 93 (1967)	100	$3,500
There are no tracts in the fiscal year 1968 programs of the National Park Service or Bureau of Sport Fisheries and Wildlife which can be identified as belonging to public agencies.		

Chairman HAYDEN. In this connection, I wonder why these tracts should not be conveyed to the United States as a gift or even by irrevocable use permit?

Mr. CRAFTS. They can in some instances. I might say some of these tracts, particularly of the Forest Service, are in-holdings inside the national forest. And you sometimes have a different situation.

ADMINISTRATIVE EXPENSES

Chairman HAYDEN. For administrative expenses you propose a total of $2,775,000. Would you please discuss the proposed use of this amount?

Mr. RICE. Mr. Chairman, these funds will be used to pay the salaries and expenses of the Bureau of Outdoor Recreation staff that administers the grants-in-aid program to the States, reviews the State outdoor recreation plans, reviews the Federal land acquisitions that are to be purchased by the Federal land-acquiring agencies, and performs the accounting functions that go along with this work.

These funds also will be used to pay for the printing and distribution of the permits and for the cost of auditing State records.

PERSONNEL GRADES AND ASSIGNMENTS

Chairman HAYDEN. Please place in the record a table showing the number of employees of the Bureau of Outdoor Recreation in fiscal year 1967 by grades and assignment, and the same information for fiscal year 1968.

Mr. CRAFTS. We will do that, sir.

(The information follows:)

Land and water conservations positions by grade and assignment, fiscal years 1967 and 1968

Grades	Total		Administration of grants-in-aid program		Coordination of the Federal land acquisition program		Assistance in developing and updating statewide outdoor recreation plans		Executive direction, administrative and information support activities	
	Fiscal year 1967	Fiscal year 1968	Fiscal year 1967	Fiscal year 1968	Fiscal year 1967	Fiscal year 1968	Fiscal year 1967	Fiscal year 1968	Fiscal year 1967	Fiscal year 1968
GS-15	3	4	1	1	1	1	--------	--------	1	2
GS-14	12	13	8	9	2	2	1	1	1	1
GS-13	25	31	8	14	8	8	6	6	3	3
GS-12	24	24	13	13	4	4	3	3	4	4
GS-11	27	28	17	18	4	4	5	5	1	1
GS-9	24	24	11	11	5	5	7	7	1	1
GS-8	1	1	--------	--------	--------	--------	--------	--------	1	1
GS-7	15	16	9	10	3	3	3	3	--------	--------
GS-6	14	14	8	8	3	3	2	2	1	1
GS-5	19	19	11	11	4	4	3	3	1	1
GS-4	17	17	8	8	5	5	4	4	--------	--------
GS-3	7	7	5	5	1	1	--------	--------	1	1
GS-2	1	1	1	1	--------	--------	--------	--------	--------	--------
Total	189	199	100	109	40	40	34	34	15	16

CIVIL RIGHTS COMPLIANCE PERSONNEL ACTIVITIES

Chairman HAYDEN. How many personnel do you propose to place in compliance with title VI of the Civil Rights Act?

Mr. RICE. Mr. Chairman, we are asking for an increase of 10 positions. These 10 positions would be used to handle the civil rights compliance activities as well as inspect physical performance of the projects.

IMPROVED LAND COST ESTIMATES

Chairman HAYDEN. I note that the Bureau of Outdoor Recreation is urging the land-acquiring agencies to prepare better cost estimates. What progress are you making?

Mr. CRAFTS. I think we are making good progress, Senator. I think the estimate for 1968 will prove better than the estimate for 1967.

EFFECT OF DEFERRING STATE-GRANT PROGRAMS TO 1968

Chairman HAYDEN. The Bureau of the Budget has advised the committee that the Bureau of Outdoor Recreation has been directed to defer $20 million in the State-grant program during fiscal year 1967, and to defer $21,500,000 in the program level. What effect, if any, will this have on your operations?

Mr. CRAFTS. I think for 1967 it will not hurt us, because the States have obligated only 40 percent of the money that has been apportioned to them and for the reasons that I have previously discussed. As the States obligations step up if this withholding continues in effect it will curtail the State activities.

Chairman HAYDEN. I want to thank you for your appearance. We have discussed a very interesting subject.

Mr. CRAFTS. Thank you, Senator Hayden, very much. It is always a pleasure to appear before you.

Chairman HAYDEN. Are there any more questions?

BUREAU AND PARK SERVICE LAND ACQUISITION ESTIMATE VARIANCE

Senator BIBLE. I have three short ones, Mr. Chairman, if I might.

When Mr. Hartzog appeared before our committee, Mr. Crafts, in his response to a question which I asked, estimated that a total of $697 million would be needed to carry out an optimum program of land acquisition. He divided the figure as follows: First, purchase of land for parks and other types of recreation areas which have already been authorized, $375 million. Second, purchase the lands for as yet unauthorized areas, assuming they are authorized, $252 million. Third, payments of judgments arising from condemnation suits, $28 million. Fourth, to provide a national system of trails and wild rivers, $42 million. Now that totals $697 million.

I note on your table at the end of your statement that you estimate the cost between 1968 and 1977 to be $617 million. I just wish for the record you would reconcile those. Maybe you can do it right off the top of your head. Or you might want to study it. I don't know what the difference is.

Mr. CRAFTS. There are what I think you would call minor differences. We are continually making estimates, Senator Bible, we and the Park Service. I sent you not long ago a preliminary draft of this. I sent you a copy of the material that Congressman Aspinall had requested, which broke down the Park Service estimates. These were preparded jointly by the Park Service and us, and we were in agreement at that time. As to the material that Mr. Hartzog submitted to this committee a few days ago—I have been out of town, and I did not catch up on it until yesterday—I don't know what the differences are. But if there are differences they are very minor differences.

But we will explain to you what the differences are.

Senator BIBLE. I don't know whether they are so minor. If my arithmatic is right, there is $80 million difference.

Mr. CRAFTS. It could well be that he has a Point Reyes figure in his estimate which is not in our estimate. This could be a substantial part of the difference.

Senator BIBLE. Yes. Why don't you check it out and furnish it for the record?

Mr. CRAFTS. All right.

(The information follows:)

Our Recreation Land Price Escalation Report estimates the total needs for land acquisition for the National Park Service at $617 million, to be expended over the next ten years. This estimate was based upon costs agreed to between the Bureau of Outdoor Recreation and the National Park Service at the time the report was prepared. The report was released in January 1967 with the concurrence of the Secretary of the Interior.

The estimate of $697 million which Mr. Hartzog presented last week incorporates many minor adjustments of costs at some 50 separate areas. This Bureau has not had the opportunity to review these new estimates. Mr. Hartzog's estimate does carry an additional amount for Point Reyes National Seashore of some $40 million. The Bureau of Outdoor Recreation estimate does not include any additional money for Point Reyes as it reflects the decision of the Secretary of the Interior and the Administration not to move ahead on this area at this time.

Desirability of Statutory Shrinkage of Authorized Areas

Senator Bible. Have you ever given any thought to the desirability of statutorily shrinking some of the areas that Congress has authorized?

Mr. Crafts. Yes, we have thought about it. We have also thought about not raising authorizations where you run out. I think there may be cases where this might be desirable. I can't be specific with you. I don't wish to be. But I think if this situation continues to get out of hand—and it is, in a sense, getting out of hand—that this may be something that may need to be done in certain instances.

Senator Bible. I am suggesting the question, because it is my intention, Mr. Chairman, as chairman of the Park Subcommittee of the full Interior Committee to have a hearing within a month directed specifically to working out statutory remedies, if that is indicated, to try to meet this ever-rising land cost.

LAND VALUE ACCELERATION

The problem is particularly accentuated by the Point Reyes example, which was authorized at $14 million, then it went to $19 million, then we were told it would be $27 million. The last figure I have heard it would be $57 million. Part of the answer there has been, undoubtedly, the failure of the county involved to pass necessary zoning ordinances.

STATE CONTRIBUTIONS

Now it seems to me in situations of this kind we might very well consider shrinking the area, maybe even completely deauthorizing it. I suppose anything that Uncle Sam has ever created in the way of parks has never been deauthorized, but this might set a precedent. If this is to the advantage very largely, as I see it, to a State such as California, it seems to me there ought to be certain quid pro quo where they should likewise do certain things.

I intend, Mr. Chairman, to go into this in depth. I have not had the opportunity of reading this bulletin "Recreational Land Price Escalation." I think it would be better to read the bulletin and then ask the questions, rather than ask the questions and then read the bulletin.

Mr. Crafts. Some of these we have answered. There is suggested legislation in here.

Senator Bible. I think it would be more orderly for me to do my homework before I ask the questions. With your permission, I will go into this in the legislative committee rather than in the Appropriations Committee.

Chairman Hayden. That is fine.

RECREATION DEVELOPMENT

Senator BIBLE. How much does the Bureau of Land Management spend on recreation development?

Mr. CRAFTS. The Bureau had actual obligations amounting to $718,000 in fiscal year 1966 and is estimating $1,451,000 for fiscal year 1967 and $1,350,000 for fiscal year 1968.

Senator BIBLE. Thank you very much, Mr. Crafts.

Mr. CRAFTS. Thank you, Senator.

WEST VIRGINIA GRANTS AND PROJECTS

Chairman HAYDEN. Here are a series of questions by Senator Byrd. Please supply the answers for the record.

(The questions and answers follow:)

Question. How much of the 1968 appropriation request will be available to West Virginia?

Answer. Grants to West Virginia from the Land and Water Conservation Fund will total about $838,000 based on the request of $65,000,000 for assistance to States. West Virginia has been allocated $2,015,000 from 1965–66–67 appropriations. Of this sum about $496,000 has been obligated.

Question. Where will recreation fees be charged in West Virginia during the coming recreation season?

Answer. The list of designated areas at which fees will be charged is under preparation. We cannot list at this time the specific areas at which fees will be charged.

Question. What projects are in the budget for West Virginia?

Answer. About $1,641,000 will be available from the Land and Water Conservation Fund for acquisition of recreation lands in West Virginia by the Forest Service in fiscal year 1968. The details on these acquisitions are shown in the attachment. We do not know what grants-in-aid projects the State will submit with the $838,000 expected to be appropriated in F.Y. 1968. The States have the prerogative of determining which projects will be submitted.

Proposed acquisitions of lands in West Virginia from land and water conservation fund

	Acres	Cost
George Washington National Forest	57	$13,700
Jefferson National Forest	1,925	100,000
Monongahela National Forest	569	[1] 205,000
Spruce Knob National Recreation Area	5,823	[2] 1,322,359
Total West Virginia	8,374	1,641,059

[1] Includes improvements valued at $91 700.

[2] Includes improvements valued at $193,982.

SUBCOMMITTEE RECESS

Chairman HAYDEN. We thank you for your appearance.

The subcommittee will stand in recess until 10 a.m. Friday, March 10, when the Federal Coal Mine Safety Board of Review Office of Saline Water, and Federal Development Planning Committees for Alaska will be heard.

(Whereupon, at 12:13 p.m., Thursday, March 9, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Friday, March 10, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

FRIDAY, MARCH 10, 1967

U.S. Senate,
Subcommittee of the Committee on Appropriations,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senators Byrd and Bartlett.

FEDERAL COAL MINE SAFETY BOARD OF REVIEW

Salaries and Expenses

STATEMENT OF HARRY R. PAULEY, MEMBER; ACCOMPANIED BY GEORGE C. TREVORROW, MEMBER; AND ROBERT J. FREEHLING, GENERAL COUNSEL.

BUDGET REQUEST

Chairman Hayden. The subcommittee will be in order. There will be placed in the record the statement in justification of the budget estimate for the Federal Coal Mine Safety Board of Review for fiscal year 1968. The Board proposes an appropriation of $162,000, an amount $16,400 less than the appropriation for last year.

(The justification follows:)

Requirements for 1968.—The Board is requesting an appropriation of $162 thousand, of which $76 thousand is for personnel compensation and $86 thousand is for other obligations. This amount is approximately $16 thousand less than that appropriated for 1967.

Establishment of Board.—The Board is an independent, quasi-judicial agency, created by Title II of the Federal Coal Mine Safety Act (30 U.S.C. 471–483). Under section 205(a) of that act, as originally adopted on July 16, 1952, the Board was composed of three members, appointed by the President, by and with the advice and consent of the Senate. However, under the recent "Federal Coal Mine Safety Act Amendments of 1965", approved on March 26, 1966 (P.L. 89–376; 80 Stat. 84), the Board was reconstituted to consist of five members, instead of three, with the members continuing to be appointed by the President, by and with the advice and consent of the Senate.

The membership of the Board is tripartite in nature, that is, two members serve as the large and small coal mine operators representatives, respectively; two, as the large and small coal mine workers representatives, respectively; and the Chairman, who is required to be an engineer experienced in the coal mining industry and without recent connection with the groups concerned, serves in effect as the public representative.

Briefly, Title II, as amended, provides mandatory safety standards which are detailed in the act and which are now applicable to all underground coal mines engaged in interstate commerce. Enforcement of these standards is initiated through findings and mine closing or classification orders, issued by representatives of the U.S. Bureau of Mines. It is the principal function of the Board, as established by the act, to determine the propriety of such orders upon requests for relief submitted to the Board, by coal mine operators affected by those orders.

Adjudicatory duties and workload of the Board.—The adjudicatory duties of the Board, in docketed cases, involve the hearing and determination of applications filed by coal mine operators seeking annulment or revision of, and temporary relief from, orders issued by the Bureau of Mines under sections 203 and 206 of the Federal Coal Mine Safety Act. Appeals from final Board orders may, in turn, be taken to the U.S. Courts of Appeals, and then to the U.S. Supreme Court. In performing these adjudicatory functions, in litigated cases, the Board is required to conduct public hearings (which, under the amended act, must generally be held close to the mine involved); to resolve interlocutory matters; to render final decisions and orders; and to certify records on appeals to the courts. All such actions of the Board, under the specific mandate of the Congress, must be taken "as rapidly as practicable" in order to minimize economic loss and to effectuate the underlying safety purposes of the act.

The adjudicatory duties of the Board also include the resolution of informal, or "advice", cases, in which disputes are settled by the voluntary actions of the parties and without the docketing and processing of formal appeals. These activities of the Board are extremely diverse, depending on the circumstances involved, and seek to avoid, whenever possible, the need to resort to time-consuming and disruptive litigation.

As to workload, from July 16, 1952, the effective date of the original act, through September 30, 1966, the Bureau of Mines issued approximately 1900 orders subject to appeal to the Board, a number of which remain outstanding. During this period, the Board received 33 formal applications for review of orders, and hearings extending from 1 to 12 days were required in each litigated case. Also, during this period, the Board handled a large number of advice matters which were settled by the informal, voluntary actions of the parties concerned.

Under the "Federal Coal Mine Safety Act Amendments of 1965," adopted on March 26, 1966, the number of findings and orders issuable by the Bureau, and, therefore, the potential workload of the agency, were very substantially expanded, as were the adjudicatory procedures required to be followed by the Board in litigated cases. In this connection, the amendments increased more than sixfold the number of coal mines subject to the Board's jurisdiction; a new category of mine closing orders, referred to as "reinspection closing orders", was added to the imminent danger and elapsed-time closing orders and gassy classification orders, already subject to appeal to the Board; hearings on requests for temporary relief, and on the merits, and other Board proceedings, must be conducted, upon request of the operator, at the county seat of the county in which the mine is located, or at some other place mutually agreed to by the operator and the Board chairman; three members, instead of two, are required to constitute a quorum; and, in cases heard by less than the full Board, a copy of the transcript must be made available to the parties and an opportunity to appear before the full Board must be afforded the parties, before final Board action.

The impact of the substantive amendments did not become fully operative until October 1, 1966, and the Board is unable to estimate with any degree of precision the number of orders likely to be issued by the Bureau of Mines in 1968. However, based on past experience under the original act and on other available data, it is anticipated that more than 300 such orders will issue, during 1968, subject to appeal to the Board.

Other duties of the Board. Apart from its adjudicatory functions, the Board must perform the broad range of activities of any independent, quasi-judicial agency in the executive branch of the Government. Such activities include, among others, the preparation and adoption of administrative orders and regulations; the maintenance of records, files and supporting data; the submission of administrative reports to other executive departments and agencies, and to the Congress; the prompt handling of inquiries and correspondence; the analysis of, and detailed reporting on, proposed and pending legislation relating directly or indirectly to the Board; the participation in hearings before committees of Congress; and the discharge of other advisory and information responsibilities.

Personnel complement. In addition to the five members of the Board, who are compensated on a WAE basis, the Board anticipates the continued performance of its varied legal and administrative duties with a staff of only four full-time employees. These employees consist of a general counsel (who, besides serving as chief legal officer, performs the work of executive secretary), and three office employees. This is the absolute minimum number of employees required by the Board to handle its projected workload, and to fulfill its substantially increased assignments, under Title II of the Federal Coal Mine Safety Act, as amended.

PROGRAM AND PERFORMANCE

Coal mine operators, affected by orders issued by Federal coal mine inspectors, may appeal to the Board for annulment or revision of, and temporary relief from, such orders. When operators appeal, hearings are held, and the Board rules upon the applications. It is estimated that the number of orders subject to appeal to the Board will increase to at least 300 in 1968, due to the extension of coverage, and the expansion of categories of orders, provided in the Federal Coal Mine Safety Act Amendments of 1965, approved on March 26, 1966. The recommended appropriation includes an amount estimated to be sufficient to cover necessary administrative expenses, and to handle an expected threefold increase in the caseload, estimated on the basis of experience under the Federal Coal Mine Safety Act, prior to its amendment.

DETAILED STATEMENT

12. *Personnel benefits.* It is estimated that $6 thousand will be required under this object to cover the Government's contribution, in accordance with existing legislation, to employees' group life insurance, group health benefits, retirement, and FICA taxes.

21. *Travel and transportation of persons.*—It is estimated that $40 thousand will be required for this object, principally for the conduct of anticipated proceedings in the field.

23. *Rent, communications, and utilities.*—It is estimated that $5 thousand will be required under this object to cover the cost of hearing room rent, local and long distance telephone services, telegraph service, and postage.

24. *Printing and reproduction.*—It is estimated that $2 thousand will be required for this object to cover the printing and reproduction cost of administrative forms, rules, letterheads, and findings and orders and other issuances of the Board.

25.1 *Other services.*—It is estimated that $22 thousand will be required for this object principally to cover the cost of court reporter services for the projected caseload.

25.2 *Services of other agencies.*—It is estimated that $9 thousand will be required for this object to cover the cost of budgeting, and complete payroll, accounting and fiscal reporting services performed for the Board by General Services Administration. Also included in this object are the estimated costs of employee health services provided by the Public Health Service, etc.

26. *Supplies and materials.*—It is estimated that $1 thousand will be required to cover the cost of all supplies that are normally used in an office.

31. *Equipment.*—It is estimated that $1 thousand will be required for incidental equipment as needed, and repairs to equipment.

FEDERAL COAL MINE SAFETY BOARD OF REVIEW—SALARIES AND EXPENSES

Object classification

[In thousands of dollars]

	1966 actual	1967 estimate	1968 estimate
Personnel compensation:			
11.1 Permanent positions	56	43	44
11.3 Positions other than permanent	6	33	32
Total personnel compensation	62	76	76
12.0 Personnel benefits	4	6	6
21.0 Travel and transportation of persons	1	43	40
23.0 Rent, communications, and utilities	1	6	5
24.0 Printing and reproduction	----------	3	2
25.1 Other services	1	22	22
25.2 Services of other agencies	4	12	9
26.0 Supplies and materials	1	2	1
31.0 Equipment	----------	2	1
99.0 Total obligations	74	172	162

PREPARED STATEMENT

Chairman HAYDEN. Mr. Pauley, will you please place your prepared statement in the record for printing in full, and then summarize it for the committee?

(The prepared statement follows:)

The Board is requesting an appropriation of $162,000 for fiscal year 1968. This amount is a reduction of approximately $16,000 from that appropriated for the current fiscal year.

As you know, the Board is an independent, quasi-judicial agency, engaged in the adjudication of appeals, and in a broad range of administrative activities, under Title II of the Federal Coal Mine Safety Act, as amended. Its five members, who are appointed by the President, with the advice and consent of the Senate, respectively represent the viewpoints of management, labor, and the general public. More particularly, one member represents the view point of the large coal mine operators; one, the small coal mine operators; one, the large coal mine workers; one, the small coal mine workers; and the chairman in effect represents the general public.

The duties and responsibilities of the Board are described in the budget justification already before your Committee. However, for your assistance, some further information regarding the Board's operations will be provided in this statement.

ADJUDICATION DUTIES OF BOARD

As to the adjudication of appeals, the Board serves essentially as a buffer between the U.S. Bureau of Mines and the coal industry, in determining the propriety of orders issued under Title II of the Federal Coal Mine Safety Act. That act, which was originally adopted in 1952 and substantially amended in 1966, establishes a comprehensive and closely integrated program designed to reduce the incidence of explosions, fires, inundations, and man-trip and man-hoist accidents, in underground coal mines. To accomplish this goal, the act empowers the Bureau of Mines to order mines classified as gassy; and to order all or parts of mines closed because of imminent danger of disaster, or because of the failure to correct specific violations of the act within the time provided therefor, or because of certain repeated violations of the mandatory safety requirements set forth in the act. In addition, Title II delegates broad authority to the Board to resolve conflicts regarding these orders, and, under designated conditions, to grant interim relief to the mine operators. Moreover, in so-called "State plan" areas, the Board alone is granted the primary jurisdiction to annul or revise closing orders issued by the Federal, or the joint Federal and State, inspectors.

Appeals may be submitted to the Board formally or informally for decision and settlement. In a formal or "docketed" case, the Bureau of Mines must first actually close the mine or classify it as gassy. Then, the Board, upon appeal, is required immediately to hear and determine any request for temporary relief; to dispose of intermediate matters; to conduct a public hearing on the merits; to prepare and issue a final decision and order; and, if review is sought, to certify the record to the U.S. court of appeals. Further appeal may also be taken to the Supreme Court of the United States.

In the informal or "advice" cases, which, in general, are submitted before the closing orders issue, the Board seeks, through a variety of measures, to resolve the disputes by the voluntary conduct of the parties, and without the closing of the mines or the disruption of protracted litigation.

RECENT AMENDMENTS OF ACT

As indicated in the justification, the amendments to Title II, approved March 26, 1966, substantially increased the jurisdiction, composition and functions of the Board. Among other things, these amendments extended the jurisdiction of the Board to cover approximately 6000 additional coal mines regularly employing fewer than 15 men underground, which were previously exempt from the safety requirements of the act. Furthermore, a new category of mine closing orders, known as "reinspection closing orders", was added to the gassy classification orders, and to the imminent danger and elapsed-time closing orders, already subject to appeal to this agency.

With respect to the composition and functions of the Board itself, the amendments expanded the size of the Board from three to five members, in order to afford representation to the newly covered mines. Moreover, hearings and other Board proceedings, which the Board previously had the option to conduct in Washington, D.C., are now expressly required by the amendments to be held, upon the request of the operator, at a location in the immediate vicinity of the mine involved. Also, the quorum for Board action was increased from two to three members. And in any case heard by less than the full Board, the amendments direct that a copy of the transcript be made available to the parties; that an opportunity to appear before the full Board be granted; and that the parties may be afforded an opportunity to submit additional evidence to the full Board. As in the original act, the Board is under a statutory mandate to take all its actions "promptly", in order to avert unnecessary economic hardship, and to prevent the devastating loss of lives and property from an underground coal mine disaster.

ANTICIPATION OF WORKLOAD

The substantive requirements of the amendments were not fully operative until October 1, 1966, and the complete reconstitution of the Board itself has been delayed. Therefore, it is extremely difficult at this time to predict with exactness the number of appeals which will be submitted under the amended act, and the applicable costs which will be incurred in resolving such appeals. These appeals and expenses will necessarily depend on the rate at which orders are issued by the Bureau; the wishes of the coal mine operators; the locations from which appeals are taken; the availability of hearing facilities; the complexity of the issues raised; and the like.

While the costs of adjudication cannot be estimated with precision at this early stage of the amended act, the Board has assessed the impact of the amendments and has carefully projected its expenses for 1968, as reflected in the schedules submitted to your Committee, on the basis of its related experience under the original law. It need hardly be emphasized that, if the caseload and the applicable expenses prove less than anticipated, the requested funds will not be fully expended and will revert to the Treasury.

Aside from its duties connected with the adjudication of appeals, the Board is also responsible as an independent, quasi-judicial agency, for the many other legal and administrative activities of any such agency in the Federal government. These duties, which are more fully adverted to in the justification, will in all probability be further increased in 1968 by the need to assist in the organization of the Federal Metal and Nonmetallic Mine Safety Board of Review, which is closely patterned after this agency in its composition and procedures.

PERSONNEL COMPLEMENT

The Board proposes to carry out its statutory duties and operations with a personnel complement consisting of the five Board members, who are compensated on a WAE basis, and a full-time staff limited to four employees. No increase in personnel is being sought for the next fiscal year. This is the minimum staff required by the Board to perform its assigned duties and to accomplish its mission of safeguarding lives and property under the amended act.

IMPACT OF PROGRAM

Before concluding, it may interest your Committee to note the impact of the law which the Board assists in effectuating. During the period since the adoption of the original act in July 1952, major disasters have been reduced by almost 70 per cent, and the number of men killed in such disasters has been reduced by almost 80 per cent, compared with a similar period before the act was passed. While this record is impressive, the Board is confident that even more will be accomplished with the determined enforcement of the recent amendments to the act, adopted by Congress in March 1966.

To repeat, the budget of $162,000 for 1968 represents a reduction of approximately $16,000 from that appropriated for the current fiscal year. You are assured that, consistent with the established policy of this agency since its inception, the Board will strictly confine its expenditures to the least amount necessary to meet its increased responsibilities under the Federal Coal Mine Safety Act, as amended.

BOARD MEMBERSHIP AND JURISDICTION

Mr. PAULEY. Thank you, Mr. Chairman. I have a prepared summary statement which, with your permission, I will read.

The appropriation request of the Board for fiscal year 1968 is in the amount of $162,000. This request is about $16,000 less than that appropriated for the current year.

The Board, as you know, is an independent agency, composed of five members appointed by the President, with Senate approval. It is engaged in a broad range of both quasi-judicial and administrative activities under title II of the Federal Coal Mine Safety Act, as amended.

1966 AMENDMENTS

The amendments to title II, which were adopted by Congress in March 1966, substantially increased the membership, jurisdiction, and functions of the Board. Without going into detail regarding these amendments, the size of the Board was expanded from three to five members; jurisdiction was extended to all underground coal mines engaged in commerce; and a new category of mine closing orders was added to those already subject to appeal to this agency. Furthermore, extensive procedural changes were made, such as those requiring that the parties be granted the right to appear before the full Board, that copies of transcripts be made available to the parties, and that the Board conduct its hearings and other proceedings at locations near the mines involved.

PROJECTION OF COST DIFFICULTY

For a number of reasons, including the fact that these amendments did not become fully operative until October 1, 1966, it is extremely difficult, at this time, to predict the exact amount of the Board's expenses in 1968. However, the Board has carefully projected its costs, to the best of its ability, on the basis of its related experience under the original act, and these estimates are reflected in the schedules now before your committee.

You are again assured that, as in the past, this agency will strictly confine its expenditures to the least amount required to perform its statutory duties.

That concludes our summary statement.

BOARD MEMBERSHIP

Chairman HAYDEN. Are all five of the authorized members of your Board now appointed?

Mr. PAULEY. No, sir; one member is lacking. He was confirmed by the Senate, I think, this week. I think I am correct in saying that he will be installed next Thursday.

OUTSTANDING BUREAU OF MINES ORDERS

Chairman HAYDEN. How many of the 1,900 orders issued by the Bureau of Mines, which are still subject to appeal by the Board, are still outstanding?

Mr. PAULEY. I will refer that to Mr. Freehling, General Counsel.

Mr. FREEHLING. As to the orders issued by the Bureau of Mines, the Board has no way of knowing how many are outstanding, although the Board itself is current in its workload on appeals from those orders.

UNCHANGED PERSONNEL

Chairman HAYDEN. I judge from your statement that you do not propose any change in the number of personnel to be employed by the Board?

Mr. PAULEY. That is correct.

TRAVEL EXPENSES

Chairman HAYDEN. In your justification, you have stated that the hearings which you hold must be held in the immediate vicinity of the mine involved. This would indicate that more travel is required under the 1965 amendments than theretofore. In fiscal year 1967, $43,000 was in your budget for travel. This has been reduced to $40,000 in fiscal year 1968. What is the reason for this?

Mr. PAULEY. I will state it briefly, and then I think Mr. Freehling can answer that, Mr. Chairman.

The budget for 1967, both the regular and supplemental budget, was projected on the expenses that we figured were reasonable in projecting, but which in no way could be accurate. Mr. Freehling is a little closer to that than I am. I will refer the question to him.

Mr. FREEHLING. The Board projected its travel expenses on the basis of an estimated workload. This workload in turn was based on the experience under the original act. The Board sees a possible leveling out toward the end of the next fiscal year, and therefore there may be a slight decrease in what is anticipated as the travel cost.

AMENDMENT EFFECT ON PERSONNEL FUNDING

Chairman HAYDEN. In the material submitted with your justification statement it is indicated that three full-time equivalent of other positions are included in your personnel. Are these the Board members who are paid on a WAE basis, or are these other personnel such as consultants?

Mr. PAULEY. Mr. Freehling, the General Counsel, I think can answer that, Mr. Chairman.

Mr. FREEHLING. That figure includes only the Board members, who are paid on a WAE basis. The reason why the figure went up from one to three, or appears to go up, is because this is based on their anticipated compensation; and that figure would be higher, due to the amended act.

Chairman HAYDEN. Thank you for your appearance.

Senator Byrd, do you have any questions?

RECOGNITION OF MR. PAULEY AS NEW BOARD MEMBER

Senator BYRD. Yes, Mr. Chairman.

Permit me to say that I am very happy this morning to be present. Particularly am I grateful for the attendance and the testimony of one of my West Virginia constituents, Mr. Pauley, a new member of the Federal Coal Mine Safety Board and a former member of the West Virginia Legislature. He is a former speaker of the West Virginia House of Delegates. He has lived in McDowell County, W. Va., I believe all of his life. McDowell County is one of the foremost counties , if not the leading coal-mining county, in the United States. I know at times it has been the county with the greatest production of any county in the United States.

So, he is very knowledgeable by virtue of his experience, very knowledgeable of the needs of the industry. He is presently engaged, I believe, in operating some coal mines. I am very honored that a member of the Federal Coal Mine Safety Board comes from my State of West Virginia. I want to compliment him on his testimony this morning. I would like to ask a few questions.

ANTICIPATED BUREAU ACTIONS

I note that your potential workload depends on the findings and orders issued by the Bureau of Mines. How many findings and orders do you now anticipate that the Bureau will issue in 1968?

Mr. PAULEY. Is that directed to me, Senator?

Senator BYRD. To you or whomever you would like to call on.

Mr. PAULEY. The adjudicatory workload of the Board depends largely on the findings and orders issued by the Bureau of Mines. The Board expects between 2,500 and 3,000 findings will be issued in 1968, and about 500 closing and classification orders.

RULES OF PROCEDURE

Senator BYRD. In handling appeals, is the Board guided by any published rules of procedure?

Mr. PAULEY. Yes. We have rules formulated and, since I am comparatively new on the Board, I will refer that question to Mr. Freehling, who put the rules in the form that they are.

Senator BYRD. Very well.

Mr. FREEHLING. Under the authority of the act, the Board has the power to issue rules of procedure. With the amended act, the Board completely revised and simplified its rules to make them particularly helpful to the new mines that came within the Board's jurisdiction.

APPEAL FROM BOARD DECISION

Senator BYRD. Where and under what conditions may a party appeal from the Board's decision?

Mr. PAULEY. The act permits any party to appeal from a Board order to the U.S. court of appeals for the circuit in which the mine affected is located. From the circuit court, the party may also appeal to the U.S. Supreme Court. The decision of the Board is reviewed by the circuit court, under the substantial evidence rule. The court may also grant temporary relief pending a determination of the appeal. As to the initial Board hearing—I think it is in the act, it is in the act, as amended—the hearing must generally be held at the county seat of the county in which the dispute or the grievance arises.

However, it can be held closer to the mine, by mutual agreement.

EFFECT OF AMENDMENTS ON SAFETY

Senator BYRD. I realize that the amendments to the Federal Coal Mine Safety Act have been effective for only a very short time. However, in this brief period have the amendments appeared to improve the safety conditions in the mines?

Mr. PAULEY. In my opinion, viewing it both as a member of the Board of some 4 or 5, months standing, and as an operator of small mines, I would say that safety has improved and the potential of further improvement is very good.

BOARD OPERATIONS UNDER AMENDMENTS

Senator BYRD. Does the Board anticipate any major difficulties in operating under the amendments to the act?

Mr. PAULEY. I believe Mr. Freehling could summarize that better, in the broad view.

Mr. FREEHLING. The Board does not anticipate any major difficulties. One of the principal problems with which the Board was faced was the delay in the appointment of the fifth Board member who would represent the small-mine workers' point of view. That problem arose because the amended act requires that the representatives of the viewpoint of the particular mine involved must participate in official actions concerning such mine.

But with the confirmation of the fifth member last Tuesday, the Board no longer anticipates any major difficulties.

LOCATIONS OF BOARD HEARINGS

Senator BYRD. Under the amended act, your hearings must now be held near the mines involved. You indicated that. How is the location of the hearing place determined?

Mr. PAULEY. I think I am correct on this. In the amended act it says the hearing or other proceeding shall be held, upon request of the operator, at the county seat of the county in which the grievance arises. It is flexible enough that by mutual agreement between the mineowner and the Board chairman, we can put it closer, or at any other point mutually agreed upon.

Senator BYRD. Mr. Chairman, I again want to say that I am grateful for the presence of my constituent, the very able Board member, Mr. Pauley. I again want to congratulate him on a very fine presentation. I think his testimony will be helpful to the committee. In my judgment, he now ranks as a veteran in having appeared before our committee this morning.

Mr. PAULEY. Thank you. I am very gratified to be here. I have always been an admirer of the distinguished chairman. It was worth my trip up here to meet him.

Chairman HAYDEN. Thank you, sir.

DEPARTMENT OF THE INTERIOR

Office of Saline Water

STATEMENT OF DR. JACK HUNTER, DIRECTOR

RESEARCH AND DEVELOPMENT AND DEMONSTRATION PLANT PROGRAMS

Chairman Hayden. Now we will hear the Office of Saline Water.

There will be placed in the record a highlight statement concerning the Office of Saline Water, summarizing the proposals for the research and development program and the demonstration plant program in fiscal year 1968.

(The statement follows:)

Highlight Statement

The Secretary of the Interior, through the Office of Saline Water, is conducting a research and development program aimed at the development of low cost methods for producing water from saline and brackish waters so that it can then be used for beneficial and consumptive purposes. The program is operated under two basic Congressional authorization acts. The Saline Water Act of July 3, 1952 (66 Stat. 328), as amended (42 U.S.C. 1951 et seq.), provides the Department of the Interior with the basic program authorization to carry on the current research and development program.

The Saline Water Act currently authorizes the program to have $90,000.000 appropriated for the fiscal years 1962 through 1972. A request is being made to the House and Senate Interior and Insular Affairs Committees to increase this authorization by $13,482,000 in order to cover the program proposed for FY 1968.

The other Congressional act, Public Law 85–883, which was passed on September 2, 1958, authorized the Department to construct, operate and maintain several plants in order to demonstrate the production of water for agricultural, industrial, municipal and other consumptive purposes from saline or brackish waters. Since their construction, these plants have been a vital part of the program's research and development effort and have been the "proving ground" or test bed for many of the new developments in the desalting field.

The Office of Saline Water program is funded under two separate appropriations, the "Salaries and Expenses" or research and development appropriation, and the "Operation and Maintenance" appropriation that funds the operating, maintenance and modification of the program's demonstration plants or test beds. Both appropriations provide Administration and Coordination funds to cover the salaries and related expenses of the OSW employees who are associated with the programs covered by the two appropriations.

The Office of Saline Water budget request, including both appropriations, amounts to $23,282,000 for Fiscal Year 1968 and represents a decrease of $7,195,000 below the total amount available for FY 1967 of $30,477,000. Added to the FY 1968 budget request, however, is a carryover from FY 1967 of $3,500,000. This carryover brings the total FY 1968 program budget to $26,782,000, a decrease of $3,695 below the amount available for FY 1967.

RESEARCH AND DEVELOPMENT PROGRAM

The budget request for the FY 1968 Salaries and Expenses, or research and development program, is $20,982,000 or a decrease of $7,144,000 below the amount available for FY 1967 of $28,126,000. The total program for FY 1968 includes a carryover from FY 1967 of $3,500,000 which brings the total funds available in FY 1968 to $24,482,000, a decrease of $3,644,000 below the amount available for FY 1967.

This decrease in the program is due primarily to the change in program emphasis from construction of major facilities in FY 1967 to that of operation, test and evaluation in FY 1968. Funding of construction of test facilities and a module, etc., West Coast Test Facility, Brackish Water Test Facility and a 17 million gpd Multistage Flash Module of a 50 million gpd plant, will be completed in FY 1967, allowing commencement of operation and extensive test and evaluation during FY 1968. Test and evaluation work on the Module will increase the present technology related to this process and will develop valuable information needed in the planning of large-scale distillation plants in the 150 million gpd size and larger.

Construction of test vehicles and equipment during FY 1968 is being kept to a minimum so that test results can be obtained from the facilities provided in past years. Several pilot plants are needed to test out technological advances. A 250,000 gpd Reverse Osmosis Test Bed Plant and the modification of a brackish water pilot plant for operation on sea water are planned for FY 1968. The design and procurement of certain long lead time items for a Long Tube Vertical Distillation Module will also be done during FY 1968. Tests are currently being made on several reverse osmosis pilot plants to evaluate their economics for operation on brackish water. It is anticipated that these tests will be completed in the latter part of FY 1968 and it is planned to modify the pilot plant which shows the most promise for adaptation to sea water test operation. The FY 1968 program includes the continued operation of the research and development contract and grant programs including basic and applied research and development activities.

DEMONSTRATION PLANT PROGRAM

The budget request for the FY 1968 Operation and Maintenance Appropriation of $2,300,000 is a decrease of $51,000 below that appropriated for FY 1967. This decrease is the result of a substantial decrease in the planned modifications to the demonstration plants and a smaller increase for operating costs.

The request includes the necessary funds to cover the normal operation and maintenance costs of the demonstration plants located at Freeport, Texas; San Diego, California; Webster, South Dakota and Roswell, New Mexico, and the necessary modifications to these plants to increase their usefulness to the program. Operating costs for FY 1968 are estimated to increase over FY 1967 by $460,000 and is due primarily to the new 1-million gpd advanced technology Clair Engle Desalting Plant located at San Diego, California. Construction of this plant is scheduled for completion during the last quarter of FY 1967 and will require a full year's operating funds for FY 1968.

In line with the over-all research and development program emphasis in FY 1968 to primarily one of operation, test and evaluation and away from construction, the modification costs of the demonstration plants have been reduced to a minimum. Modification of demonstration plants in FY 1968 has been estimated at $278,000 or a reduction of $511,000 from the FY 1967 amount of $789,000. The modification funds requested in FY 1968 will be used to make the necessary modifications so that the test beds or demonstration plants can be utilized for the purpose of testing experimental hardware, materials and techniques under actual plant operation conditions.

PREPARED STATEMENTS

Chairman HAYDEN. We will be glad Dr. Hunter to have you place your written statement in the record and highlight it for the committee.

Dr. HUNTER. Thank you, Mr. Chairman, and members of the committee, we have two statements we would like to enter into the record. One by Assistant Secretary DiLuzio who has asked me to express his regrets that a last-minute problem came up and he had to cancel his appearance; but he has submitted his prepared statement and we would like it in the record.

Chairman HAYDEN. That may be done.

(The statements follow:)

STATEMENT OF FRANK C. DILUZIO, ASSISTANT SECRETARY FOR WATER POLLUTION CONTROL

Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you to discuss the activities of the Office of Saline Water and to outline the program of work we have developed for fiscal year 1968.

I shall only touch on the high points of the program. Director Hunter is here to provide you with program details and to provide other information as the Committee may desire. As you know, during the past year there have been several significant changes in the administration of the Office of Saline Water.

On July 5, 1966, I was singularly honored by President Johnson who nominated me to be the first Assistant Secretary for Water Pollution Control. My nomination was confirmed by the Senate on July 20, and I undertook immediately my new responsibilities which include the operations of the Office of Saline Water and the Federal Water Pollution Control Administration. One of my first official acts as Assistant Secretary was to name Dr. Jack Hunter to be the acting director of the Office of Saline Water. I was particularly pleased when, on January 31, 1967, the Secretary of the Interior appointed Dr. Hunter to be the new director of the Office.

In my opinion, Dr. Hunter is eminently qualified to serve in this capacity. When I was Director of the Office, I recruited Dr. Hunter from industry to serve as assistant director for engineering and development, a difficult assignment in which he has served with distinction. Before he joined the Office of Saline Water, Dr. Hunter was employed for ten years by the Martin Company of Baltimore, Maryland, where he served as chief engineer of the Nuclear Division, engineer manager of the Nuclear Division, director of research in the headquarters office, and director of concepts in the headquarters office.

A native of Ohio, Dr. Hunter received his bachelor of science degree in engineering physics from Ohio State University in 1942, and his doctorate in nuclear physics from Ohio State University in 1950. He worked on the Manhattan Project from 1942 through 1946 and held an AEC fellowship from 1948 to 1950. Until 1951, he was a senior physicist with the Nuclear Experiment Unit of the Fairchild Engine and Airplane Corporation, and from 1951 to 1955, was a supervisor in the Nuclear Experimental Unit of the General Electric Company.

Dr. Hunter has been president of the Maryland Academy of Sciences since 1962, chairman of the N2.4 Committee on Nuclear Terminology for the American Standards Association since 1960, and chairman of a subcommittee working group of Technical Committee 85 of the International Standards Organization since 1960.

Over the past several years, the Office of Saline Water has become increasingly involved in the planning, construction, and operation of physical facilities related to the desalting program. This activity has grown significantly over the past two years and we expect it to continue to grow as technology developed under the program reaches the point where construction of test beds, prototype plants, and other facilities is justified. In order to best manage this important phase of our program, we have reorganized the Office by providing for an assistant director for Project Management and Plant Engineering. This action divides the operation of the Office under three assistant directors: Research, Engineering and Development, and Project Management and Plant Engineering.

The new assistant director will have the responsibility of overseeing construction, operation, and maintenance of OSW field facilities, and for two large projects in which the Office is currently involved—the 150-million gallon-per-day dual purpose desalting and electric power plant to be constructed by the Metropolitan Water District of Southern California, and the construction of a desalting plant in Jidda, Saudi Arabia, as well as for other large projects that may soon come about.

John W. Heintz, whom I was also able to entice from industry, has served as chief of the Special Projects Division for the OSW since July 1965, has now been named acting assistant director for Project Management and Plant Engineering.

A native of Ogden, Utah, Mr. Heintz received his B.S. degree from the U.S. Naval Academy in 1940, his Naval Engineer degree from MIT in 1949, and also from MIT his M.S. degree in physics in 1952. After completing over twenty years of service with the U.S. Navy he voluntarily retired in 1961 with the rank of Commander. Prior to joining the OSW, he was the assistant to the vice-president, Davison Chemical Division of W. R. Grace Company.

We believe the reorganization of the OSW will enable us to expedite the management of our programs and will provide a close interface between the operational and construction engineers of plant engineering and the individual project engineers assigned to specific projects. It will also strengthen the ability of the OSW to work more closely and more cooperatively with American industry in helping private industry to more quickly and more easily develop its own technical abilities.

One very important aspect of our plans for fiscal year 1968 is contained in authorizing legislation now before the Congress for consideration. S. 270 has passed the Senate and hearings are scheduled for February 27 and 28 by the House Interior and Insular Affairs Committee on this legislative proposal which will provide for the participation of the Department of the Interior in the construction and operation of the 150-million gallons-per-day desalting plant to be constructed by the Metropolitan Water District of Southern California.

The engineering study of this plant, which was jointly sponsored by the Metropolitan Water District, the Atomic Energy Commission and the Department of the Interior, indicates the cost of desalted water from this plant to be 21.9 cents per 1000 gallons. The Atomic Energy Commission already has received an authorization of $15 million for participation in the project.

Subject to the enactment of the authorizing legislation now before the Congress, we will provide this committee with full details and justification of our planned participation, but I should like to emphasize at this time that participation by the Office of Saline Water in this project will permit us to purchase the information and operating experience we so sorely need to advance large plant technology at a cost below that which would be necessary, and in a more practical manner, than if we were to construct the entire plant and operate it ourselves. Construction and operations of a plant of this size will represent a major milestone in the desalting program, since it will provide the know-how of plant design in the size range needed by large metropolitan areas.

While the news media have given great attention to our plans for the development of desalting technology for application in large plants, I want to make it perfectly clear that this phase of our program is in no way detracting from our efforts to develop new and improved technology for application to small plants. We intend to continue to maintain a balanced program for large and small plants as well as for sea water and brackish waters. Dr. Hunter's report to the Committee will show that we are vigorously continuing our efforts on the reverse osmosis which shows great promise for desalting brackish waters, including water containing municipal and industrial wastes; to improve the potential of the electrodialysis process which has already found considerable commercial application for desalting brackish waters; and freezing processes, which continue to show promise in smaller plant applications for desalting both sea and brackish waters.

The Government of Israel has under consideration a report which indicates the feasibility of a dual purpose desalting and electric power plant to help solve that nation's almost desperate water supply situation. This report was sponsored jointly by the Government of Israel and the United States, with the latter being represented by the Office of Saline Water and the Atomic Energy Commission. It shows that a plant capable of producing 100 million gallons of fresh water daily along with 200 megawatts of electric power is feasible, with total capital costs estimated at $200 million. The plant would have a nuclear reactor as an energy source.

We have made no commitment of financial support for the construction and operation of this plant. We have recently learned that the Government of Israel is considering the feasibility of increasing the size of this plant, particularly the electric generating capacity and delaying the construction schedule to the mid-70's.

Fossil fuels are not being forgotten in the construction of desalting plants. For example, oil will be used in a dual-purpose plant to be constructed at Jidda in Saudi Arabia. This plant will produce five million gallons of fresh water daily along with 36,000 kilowatts of electric power. Nuclear energy does not appear to be competitive with fossil fuels for desalting plants of 50 million gallons-per-day or smaller except in dual purpose plants where there is a large demand for energy to produce electric power. It is obvious that there is a role for both fossil fuel and nuclear energy in desalting plant applications, depending on the size of the plant and its location.

Under agreement with the Government of Saudi Arabia, the Office of Saline Water will provide from its ongoing program the universal design of a 2.5 million gallons-per-day desalting plant, with this design adapted to local conditions at Jidda. At the same time, using funds provided by the Government of Saudi Arabia, the Office of Saline Water will act as the contracting and supervising office for the construction of the plant. We expect to gain a considerable amount of data and information from the plant operation to further our development of desalting technology.

At the request of the Department of State, I recently visited Saudi Arabia, Kuwait, Iran, Italy and Malta. During that visit I found high interest in the potential of the desalting technology being developed by the Office of Saline Water to solve many local water supply problems. By exporting the technology we are developing, I am convinced we will do much to further improve our relations with these nations and demonstrate in a practical manner President Johnson's pledge to make this information available to the thirsty nations of the world.

The Saline Water Act of 1952, as amended, was approved by the Congress with the objective of increasing the water resources of the Nation through the development of practicable low-cost means of producing from sea water, brackish water, or from other saline waters which include mineralized or chemically charged waters, water of a quality suitable for beneficial consumptive purposes. It is becoming increasingly clear that the processes developed for desalting have had, and will continue to have, a much wider application than originally intended. The rapid changes in the amount and form of pollution which we now discharge into our waterways have taxed the effectiveness of the pollution treatment methods that only a few years ago were perfectly adequate. The pollution treatment systems that are available are satisfactory for primary and secondary treatment, and for these purposes they will continue to be satisfactory for a number of years, but desalting processes will be required to provide tertiary treatment to reclaim waters polluted by municipal and industrial wastes and irrigation return flows.

Some of the wastes that are now finding their way into our streams and rivers, such as nutrients, detergents, insecticides, chemicals, and other "exotic" wastes that have resulted from our "advanced" industrial development, simply cannot be reclaimed by what once were considered normal treatment methods. We must develop advanced waste treatment processes which can economically recover fresh water from waste water, brackish waters, acid mine waters, or other waters defiled by pollutants.

The processes developed by the Office of Saline Water not only offer a method of providing an incremental supply of fresh water to add to our national water inventory by producing fresh water from sea water; it is now evident that these processes will be needed to reclaim fresh water from the flowing garbage cans we once called sparkling rivers. They will find an application in resolving the problems of municipal waste disposal agricultural return flows, acid mine waters, and in many types of industrial applications, particularly in those industries that require high quality water for processing or for boiler feed water.

While the reports we have obtained are still incomplete, it is obvious that the tempo of commercial sales of desalting plants sharply increased during 1966, and the market should even be better in 1967. U.S. industry had its best year in this highly competitive field. About two-thirds of the 30-million gallons per day total installed capacity awarded in 1966 will be constructed by U.S. firms. The largest contract awarded during this past year was for the construction of a 9.6 million gallons per day of desalting equipment for Kuwait. This $10,752,000 contract was awarded to Ishikawajima-Harima. The award of this contract is noteworthy because it marks the first entry into the large scale distillation plant field by a Japanese firm.

While Dr. Hunter will be expected to carry the load of the day to day operation of the Office of Saline Water, I shall continue to give a fair share of my time to provide policy guidelines and technical direction to the program. Having served as Director, I am sympathetically aware of the problems which Dr. Hunter must face and the types of decisions he must make. I will continue to be intimately involved in program activities, although I will now be involved on both sides of the coin. My interest now must center on pollution abatement, and reclaiming polluted waters, but since in a practical sense of the word, sea and brackish waters are polluted waters and since desalting processes will find application in reclaiming polluted waters, I couldn't divide my interest between the two programs even if I wanted to.

Thank you for your kind attention. I shall be pleased to respond to any questions the Committee may wish to ask.

STATEMENT OF DR. JACK HUNTER, DIRECTOR OF THE OFFICE OF SALINE WATER

Mr. Chairman and members of the committee, I want to start off by saying that it gives me a great deal of pleasure to be here today in my first official appearance before this distinguished group as Director of the Office of Saline Water to explain to you the program we plan to carry out in fiscal year 1968.

At the same time, I want to emphasize that we are aware that we are appearing here today to make these requests without yet having received an authorization for our fiscal year 1968 appropriation. As you may recall, Public Law 89-118, approved by President Johnson on August 11, 1965, requires us to return to the Congress this year for both an authorization and an appropriation, and the budget requests we are making today is being made subject to whatever authorization we may later receive. Legislation to authorize our 1968 fiscal year activities has been prepared by the Department and forwarded for the consideration of the Congress.

The Saline Water Act of 1952 authorizes the Secretary of the Interior to conduct, through the Office of Saline Water, a research and development program "for the development of practicable low cost means of producing from sea water or from other saline water, water of a quality suitable for agriculture, industrial, municipal, and other beneficial consumptive uses" and that this shall be "on a large scale basis for the purpose of conserving and increasing the water resources of the nation".

The original Act was amended in 1955, in 1961 by passage of the Anderson-Aspinall Act, and again in 1965 so that our authorization currently extends through 1972. A separate act passed in 1958 provided for the construction and operation of not less than 5 plants which were to demonstrate the reliability, engineering, operating and economic potentials of the sea or brackish water conversion processes which appear to be most promising. Under the authority of these acts, and the related appropriations, our program has continued to expand and significant progress has been made in the development of technology.

The 1952 Act, as amended, currently authorizes an appropriation of $90 million during the fiscal years 1962-1972, inclusively, plus such additional sums as the Congress may authorize and appropriate but not to exceed $185,000,000. Our appropriations under this authorization have totaled $82,500,000, which leaves an unappropriated balance in our existing authorization for research and development of only $7,500,000. A request is being made, therefore, to increase this authorization by $13,482,000 which will permit an appropriation of $20,982,000 to cover the "salaries and expense" program we propose to undertake in the next fiscal year.

Shown separately in the budget justification, we are also requesting $2.3 million in fiscal year 1968 for the operation and maintenance of the plants constructed under the provisions of P.L. 85-883, a decrease of $51,000 from funds currently available. This decline results from an increase in actual operating costs combined with a substantial drop in projected modifications.

The request covers the funds we anticipate will be needed to cover normal maintenance and operation of our plants at Freeport, Texas; San Diego, California; Webster, South Dakota; and Roswell, New Mexico. Modification costs will be held to that which is necessary in order that these plants may be utilized for testing experimental hardware, materials, and techniques under actual operating conditions in a desalting plant.

Our total program appropriation request for fiscal year 1968, including appropriations under both of these authorizations, amounts to $23,282,000, which is $7,195,000 less than the total amount of money we had available during the current fiscal year. Added to this budget request, however, is a $3.5 million carryover from the current-year funds that will be available for program obligations in FY 1968. Including this carryover, our total FY 1968 program budget totals $26,782,000 or $3,695,000 below the amount of money available to us for the current year.

Although the request for funds is lower than last year, it will enable us to carry on the advancement of desalting technology. There is no change in program emphasis, but the schedule of construction of major facilities during the current year is considerably higher than that programmed for fiscal year 1968. The operation, testing and evaluation of these new facilities in the coming year will be far less expensive than their cost of construction. We will complete the funding during the current year of such projects as the San Diego Saline Water Test Facility, the 1-million gallons-per-day Clair Engle plant, the large module we plan for San Diego, and major modifications to the 1-million gallons-per-day plant at Freeport, Texas. The extensive testing and operating program we have scheduled for these facilities will provide the advanced technology we so sorely need to enable us to push forward the accelerated program President Johnson has directed us to undertake.

Test and evaluation work we have scheduled for the multistage flash distillation process module at San Diego, for example, will advance our present technology in this process and will provide the information we must have to proceed with the final engineering designs of desalting plants in the 50-150 million gallons-per-day size range and larger. In our earlier planning for fiscal year 1968 we had considered the construction of a long-tube vertical multi-effect distillation process module, but we now see that this work should be deferred until the results from the modifications of the Freeport plant become available.

We will, of course, continue our program of basic and applied research and engineering development activities. These cannot be ignored if we are to extend the frontiers of knowledge and develop new or improved processes and better operating techniques that will be necessary to reach the long-range goals that we have established.

Before I go into a detailed breakdown of our budget estimates for the coming year, Mr. Chairman, there is one other point I would like to emphasize and that is that in the conduct of our program, we have developed a close relationship with private industry because, as we see it, our job is to develop technology to the point where private industry can apply it to the construction of production plants which will alleviate the world's water shortages. We are consistently striving to strengthen and expand this association and to encourage private industry *to apply its own technological abilities.* Of major interest in this respect is the patent policy of the Office of Saline Water. We have endeavored to the maximum extent possible, compatible with our authorization, to preserve for industry the rights and protection which they are entitled and deserve under the law. We are required, by our authorization, to bring the results of the work we pay for into the public domain. This is appropriate to the purpose of the Office and to its source of funds. While we have had a few firms that have been unwilling to accept our patent policy, our general relations with industry in this area have been excellent.

The major expenditures planned for fiscal year 1968 are as follows:

Research ($5,000,000)

The research program is responsible for generating new concepts, new ideas, and new scientific knowledge upon which engineering and development activity can build the technology required for economic water desalting. The research program covers a wide range of activities designed to fulfill four major program objectives:

(1) studies to provide basic understanding of water and aqueous solutions which are the focus of our entire program and its processes.

(2) careful examination and investigation of ideas applicable to new and different desalting processes.

(3) quantitative study and evaluation of promising new processes as a basis for process development.

(4) providing better understanding of how processes work and making available better materials.

In our budget for fiscal year 1968 these objectives are covered under three basic headings: nature of water; water supply augmentation and conservation; and water quality management and protection. I will outline these one at a time.

Nature of water.—In this category we include studies of the properties of water both in its pure state and when it is contaminated by chemicals and minerals. The study of the properties of water is a basic search for new knowledge which would give us a better understanding of water itself. We need to know, for example, just how water boils, how an ice crystal is formed and excludes salt, how salt or water pass through membranes, what happens at a liquid surface, how can we best inhibit corrosion of materials by sea water. We hope these studies will bring us data and information from which we will be able to develop new concepts as well as more efficient designs of current desalting processes.

Water supply augmentation and conservation.—Research efforts in this category are related to making additional water available by desalting processes and to the use by desalting processes of water of particularly impaired quality.

Specific activities in this area include (a) research on distillation processes with the objective of reducing resistance to mass and energy transport at the interface of the liquid and the vapor. Progress in this area would improve distillation processes by increasing efficiency and reducing costs; (b) research leading to new or improved membranes for the electrodialysis and the reverse osmosis processes; (c) basic studies on the formation and growth of crystals and the application of this knowledge to the freezing and hydrate processes; and (d) investigation of the problems and means of using unusually contaminated waters as potential feed streams for desalting processes. For economic reasons, desalting plants producing water for cities must be located near the cities they serve and these plants will frequently have only polluted saline water upon which to operate.

Water quality Management and protection.—The research program under this category is concerned with the identification of pollutants that may be found in feed water and their effect on the various processes, the ultimate disposal of wastes, and the identification of improved methods of pretreatment of feed water to make them more amendable for use in desalting plants.

We have found through our investigation to date dependent upon the processes involved, particular forms of pollution may have significant adverse effects on the operation or service life of desalting equipment. For example, in feed water near large cities or industrial plants, the saline water source will in all probability contain organic pollutants, detergents, and corrosive chemicals. The organics have to be identified since they may pass through the distillation process into the product water. The corrosive chemicals may limit the life of the plant components and the detergents may cause the water to foam, making the process inoperative. In the membrane process certain pollutants may encourage the growth of algae on the surface of the membrane thus blocking the flow of water and limiting the effective operation of the process.

In the area of ultimate disposal of wastes, we are concerned particularly with the disposal of the waste brine, inherent in any desalting process, in a manner such that it will not contaminate or further degrade available water supplies and aquifers, and, in the case of sea water plants, in a manner that will not interfere with marine life and other uses of our shore areas.

In the water treatment area, we are very concerned with learning the effect of particular chemicals upon the operation and lifetime of the equipment. As an example, the presence of iron or manganese seriously impairs the performance of membranes in both reverse osmosis and electrodialysis plants. The formation of scale is a limiting factor to the temperature and concentrations which may be successfully employed at distillation plants. Since the cost of pretreatment is significant in terms of the total cost of a desalting process, it is important that we find both more effective and less expensive means of removing or modifying the troublesome components of our source water.

Engineering and development

It is the role of engineering to take the knowledge developed by research and apply it in a manner to achieve economic and practical technology as is the basis of design for production plants. The program of development for each process must include a series of stages progressively carrying the development from the laboratory phase to the point at which successful production plants can be built. These various activities may be described in general as follows: construction and test operation of pilot plants, development through test bed plant operations, construction and operation of large modules, component and materials development, and advanced process studies.

Pilot plants are the work horses of any process development program and are utilized to try out new ideas and to improve the technology of existing processes. In general, pilot plants are small and by far less money is involved in their construction than in their operation to develop the necessary data.

Test beds are the first point where a process is tested in a size sufficient that practical plant problems and economics can be determined. Obviously, test beds are not built until pilot plants have done their job of establishing the basic feasibility of the designs and technology involved. Test beds bring together as a complete plant the process technology and the necessary components to permit the operation of a process to be studied as an integrated plant and to permit the performance of the process to be optimized.

A module is a segment of a complete large plant. The components and sections involved are for the first time operated under full-scale large plant conditions. This operation serves the valuable role of verifying that the design made by theoretical extrapolation from smaller units is sound and it further permits the necessary "fine tuning" modifications to be made before a complete large plant is committed to hardware.

Component and materials development takes particular pieces of hardware involved in any process and permits their refinement to the stage of a reliable item both from their design and their materials of construction. Through such tests a complete understanding of how major components operate is acquired in order that their costs may be reduced and their overall reliability can be extended to the point that practical production plants could be designed and built.

Advanced process studies play a very important role in establishing the program direction for the processes involved. These studies develop a picture of what plants could look like depending upon technology that might exist. By these studies, then, we can determine which technology is most important to be developed from the viewpoint of making technically possible desirable future plants. Such conceptual plants are also a valuable input in resolving the question of what particular plant characteristics will be most useful in a practical application to satisfy real incremental water requirements.

The development of these various processes is carried out by three divisions: the Membrane Division, the Distillation Division, and the Special Projects Division. I will describe the activities of each in turn.

Distillation Division ($4,365,000)

The work of the Distillation Division is concentrated on three basic processes: the verticle-tube-multi-effect evaporators, the multi-stage flash evaporators, and the vapor compression process. Each of these processes has its unique advantages dependent upon the plant size, type of water being treated and other parameters such as energy costs, fixed-charge rates, and water purity required. The Distillation Division has several pilot plants in operation or under construction for the following purposes: to test new condensation surfaces where the condensed vapor forms water droplets so that the overall rate of condensation is greater; to prove the usefulness of aluminum as a replacement for expensive and scarce copper alloys; to control the formation of scale so that plants can be operated at higher temperatures where the efficiency of performance is greater; to demonstrate newly developed high efficiency evaporation surfaces which would result in significant cost savings to the overall plant, and to provide information on evaporator performance where sea or brackish waters also contain pollutants such as municipal or industrial wastes.

This Division is responsible for the development program carried out in the distillation plants at Roswell, New Mexico; Freeport, Texas; and the Clair Engle Plant at San Diego, California. In these plants we are putting to the test new methods of water pretreatment for scale control, performance tests under actual plant conditions of improved transfer surfaces, improved materials and corrosion-prevention techniques and overall system optimization. In the Freeport plant, new configurations of the evaporator effects are being evaluated. The Clair Engle plant will operate at higher temperatures and higher performance ratios than have been before possible. The plant at Roswell is developing important data on the ability to treat extremely difficult brackish waters.

This Division expects in the very near future to award a contract for the construction of a multi-stage flash module to be located at the San Diego test center. This module will establish a technical basis and verify the design appropriate to the construction of large plants. The first application of this technology is expected to be in the 150 mgpd desalting plant which will supply water to the MWD of Southern California.

In the area of component and materials development, a full-scale test chamber is being operated at our Wrightsville Beach Test Station which is expected to lead to improvements in high performance flash chamber design. Large pumps capable of handling hot brine are under development in cooperation with the Bureau of Reclamation. The Bureau of Reclamation is also investigating the potential of concrete as a low-cost material for construction of evaporator vessels. Through the use of the ORNL, we are carrying out a broad investigation of improved materials and components.

We have previously mentioned the performance of 15 conceptual designs for 50 mgpd plants. The results of these studies have been incorporated into our designs and we are now investigating larger concepts ranging from 250 mgpd to as large as 1 bgpd. As I have said, these investigations are basic in providing perspective to the direction of development that the distillation program should take.

Membrane Division ($4,300,000)

Efforts of the Membrane Division are concentrated on development of two desalting processes which appear economical for converting brackish waters to fresh—electrodialysis and reverse osmosis. The attractive features of these processes are low energy requirements and operation without significant temperature change. The latter permits use of low-cost materials for plant construction.

Although current technology restricts use of reverse osmosis to brackish water conversion, we are making progress toward the goal of sea water conversion and increased emphasis will be placed on this effort during the coming year.

Significant progress has been made in our efforts to bring this very promising process over the past several years from the laboratory stage to the point where it can find practical application in water supply.

Principal fiscal year 1968 objectives to advance the reverse osmosis program include: (1) development of design data needed to construct a 250,000 gallons-per-day test bed plant by operation of 10,000 to 50,000 gallons-per-day pilot plants; (2) development of economic brackish water pretreatment methods to obtain longer membrane life and thus reduce maintenance costs; (3) development of new more rugged membranes with longer life and improved desalting properties; (4) development of efficient systems to recover hydraulic energy from waste brine streams; and (5) development of new and novel design concepts to reduce capital costs.

Fiscal year 1968 program activities in electrodialysis will be concentrated in two areas: (1) economic evaluation of the transport depletion process, which is a variation of the electrodialysis process that offers the potential of treating much greater quantities of water in a given size plant, by field testing a 10,000 gallons-per-day pilot plant on brackish waters; and (2) improvement of electrodialysis process economics by developing techniques and materials to permit process operation at temperatures up to 180 degrees. Our studies indicate that success in these areas would significantly lower costs of desalting brackish waters.

Finally, we plan to investigate, in a joint program with the Federal Water Pollution Control Administration and the Bureau of Mines, the potential application of membrane technology to water pollution control, with particular regard to acid mine water drainage and irrigation return flows.

These processes will be tested in our aggressive field test programs which I will describe later.

Special Projects Division ($3,515,000)

This division will continue to develop and evaluate the freezing, hydrate and ion exchange desalting processes, and to conduct engineering investigations pertaining to brine disposal and the recovery of by-products from the brines.

Crystallization processes, which include freezing and hydrates, have been attractive because the low temperatures involved minimize problems of corrosion or scale formation and because they have the potential of operating with less energy per unit of water produced. Studies based on results obtained to date indicate that crystallization processes have a potential economic advantage over other processes in plants of the one to five million gallons-per-day size range, especially for desalting sea or very brackish waters.

The principal work to be done in crystallization during fiscal year 1968 will include: (1) continued operation, development, and evaluation of four different crystallization pilot plants at the Research and Development Test Station in Wrightsville Beach, North Carolina; (2) construction and operation of a small mobile secondary refrigerant pilot plant incorporating the latest engineering features; (3) operate a freezing process pilot plant on brackish waters; (4) design studies, development, and evaluation of new or improved components including heat exchangers, compressors, filtration systems, and devices for separating and washing the brine from crystals; and (5) design and evaluation of methods for continuous detection of contaminants in the feed water for crystallization processes, analytical studies of the dynamics of the processes, and engineering and feasibility studies for larger plants.

At the same time, we plan to investigate and evaluate the technical feasibility and economic potential of other new processes for desalting. Laboratory and bench scale studies indicate that two ion exchange processes may have economic and technical advantages over other processes using brackish waters of high hardness and low salinity. These will be evaluated at the pilot plant level.

The practical problems associated with the disposal of the brine effluent from desalting plants require further investigation. While Research looks at basic techniques, it is our engineering job to bring these techniques to the point of practical economic application. In all processes the brine effluent will be at a higher concentration, and in most cases, at a higher temperature. It may also be of a slightly different composition due to corrosion products and pre-treatment than the incoming feed water. We will study and determine the effects of discharging the brine effluent of large coastal and inland desalting plants upon the local environment, and will investigate and evaluate effective and economic methods for disposing of this effluent.

Recent studies have shown some of the ion exchange processes to be effective in the treatment of acid mine drainage for the production of potable water. We will conduct pilot plant studies and evaluate one or more of these processes with acid mine drainage.

Project management and plant engineering

Salaries and expenses ($1,600,000)—Maintenance and operation ($2,088,000)

Progress in our research and development has brought us to the point of an increasing involvement with hardware of significant size. In recognition of the necessity of dealing with this hardware in an effective manner and that concern with procurement of hardware could be a distraction to the management of an effective development program, I have within the last few weeks added this third assistant director to be responsible for these activities. This new assistant directorate for project management and plant engineering will provide a means for effectively overseeing the construction, operation, and maintenance of our field facilities; supervision of the two large projects, the proposed 150 MGPD plant and the Saudi Arabia desalting plant; and the necessary non-process supporting design effort. Any additional large projects with which we may become involved will be likewise the responsibility of this assistant director.

Maintenance and operation funds requested in this budget will be used for management, operation, and modification of the plants at Freeport, Texas; San Diego, California; Roswell, New Mexico; and Webster, South Dakota.

Some plant modifications are planned to increase the usefulness of these plants to our program. Modifications planned at San Diego include initiation of design and engineering for equipment necessary for the flash distillation process to operate at high temperatures. At Webster, we are modifying the pretreatment system to avoid fouling of the membrane stacks to reduce maintenance costs. Roswell modifications include changes in the deaeration system and the heat exchange system.

The proposed budget provides the funds needed for the operation and maintenance of the Research and Development Test Station at Wrightsville Beach, North Carolina; the San Diego Saline Water Test Facility, and construction of a Brackish Water Test Facility at Roswell, New Mexico. Additionally, we plan to provide facilities at Freeport, Texas, for the testing of materials of construction.

We will also provide funds for evaluation of in-plant corrosion testing, preparation of additional sections of the engineering data book, and support engineering work as required at the test facilities.

We are now preparing for important investigations on irrigation return flows with Federal Water Pollution Control Administration and on acid mine water in cooperation with Federal Water Pollution Control and the Bureau of Mines. We are also planning and expect to initiate early in the next fiscal year a broad field testing program on brackish water processes where we have divided the endless varieties of brackish waters into a limited number of classes having potential as important sources of brackish water supply. These tests, which we hope to conduct at existing government installations, will provide us with the optimum operating parameters and comparative economics for each of the brackish water processes under comparable conditions. The results of these tests should be a major contribution toward determining which of these processes truly have economic potential for further development.

Program analysis ($652,000)

This division conducts engineering feasibility and economic studies to determine the potential of desalting as a practical source of incremental water supply. These studies must consider plant size, cost and availability of fuel, type of water to be desalted, seasonal demand, storage capacity, specific problems related to geographical areas such as brine disposal, power requirements to ascertain the potential of dual purpose operations, etc.

They examine in detail all aspects of the possible use of a desalting plant with regard to future needs for incremental supplies of fresh water, including the choice of the best desalting process for the particular circumstances and the best mode of operation. Proposals for Federal participation in prototype desalting plants also are evaluated.

These feasibility studies provide real goals for the program and assist in determining the performance requirements that must be achieved for the practical use of desalting technology.

In assessing the potential applications of desalting, and in making feasibility studies for specific applications, it is necessary to compare desalting costs with fresh water supplied from other sources. In the recent study we supported with the State of Texas on the Potential Contribution of Desalting to Future Water Supply in Texas, the development of alternative costs was a part of the contract. We provided the Texas Water Development Board with recommended guidelines to be used for developing unit cost of desalting. For alternative fresh water supplies from ground water or surface water imports, the experience of the TWDB was drawn upon and we worked closely with them to arrive at procedures for equitable comparison of costs. The procedures adopted for use were of sufficient accuracy for these preliminary studies and they were reviewed with representatives of the Assistant Secretary for Water and Power and the Bureau of Reclamation. The cost procedures were applied to each of thirty-seven Texas cities selected from the 586 communities in the State with population of 1,000 or more which had been identified by a screening procedure as likely candidate communities for the application of desalting procedure to their available water supplies.

The costs for desalting and conventional water include the costs of raw water, water transportation, water treatment, amortization of the capital debt and for desalting, the cost of brine disposal. Such comparative costs, as noted previously, are considered preliminary pending the performance of more detailed engineering cost estimates.

We are also performing a complete review of the cost accounting procedures for desalting plants in order to make sure we have a system that fairly compares the various desalting processes.

Just over a year ago we began, in cooperation with the Government of Mexico and the International Atomic Energy Agency, a study of the feasibility of construction of one or more desalting plants large enough to serve portions of the states of California and Arizona as well as portions of the Mexican states of Sonora and Baja California. This study is of a special interest because it deals with larger plants that we have previously constructed and because it will test the question of continued improvement in economics with increasing size and because it will explore in depth all facets of the economics of water for all purposes including agricultural uses. This study which covers the period through 1995 will encompass an examination of the water requirements and the potential technical solutions which could be available at various points through this time period. For the purpose of examining the economic parameters, we are looking at a basic plant size of 1 BGPD. We are also examining in cooperation with the Bureau of Reclamation the corollary question of the true economic value of desalted water in relation to its use in upgrading existing low-quality waters, the lower quantities of water required for irrigation with high quality water and the impact upon crop yields. While we have always recognized that high quality water has an intrinsic value greater than low-quality water, we expect this study with Bureau of Reclamation will be a step toward quantilization of this value increment.

OSW participated as a member of the Northeast Desalting Team in the study completed last year on Potentialities and Possibilities of Desalting for Northern New Jersey and New York City. Comparison of the alternatives to desalting was made in cooperation with local water supply authorities. Their report indicates that although fresh water from the Hudson River currently provides the most economic interim source to meet the water shortages of the area, engineering advances in desalting technology expected with the development of large scale desalting plants could eliminate present cost disadvantges. Desalting must, therefore, be given serious consideration in any future surface water development in that area. Follow-on studies in areas recommended by the Northeast Desalting Team are being planned with both New Jersey and New York City authorities. Our future plans include additional studies with other State agencies with an interest in desalting and in working closely with Federal Government agencies having a responsibility for future water supply planning. These studies would provide information on possible applications of desalting technology developed through the saline water conversion program and development of procedures for comparison of desalting with other supply methods.

Administration and coordination ($1,762,000)

Salaries and expenses ($1,550,000)—Operation and maintenance ($212,000)

We think, and hope you concur, that the program we are currently administering and the activities we propose for FY 1968 is a vigorous effort toward the goal of supplementing our water resources through practical application of desalting. This program is made up of almost 300 contracts covering a wide range of technical fields and types of activities going all the way from basic research through applied research and development to the construction of test bed plants and modules. The total obligational authority of this program has expanded from FY 1965 to FY 1967 by 110%. In the same time period, the OSW staff was increased by only 21%. We then find ourselves in a position where further increases in staff would materially assist us in effectively managing a program that continues to grow in complexity and importance. Keeping in mind that the role of the OSW staff is not the actual performance of the laboratory and fieldwork, but of providing its direction and planning the most effective and expeditious means of attaining its goals, there is a premium on the higher qualified personnel. People with experience and mature judgment can increase the effectiveness of our expenditures far more than the costs of their salaries. Our FY 1968 request for Administration and Coordination of $1,762,000 represents an increase of $65,000 over the amount available for this purpose in FY 1967. This increase will permit the addition of 5 new positions during FY 1968. With this increase, the total staff of the OSW including our field engineers would be 137.

In this presentation, we have endeavored to provide the Committee with a complete picture of the operations in which we are now engaged as well as the work we plan to conduct in the coming fiscal year. We know that many of our processes and much of our terminology is difficult to assimilate. In order to provide you with a better understanding of our programs, we would like to invite the Members of this Committee to visit our research and development facility at Wrightsville Beach, North Carolina, or if your travels bring you near any of our other installations we would be more than happy to arrange for an on-site briefing of our activities.

We would be pleased to answer any questions you may have concerning our program for it is our intention to provide you with complete and readily understandable information concerning our operations.

AUTHORIZATION BILL UNAPPROVED

Dr. Hunter. I would like to begin by saying that I am pleased to be here in my first appearance before this committee. I would also like at this time to emphasize that we are aware that we are appearing here today making this request for appropriation before having received approval of our authorization bill. We recognize that the action today will be subject to whatever authorization we may later receive.

MERGING OF PRIOR SEPARATE AUTHORIZATIONS AND APPROPRIATIONS

Since the time that we submitted our budget breakdown to you, there have been several changes I would like to deal with in our authorization program. As you know, we have in the past operated under two separate authorizations and two separate appropriations; one for our basic program, and one for the demonstration plant program. In our authorization this year, we are requesting that these separate authorizations be merged into a single authorization, and we would like to request that in reviewing our program you consider making a single appropriation in the event we do receive such authorization. This will materially simplify our problems of operation and will recognize the fact that the demonstration plant program has fulfilled its objectives as a demonstration plant program and further recognize that these facilities have become an extremely important part of our research and development program. They are invaluable in the performance of experiments to advance our technology.

BUDGET REQUEST

In the material submitted to you under the two separate requests, we had asked for an increase in authorization of $13,482,000 for our basic program, and a separate request for $2.3 million for the operation and maintenance of our demonstration plant. Under the amended authorization, these would be totaled as a single item. That would bring us to a fiscal year 1968 program requesting appropriation under these authorizations in an amount of $23,282,000, which is just over $7 million less than the total amount of money we had available last year, or this current year.

TOTAL OBLIGATIONAL AUTHORITY AND CONSTRUCTION DEFERRAL

However, I would like to point out that in the fiscal year 1967 certain contingencies of our program have meant that we could not properly program the expenditure of $3.5 million, and this is expected to become a carryover and would give us then a total obligating authority for 1968 of $26,782,000. The primary factors that are changed in the program to account for this decrease are such items as the fact that a major construction program for a vertical tube evaporator module has been deferred until 1969 fiscal year. This is deferred because the experimental program we had been carrying on on this process will not have produced sufficient data to permit us to effectively design the module until that time.

OFFICE RELATIONSHIP WITH INDUSTRY

There is one other item that I would like to emphasize before I begin a more detailed discussion of our program, and that is our relationship with industry. I would like to emphasize that in the conduct of our program we have developed a close relationship with industry because, as we see it, our job is to develop technology to the point where private industry can apply it successfully to the construction of production plants as required by the world's water shortage problems. We will continue to strengthen this association and expand it in order to produce an effective working relationship with industry.

RESEARCH PROGRAM BALANCE

As to our detailed program, within the total budget request we are requesting a sum of $5 million for research. We continue to believe that an aggressive and strong research program is necessary if we are to meet our eventual cost objectives. This research program is balanced between the matter of solving short-term problems in support of the engineering activities and its more important task of developing long-term solutions that will eventually permit us to reach the economic target we have set.

DISTILLATION DIVISION: DETERMINATION OF PROCESS HAVING GREATEST ECONOMIC POTENTIAL

In the Distillation Division, one of our engineering divisions, we are requesting for 1968 the sum of $4,365,000. The principal objectives of this Division are to develop the technology that will eventually give us the capability for very large plants suitable for major metropolitan water supplies. And in this area we are very much interested at the present time in the economic competition between two processes; the vertical evaporator process, and multistage flash process. The objective here in the next two years is to determine which of the processes has the greatest economic potential, and then obviously eliminate the loser.

HIGHER TEMPERATURE OPERATION GOAL

We are also making excellent progress on developing more heat transfer services. We are initiating a program on materials which may have a major impact on the cost of equipment. We are pursuing an objective of higher temperature operation which will improve the efficiency of our plant operation and provide lower cost product water.

As a corollary to this, we have had to carry out an intensive research on water pretreatment techniques, in order to prevent scale formation and to minimize the effect of corrosion.

MEMBRANE DIVISION: ELECTRODIALYSIS AND REVERSE OSMOSIS PROCESS

In our Membrane Division, we are requesting the sum of $4,300,000. This will be applied to two basic processes; the electrodialysis process, and reverse osmosis process.

The electrodialysis process has been used commerically for production of speciality waters, operating with rather mild salt waters, on a very small scale. It is not now, in our opinion, economic for large-scale municipal application for desalting brackish waters. However, the program we are carrying out now is beginning to improve the technology and reduce the costs. By developing better pre-treatment methods, we are widening the type of waters that can be sucessfully treated by the process.

In the reverse osmosis process, we have a system which, in our opinion, offers a unique opportunity in that it is the most flexible process we know. It can treat brackish waters of little salt content. We are now becoming more successful with more heavily salted waters, and we eventually expect to apply it to seawater. This is also a promising process for treatment of especially difficult waters, such as acid mine water and irrigation return-flow waters. It has, in fact, even been applied to the treatment of sewage; and in this case has produced potable water which is remarkably free of bacteria and virus, something very few other treatment systems can offer.

Our objective in this process is to demonstrate the applicability to small municipal supplies within approximately 2 years when we are treating reasonably brackish water, and then to progressively extend its applicability to more difficult waters. The primary emphasis of the research program is on developing improved membranes, because these are the key to economic operation of the process.

SPECIAL PROJECTS DIVISION: FREEZING AND OTHER PROCESSES

In the Special Projects Division, we are requesting a sum of $3,515,000. This is the division which deals with the freezing processes, the hydrate process, and other newer processes. For example, electro-absorption and ion exchange. Now ion exchange itself is not a new process, but it is newly considered as a potential on an economic basis for treating large quantities of water.

In the vacuum freeze process, which is one of the two freezing processes, we have demonstrated operation of a small pilot plant that produced potable water and delivered it to a community where it was consumed. This process is progressing satisfactorily. We have expectations that this will find real application in small sea water plants and in more difficult brackish waters.

Refrigerant Process

The refrigerant process has been difficult. This process has not developed smoothly, and we have had to back up and start again. The second start is now based upon much greater knowledge of the process that has been developed over the past 2 years by extensive work with pilot plants. In spite of the difficulties we still believe this process has potential for economic application, and it has special advantages under certain circumstances.

Ion Exchange Process

I mentioned the ion exchange process. This process looks extremely interesting for lightly salted brackish waters. It may also have application in the treatment of acid mine water. We will be initiating tests this summer, a second series of tests, on acid mine water. The location will be in West Virginia. This is a cooperative program with the Federal Water Pollution Control Administration and with the Bureau of Mines.

Brine Disposal

Another problem this division deals with is the matter of brine disposal. I think we are all familiar with the problem of disposing of warm brine and its effect on the ecology of the area in which it is disposed. For seawater plants, the process has a fairly ready solution, although we are required to exercise great care in how we dispose of it. In the inland situation, the problem is a great deal more difficult and we are now accelerating our work in this area in order to find an economic solution that will permit effective utilization of desalting plants by inland cities.

PROJECT MANAGEMENT AND PLANT ENGINEERING

We have initiated or established recently a new organizational component of the Office. This is called Project Management and Plant Engineering. As we have progressed in our program, we have come to the point where to carry on our development work we must become involved in a growing scale of hardware items. We have felt that it was appropriate and would increase our efficiency by putting together this particular problem into a separate organizational component and thus relieve the Research and Engineering Divisions of the necessity of being concerned with the matter of constructing routine facilities.

Responsibilities

This unit, then, operates as a service to research and the engineering divisions in seeing that the hardware is efficiently erected and, for the larger plants, they are also responsible for the operation and maintenance. This permits the other divisions to concern themselves with their primary objectives, that of research and engineering development.

This division is also responsible for providing the management of our current two large programs, the Metropolitan Water District, Bolser Island Desalting Plant. This is the large 150-million-gallon-per-day plant that we are now requesting authorization and appropriation to participate with a group of utilities in the Metropolitan Water District of Southern California. They are also responsible for managing our program with Saudi Arabia which involves the construction of a plant in the city of Jidda. Incidentally, the construction of that plant is funded by the Saudi Arabian Government.

INTENSIVE FIELD TEST ON BRACKISH WATER SYSTEMS

Also, under the general management of this division strike this coming year we will initiate an intensive field test program on brackish water systems. The several brackish water processes have now come to the point where it is necessary to operate them under real conditions in order to finally determine the optimum operating conditions, the appropriate pre-treatment techniques, and the economics of each process under each particular type of water. In this program we will select out of the infinite series of brackish waters a limited number of waters that typify water types important in small municipal supplies, and we will then develop operating techniques and economics, and thus permit the choice of the most appropriate process to each type water.

This field test program will also include, as I mentioned, additional work in the area of acid mine water and irrigation return-flows.

PROGRAM ANALYSIS DIVISION: ENGINEERING FEASIBILITY AND ECONOMIC STUDIES

In our Program Analysis activity, we are requesting $652,000. This division conducts engineering feasibility and economic studies. These studies are an important guide to our program, in that they develop the true economics of each process as it stands now and its potential economics if we are successful in continuing the development. You must recognize in this question that, for each particular type of water and each economic situation, different processes are the best solution. For example, distillation is the best solution at the current time when we are dealing with seawater plants of rather large size. Even these distillation plants will look different if we are in an area where the energy cost is either high or low, and also dependent upon whether the interest charges and tax charges for money are large or small.

FEASIBILITY STUDIES

Feasibility studies are an examination of a particular circumstance, such as our participation in the recent Northeast Study where you have the problem of determining the optimum type of process and the optimum manner of operation to produce low-cost water for that particular problem.

TEXAS WATER RESOURCES STUDY

I might also point out that we have just recently completed a first phase program with the Texas Water Development Board in which we have examined a number of cities in Texas as part of their long-range water plan to determine the prospects for desalting and supplying incremental water requirements. As a corollary to this study, we have undertaken further work to determine practical means of comparing costs of water from different sources, including the natural sources, and the various types of desalting processes.

MEXICAN STUDY

Just over a year ago we began, in cooperation with the Government of Mexico and the International Atomic Energy Agency, a study of the feasibility of construction and operation of very large plants for the area in the Southwest comprised of southeast California, southwest Arizona, northwest Sonora and northeast Baja, Calif. This study is of special interest to us because it allows us to examine in a real circumstance the feasibility and economics of very large plants. You undoubtedly know, increasing plant size has brought about dramatic improvements in the cost of water. We are interested in determining if this trend toward lower cost water continues to be achieved with increasing plant size. In this particular study, we will examine, in the preliminary sense, plant sizes of the order of 1 billion gallons per day and determine what technical problems would be faced in their design and construction, and what would be the economics of their operation.

Chairman HAYDEN. 1 billion gallons a day?

Dr. HUNTER. 1 billion.

Chairman HAYDEN. How many acre feet is that?

Dr. HUNTER. That is a million acre feet a year, approximately.

ADMINISTRATION AND COORDINATION

In the area of administration and coordination, we have programed a figure of $1,762,000. I have given you a very brief summary of our program. I hope you will agree that this is an aggressive and vigorous effort to achieve our goal of low-cost desalted water. I would like to point out that this program is made up of almost 300 active contracts at the current time. These contracts cover a wide range of technical fields and economic studies. On the average, they are rather small in value, but it is a complex management problem. In the period from the fiscal year 1965 to 1967, the obligational authority of the program increased by an amount of 110 percent. In the same time period, the OSW staff was increased by 21 percent. We are obviously, then, in a position where additional staff will materially assist us in managing and continuing to properly plan this program.

RESEARCH CONTRACTS AND STAFF INCREASE

It should be kept in mind that we do not do the actual work in-house. We are a management operation. We do the work under contract to universities, industries, individuals, associations, and so on. Accordingly, in our 1968 request we have an increase of $65,000 over the previous year, and we are requesting five new positions, bringing our total authorized staff to 137.

In this presentation I have attempted to provide a very brief but complete picture of our activities. I shall be very happy to supplement this by answering any questions you may wish to ask.

Thank you very much.

SALARIES AND EXPENSES

Chairman HAYDEN. There will be placed in the record the budget justification for a fiscal year 1968 appropriation of $20,982,000 for salaries and expenses. This is a decrease of $6,518,000 under the amount appropriated in fiscal year 1967.

(The justification follows:)

Appropriation, 1966		$20,000,000
Unobligated balance, prior year	$1,182,110	
Recovery prior year obligations	403,367	
		1,585,477
Total available, 1966		21,585,477
Appropriation, 1967		27,500,000
Unobligated balance, prior year		4,156,991
Transfer to Salaries and expenses, Office of the Secretary, Department of the Interior	−$31,000	
Program deferral to fiscal year 1968	−3,500,000	
		−3,531,000
Total available, 1967		28,125,991

SUMMARY OF INCREASES AND DECREASES, 1968

Research and development:		
Increase in research program	+$360,000	
Decrease in program analysis and engineering feasibility and economic studies	−148,000	
Decrease in engineering and development program	−3,920,991	
		−3,708,991
Administration and coordination: Increase in administration and coordination		+65,000
Net decrease, 1968		−3,643,991
Total available, 1968		24,482,000
Less unobligated balance from 1967		−3,500,000
Budget estimate, 1968		20,982,000

Analysis by activity

Activity	Amount available 1967	Fiscal year 1968			Total available 1968 compared to total available 1967	Budget estimate 1968 compared to available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
1. Research and development:						
(*a*) Contracts and grants (non-Federal)	$26, 320, 991	$22, 137, 000	$3, 500, 000	$18, 637, 000	−$4, 183, 991	−$7, 683, 991
Research	5, 490, 000	5, 565, 000	850, 000	4, 715, 000	+75, 000	−775, 000
Program analysis and engineering feasibility and economic studies	800, 000	652, 000	------------	652, 000	−148, 000	−148, 000
Engineering and development	20, 030, 991	15, 920, 000	2, 650, 000	13, 270, 000	−4, 110, 991	−6, 760, 991
(*b*) Federal laboratories	320, 000	795, 000	------------	795, 000	+475, 000	+475, 000
Research	------------	285, 000	------------	285, 000	+285, 000	+285, 000
Engineering and development	320, 000	510, 000	------------	510, 000	+190, 000	+190, 000
2. Administration and coordination	1, 485, 000	1, 550, 000	------------	1, 550, 000	+65, 000	+65, 000
Total	28, 125, 991	24, 482, 000	3, 500, 000	20, 982, 000	3, 643, 991	−7, 143, 991

JUSTIFICATION SALARIES AND EXPENSES APPROPRIATION

This appropriation provides the Department of the Interior's Office of Saline Water with the necessary funds to conduct the research and development portion of the Saline Water Program. Included in the appropriation are funds needed to support the Office of Saline Water's research and development contract and grant programs. The work covered includes (1) basic and applied research and development activities, and the construction, operation and maintenance of pilot plants, modules, test beds, and other experimental research equipment, (2) the construction, operation and maintenance of the Office of Saline Water's test facilities, e.g., San Diego Test Facility, Brackish Water Test Facility, East Coast Test Facility, etc., (3) the salaries and expenses of OSW employees associated with the above program activities.

The Budget request for $20,982,000 is a decrease of $7,144,000 below the amount available for fiscal year 1967 of $28,126,000. The total program for fiscal year 1968 is $24,482,000 including $3,500,000 financed by carryover from fiscal year 1967. The resultant decrease in the total program of $3,644,000 below fiscal year 1967 ($28,126,000 vs $24,482,000) results largely from the change of program emphasis from construction in fiscal year 1967 to operation, test and evaluation programed for fiscal year 1968.

A detailed analysis of the Program follows.

(a) *Research*

The Research program is responsible for the generation of new concepts, new ideas and new scientific knowledge upon which the Engineering and Development activity can build its technology applicable to the development of processes for saline water conversion. The Research Program covers a wide range of activities designed to fulfill four major program objectives: (1) careful examination and investigation of ideas applicable to new and different desalting processes, (2) quantitative study and evaluation of promising new processes as a basis for preliminary plant designs, (3) studies to provide basic data required for the improvement of existing processes, and (4) studies to provide basic information on water and aqueous solutions and their behavior.

The Research program for fiscal year 1968 totals $5,850,000. Of this amount, $850,000 represents prior year appropriations carried over into 1968 for items deferred to the budget year. Analysis of the proposed funding compared to fiscal year 1967 availability is shown below:

[In thousands of dollars]

Program	Amount available, 1967	Fiscal year 1968			Total available, 1968 compared to total available 1967	Budget estimate, fiscal year 1968 compared to available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
1. Nature of water	1,561	1,569	170	1,399	+8	−162
Properties of water	326	393	120	273	+67	−53
Aqueous solutions and suspensions	1,235	1,176	50	1,126	−59	−109
2. Water supply augmentation and conservation	3,267	3,536	650	2,886	+269	−381
Saline water conversion	3,267	3,503	650	2,853	+236	−414
Use of water of impaired quality	----------	33	----------	33	+33	+33
3. Water quality management and protection	662	745	30	715	+83	+53
Identification of pollutants	----------	112	----------	112	+112	+112
Ultimate disposal of wastes	114	124	30	94	+10	−20
Water treatment	548	509	0	509	−39	−39
Total	5,490	5,850	850	5,000	+360	−490

The new funds requested in FY 1968 of $5,000,000 represents a decrease of $490,000 below the amount available in FY 1967 of $5,490,000. The total program for FY 1968 is $5,850,000, including $850,000 carried over from the previous year.

1. *Nature of water*

Funds available fiscal year 1967	$1, 561, 000
Funds requested fiscal year 1968	1, 399, 000
Decrease	162, 000

Request for FY 1968 is $1,399,000 or a reduction of $162,000 below FY 1967. The total program is $1,569,000 including $170,000 carried over from the previous year.

a. Properties of water

Request for FY 1968 is $273,000 or a reduction of $53,000 below FY 1967. The total program is $393,000 including $120,000 carried over from the previous year.

This portion of the program constitutes a basic quest for new knowledge concerning a better understanding of water itself. It is designed to meet the long-range objectives of the Office by supplying new data and insight upon which revolutionary new concepts may be founded that would lead to a "break-through" in desalination technology.

b. Aqueous solutions and suspensions

Request for FY 1968 is $1,126,000 or a reduction of $109,000 below FY 1967. The total program is $1,176,000 including $50,000 carried over from the previous year.

This portion of the program fulfills both the long-range objective of supplying new data and information from which new concepts will hopefully arise, and the short-range objective of supplying needed thermodynamic, kinetic, and transport data necessary for more efficient design of current desalting processes.

2. *Water supply augmentation and conservation*

Funds available fiscal year 1967	$3, 267, 000
Funds requested fiscal year 1968	2, 886, 000
Decrease	381, 000

Request for FY 1968 is $2,886,000 or a reduction of $381,000 below FY 1967. The total program is $3,536,000 including $650,000 carried over from the previous year.

a. Saline water conversion

Request for FY 1968 is $2,853,000 or a reduction of $414,000 below FY 1967. The total program is $3,503,000 including $650,000 carried over from the previous year.

This effort is designed to provide new information relevant to separation processes. New data, new techniques for vaporization, crystallization, membrane, and ion-adsorption processes are included in this category.

b. Use of water of impaired quality

Request for FY 1968 is $33,000 or an increase of $33,000 over FY 1967.

This effort is concerned with the use of unusually contaminated waters as potential feed streams of desalination processes, and the suitability of partially desalted water for specific applications.

3. *Water quality management and protection*

Funds available fiscal year 1967	$662,000
Funds requested fiscal year 1968	715,000
Increase	53,000

Request for FY 1968 is $715,000 or an increase of $53,000 over FY 1967. The total program is $745,000 including $30,000 carried over from the previous year.

a. Identification of pollutants

Request for FY 1968 is $112,000 or an increase of $122,000 over FY 1967.

Certain pollutants markedly affect the performance of desalination processes. In many instances even the nature of these pollutants is unknown. This effort is to develop means to identify and monitor these pollutants.

b. Ultimate disposal of wastes

Request for FY 1968 is $94,000 or a reduction of $20,000 below FY 1967. The total program is $124,000 including $30,000 carried over from the previous year.

The waste stream of any desalting process must be disposed of in a way that will not contaminate available water supplies and aquifers. This effort is concerned with basic studies on the utilization and disposal of these waste streams, particularly as they relate to inland sites.

c. Water treatment

Request for FY 1968 is $509,000 or a reduction of $39,000 below FY 1967.

This effort is concerned with pretreatment of specific saline waters to make them more amenable for desalting processes and other applications.

The Research activity embraces studies in all relevant areas of basic and applied science. A substantial effort is devoted to a better understanding of the kinetics and mechanisms by which heat, water molecules, and ions are transported to and across boundaries. Studies of a more applied nature relate to the development and testing of new separation processes, the investigation of means of preventing or mitigating the effects of scale and corrosion, the improvement of heat transfer, development of improved materials of construction, byproduct recovery, etc. The FY 1968 Program will consist of approximately 70 separate projects.

A few examples of recent accomplishments that have been achieved and may be expected from the ongoing program are given below.

1. Promising methods of electrically regenerating ion-exchange materials have been developed. This offers the potential of substantially reducing the cost of desalination by ion-exchange methods.

2. A comprehensive analysis of heat and mass transfer phenomena which occur in the freezing process has been made. This will eventually permit design of more efficient crystallizers for freezing processes, and cost-reduction for this important desalting process.

3. The nucleus of a facility for study of corrosion in sea water was established. This will make possible the comprehensive study of materials and their behavior under conditions typical of those found in desalination plants.

4. A new class of reverse osmosis desalination membranes, namely, polysaccharide acetates, has been discovered which shows salt rejections on sea water exceeding 99%.

5. Ultra-thin films of cellulose acetate have now been prepared which show 99.5% salt rejection or better, and offer the potential of development into a new system for the desalination of sea water.

6. A quantitative account and a general theory of evaporation and condensation coefficients of water and other liquids have been made.

7. Encouraging progress has been made on the fundamental question as to whether or not liquid water consists of a mixture of distinguishable species. From novel calculations, neutron scattering and infra-red absorption spectra, new evidence has been found indicating that more than one kind of clustering exists in liquid water.

(b) *Program analysis and engineering feasibility and economic studies*

Funds available fiscal year 1967	$800, 000
Funds requested fiscal year 1968	652, 000
Decrease	148, 000

This activity provides for the conduct of engineering feasibility and economic studies to investigate the potential application of desalting technology. This funding estimate provides for the contract support required for this activity. The staff functions and in-house responsibilities for this activity that are carried out by OSW personnel are included under the Administration and Coordination justifications.

The estimate for fiscal year 1968 is $652,000 a decrease of $148,000 below the amount available for fiscal year 1967. The decrease is due largely to unobligated funds from 1966 that were carried over into fiscal year 1967.

A. Engineering feasibility studies, $352,000

These funds are to pay the cost of participation in national and international feasibility studies of the potential applications of desalting technology related to specific geographical areas or locations. In addition they are an important source of valuable information used in determining future program direction. These studies examine in detail, for an area which has saline water sources available, all aspects of the possible use of a desalting plant in regard to future needs for incremental fresh water. It includes determination of the economics of the several desalting processes to a particular situation and the economics of all other alternate sources for incremental water. In these types of projects an in-house preliminary Departmental study usually precedes any contracts for detailed feasibility studies, which normally would be jointly financed with the interested water user agencies. Also included is the evaluation of specific proposals for Federal participation in prototype desalting plants. Engineering feasibility studies must first be undertaken to determine in advance the magnitude of desalting technology gain which could be expected as a result of that participation. This is necessary as the particular plant must offer a specific opportunity to advance the science and technology in the desalting field, and contribute materially to low-cost desalting.

B. Engineering economic studies, $300,000

Engineering economic studies and surveys are performed to determine the characteristics of a particular process to a large variety of situations. The size of plant required, energy sources and comparative costs, different modes of operation are all examined covering a wide variety of economic parameters relating to the application of a particular process. This category includes the further correlation of the economics of various saline water conversion processes to other available means of incremental water supply. These studies may also relate to ongoing process development efforts or deal with evaluation of future desalting opportunities. In addition, the funds requested will support economic studies leading to the development of methods that will provide the cost of water for alternate sources of water supply on a common basis.

(c) *Engineering and development*

The Engineering and Development activity is comprised of four major Divisions concerned with the program management of engineering and development effort on promising processes used to desalinate water and with the operations of engineer facilities for the conduct of this work.

The Engineering and Development program for FY 1968 totals $16,430,000. Of this amount $2,650,000 represents prior year appropriations carried over into 1968 for items deferred to the budget year. Analysis of the proposed funding compared to FY 1967 availability is shown below:

[In thousands of dollars]

Program	Amount available, 1967	Fiscal year 1968			Total available, 1968 compared to total available, 1967	Budget estimate, fiscal year 1968 compared to available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
Distillation	10, 162	5, 605	1, 240	4, 365	−4, 557	−5, 797
Membrane	4, 292	4, 830	530	4, 300	+538	+8
Special projects	3, 420	3, 945	430	3, 515	+525	+95
Plant engineering	2, 477	2, 050	450	1, 600	−427	−877
Total	20, 351	16, 430	2, 650	13, 780	−3, 921	−6, 571

Distillation Division

Funds available fiscal year 1967	$10, 162, 000
Funds requested fiscal year 1968	4, 365, 000
Decrease	5, 797, 000

Request for FY 1968 is $4,365,000 or a reduction of $5,797,000 below FY 1967. The total program is $5,605,000 including $1,240,000 carried over from the previous year.

The reduction in the Distillation budget estimate and the total program (including carryover) for FY 1968 is due primarily to a decrease in the requirement for module funds resulting from the completion of the funding of construction of the MSF Module in FY 1967.

[In thousands of dollars]

Program	Amount available 1967	Fiscal year 1968			Total available 1968 compared to total available 1967	Budget estimate fiscal year 1968 compared to available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
I. Pilot plants	1,492	1,189	50	1,139	−303	−353
II. Modules	6,000	2,190	1,190	1,000	−3,810	−5,000
III. Components and support studies	987	1,122		1,122	+135	+135
IV. Advanced studies	1,243	861		861	−382	−382
V. Special research and development	440	243		243	−197	−197
Total	10,162	5,605	1,240	4,365	−4,557	−5,797

The Distillation Program for FY 1968 provides for the continued engineering and development of the distillation process with concentration on the following major activities:

Close liaison with contractors on the MSF module, including the approval of drawings, inspection of equipment and construction, initial startup, and operation.

Investigation, design and procurement of long lead items for a large LTV module.

Testing and evaluation, and dissemination of data derived from the new 1.2 million gpd Senator Clair Engle (multistage, multieffect flash) Distillation Plant which is now being built at the San Diego Saline Water Test Facility. This plant will be in operation by the end of calendar year 1967.

Pilot Plants—Construction, operation, and testing of MSF, LTV and miscellaneous pilot plants.

A stepped-up program in heat transfer, design and component studies that will lead to the design and construction of small and medium size prototype plants, 5 to 15 million gpd.

Studies of advanced distillation plants which are expected to effect a major decrease in water costs up to 50 percent by the years 1975–80.

Conceptual studies of plant design and economics in sizes up to one million gpd including multiprocess plants.

I. PILOT PLANTS

Request for FY 1968 is $1,139,000 or a reduction of $353,000 below FY 1967. The total program is $1,189,000 including $50,000 carried over from the previous year.

The development work in pilot plants breaks down into two categories:

a. operation and investigations on previously funded and constructed pilot plants,

b. the design and construction of new pilot plants and submodules of presently operating plants.

The decrease in the estimate for FY 1968 over FY 1967 results from the fact that the requirements for new pilot plants have been held to a minimum until the results of pilot plants now in operation or projected for operation by FY 1968 can be evaluated. It is also estimated that the pilot plant program will be able to save approximately $108,000 in FY 1968 by converting from visual/manual operation of the pilot plants at Wrightsville Beach to automated instrumentation, and thus reducing the number of contractor employees needed for operators.

Pilot plant operation

Operation of the 25,000 gpd pilot plant at Wrightsville Beach will be continued by Baldwin-Lima-Hamilton. This plant is giving valuable information on scale control methods and limitations. New instrumentation is being added to the plant to increase the value of the data obtained.

The skid-mounted pilot plant will be put into operation in the New York Metropolitan area to determine the feasibility of operating in highly polluted waters.

The aluminum pilot plant will go in service at Wrightsville Beach for a minimum of two-year extended operation. This pilot plant is expected to test the feasibility of using aluminum tubes in distillation plants at an expected savings in capital cost.

The two-stage flash module at the Millstone Point Test Facility of American Machine and Foundry will be continued in operation during FY 1968. It has contributed much valuable knowledge which is now being utilized in the design of the module to be built at San Diego Saline Water Test Facility. Work on this unit will be phased out at the end of this period as the new and more sophisticated, high-capacity, flash test device will be put into operation by Baldwin-Lima-Hamilton at Wrightsville Beach. This unit will be better instrumented and will have more than twice the capacity of the AMF flash test device.

New pilot plants

An LTV pilot plant, comprising five effects, will be set up in FY 1968 and operated at Wrightsville Beach. This pilot plant will incorporate the General Electric-type, high performance, fluted tubes which have shown excellent promise in the laboratory and in a two-effect pilot plant. This pilot plant will have a capacity of approximately 20,000 gpd.

A pretreatment unit to be added to the 25,000 gpd MSF plant will be developed during FY 1968 incorporating a fluidized bed preheater. This system now being developed in bench scale tests at Brookhaven Laboratory shows excellent promise for scale prevention at high temperatures.

A system developed by Allis-Chalmers for the use of direct contact heaters shows excellent promise. It is expected that the system will be moved and operated at Wrightsville Beach to prove out the techniques developed on synthetic brines. It is proposed to design and install a pilot plant incorporating the secondary heat pump principle adapted for the LTV system. This system shows excellent promise for single purpose small and medium size plants.

II. MODULES

Request for FY 1968 is $1,000,000 or a reduction of $5,000,000 below FY 1967. The total program is $2,190,000 including $1,190,000 carried over from the previous year.

The program for FY 1968 provides for investigation, design, and procurement of long lead items for a large LTV module, and for operation of the MSF module. The developments from the modified Freeport demonstration plant, the 250 million gpd conceptual design studies now in process, and the operation of a multieffect LTV pilot plant at Wrightsville Beach featuring high performance heat transfer surfaces are all expected to prove out the appreciable savings inherent in this system. However, before the LTV process can be considered ready for industry's acceptance and for large scale municipal and regional water supplies, a module or test bed must be constructed and operated. Funds are requested for the investigation, design, and purchase of long lead items of an LTV module at the San Diego Saline Water Test Facility in the amount of $1,190,000. The cost of the module is estimated to be less than the MSF module when it is designed and constructed.

III. COMPONENTS AND SUPPORT STUDIES

Request for FY 1968 is $1,122,000 or an increase of $135,000 over FY 1967.

Components, $575,000

This activity provides for development studies that will result in more economical performance and reduce the cost of components of large plants including those which may be funded or programmed in the immediate future.

A major cost factor of a distillation plant is the heat transfer surface. Intensive efforts are continuing in cooperation with industry to develop economical heat transfer surface involving new methods of fabrication and new configurations. The increased funds for 1968 are requested to continue this development which has shown promise in tubes incorporating dropwise condensing promotors, fluted tubes, extended surface tubes, and tubes incorporating turbulance promotors. Increases in heat transfer characteristics of heat exchange surfaces can materially decrease the surface required, and therefore result in significant decreases in plant cost.

A considerably widened scope of materials testing and development is required to develop the most economical plant. The major effort will be in the development of new materials for the particular environmental conditions and the evaluation of materials presently available.

Support studies, $547,000

The Oak Ridge National Laboratory has been used for technical assistance and as consultants on a variety of matters such as the literature searches, evaluation of long tubes, evaluation of flash chamber design, corrosion problems, evaluation of product water treatment, preparation of specifications for new tube concepts, and evaluations of proposals. Funding in FY 1968 is requested to continue this type of assistance. The Oak Ridge National Laboratory has a wide range of professional personnel in many disciplines and can give expert advice in many fields.

IV. ADVANCED STUDIES

Request for FY 1968 is $861,000 or a reduction of $382,000 below FY 1967.

Conceptual designs, for the design of a large (250 mgd) plant of the vapor compression type employing long vertical tubes, will be made under FY 1968 funding. A number of other conceptual designs will also be included. Other studies include a definitive small single-purpose plant and conceptual designs made in conjunction with siting studies.

Funding in FY 1968 is also requested for a minimal effort in solar distillation to keep abreast of the art, and for preparation of a number of manuals for operation, computer codes, value engineering, and maintenance studies. An investigation will be made of hybrid plants combining several of the distillation processes.

V. SPECIAL RESEARCH AND DEVELOPMENT

Request for FY 1968 is $243, 000 or a reduction of $197,000 below FY 1967.

The funds requested under this item are minimal to support and investigate, in the early stages, instrumentation and the possibilities of the desulfating process for water treatment. It also provides a minimal funding for consultants for special projects as they arise.

Membrane Division

Funds available fiscal year 1967	$4, 292, 000
Funds requested fiscal year 1968	4, 300, 000
Increase	8, 000

Request for FY 1968 is $4,300,000 or an increase of $8,000 over FY 1967. The total program is $4,830,000 including $530,000 carried over from the previous year.

The Membrane program for FY 1968 provides for the continued engineering and development of the two most promising membrane programs, namely, reverse osmosis and electrodialysis. The variations of electrodialysis, transport depletion and electrosorption, will also be developed. The increase in the budget estimate and the total FY 1968 program (including carryover) is due to increased emphasis placed on the reverse osmosis process during the budget year.

[In thousands of dollars]

Program	Amount available, 1967	Fiscal year 1968			Total available, 1968, compared to total available, 1967	Budget estimate, fiscal year 1968, compared to available, 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
I. Reverse osmosis	3,061	3,500	350	3,150	+439	+89
Pilot plants	884	1,050	250	800	+166	−84
Test bed plants	....	300	....	300	+300	+300
Process development	1,227	950	....	950	−277	−277
Membrane development	205	400	100	300	+195	+95
System optimization	80	175	....	175	+95	+95
Field tests and pretreatment studies	565	500	....	500	−65	−65
Energy recovery systems	100	125	....	125	+25	+25
II. Electrodialysis and other	1,231	1,330	180	1,150	+99	−81
Pilot plants	485	535	80	455	+50	−30
Process development	190	155	....	155	−35	−35
Membrane development	231	260	50	210	+29	−21
System optimization	100	75	....	75	−25	−25
Field tests and pretreatment studies	225	305	50	255	+80	+30
Total	4,292	4,830	530	4,300	+538	+8

I. REVERSE OSMOSIS

Request for FY 1968 is $3,150,000 or an increase of $89,000 over FY 1967. The total program is $3,500,000 including $350,000 carried over from the previous year.

The funds provide for the development of reverse osmosis process which has strong potential as a low-cost desalting process. Considerable progress will have been made in the development of membrane modules of different configurations including plate and frame, spiral, and shell and tube. Construction of pilot plants based on all these module design concepts should be completed by the end of FY 1967. Feedwater pretreatment methods to remove contaminants (iron, manganese, organics) that cause membrane fouling during reverse osmosis unit operation will also have been established in FY 1967. In FY 1968, it is planned to field test these pilot plants with natural brackish waters, acid mine waters, irrigation return waters and other highly polluted waters. Construction of one 250,000 gpd test bed plant and additional 10,000–20,000 gpd pilot plants based on one or more new design concepts and membranes now under research and engineering study are also planned. Other programs continued in FY 1968 are: (1) optimization of feed water pretreatment methods to achieve economic operation of reverse osmosis units with brackish and sea waters, (2) development of systems to recover energy from process waste brine.

Major portions of the reverse osmosis development are detailed below:

Pilot Plants

Request for FY 1968 is $800,000 or a reduction of $84,000 below FY 1967. The total program is $1,050,000 including $250,000 carried over from the previous year.

This program provides for continuation of testing and evaluation of existing pilot plants and others scheduled for completion in FY 1967; design and construction of a 10,000 gpd unit based on tubular configuration; design and construction of additional pilot plants of 1,000 gpd to 10,000 gpd capacity, based on: (a) new membranes (inorganic membranes, glass membranes, ultra-thin film cellulose acetate membranes); (b) new design concepts (rectangular plates, hollow fine fibers). Finally in FY 1968, the best brackish water tested pilot plant will be modified for sea water opearation.

Test bed plants

Request for FY 1968 is $300,000 or an increase of $300,000 over FY 1967.

The reverse osmosis process is expected to advance to the test bed phase of development by FY 1968. Sufficient data will be available from the plate and frame, spiral module and tubular design pilot plants to allow selection of one of these plant configurations for scale-up and evaluation of a larger second generation reverse osmosis plant with a product water capacity up to 250,000 gpd.

Process development

Request for FY 1968 is $950,000 or a reduction of $277,000 below FY 1967.

The decrease in the estimate for FY 1968 below FY 1967 results from the progression of the reverse osmosis process towards the test bed phase of development. Process development efforts in FY 1968 will be centered on long-term testing of the present designs and one or more new basic designs in small pilot plants (1000 gpd capacity) for the purpose of determining membrane and other components life, their physical and chemical stability and other performance parameters in extended service. It is planned to develop suitable techniques to eliminate membrane fouling and compaction which significantly reduce flux rates in long-term operation.

The economics of using a combination of ion-exchange resin and reverse osmosis processes (at moderate pressures) for desalting sea waters to public health standard quality will be investigated in pilot plant tests.

Membrane development

Request for FY 1968 is $300,000 or an increase of $95,000 over FY 1967. The total program is $400,000 including $100,000 carried over from the previous year.

The increased funding for FY 1968 is required for an accelerated program for development of thin films and suitable support materials for these films. Basic research studies have shown that thin films of cellulose acetate, polysaccharides, polyelectrolytes, porous glass films and modified ion-exchange membranes hold promise for reverse osmosis application. Laboratory test data indicate higher flux rates for some of these films compared to conventional cellulose acetate membranes. The performance characteristics of these films and membranes will be evaluated in small pilot plants using natural saline waters. Because of the extreme thinness of these films, they require rigid porous supports to withstand high pressures typical of reverse osmosis process operation. Efforts will be continued to improve the fabrication techniques and performance characteristics of the conventional cellulose acetate membranes.

System optimization

Request for FY 1968 is $175,000 or an increase of $95,000 over FY 1967.

The increased funding for FY 1968 is required to perform thorough engineering and economic analysis of different membrane module designs (plate and frame, spiral, shell and tube, and narrow channel) and of other components of reverse osmosis systems to aid selection of the most economical and practical designs and components required for construction of 1–10 mgd capacity plants. Process development and field evaluation of these design concepts will have been advanced sufficiently in FY 1967. As part of this effort, tentative design specifications for the construction of a 1 mgd capacity plant on the best design concept will be prepared.

Another effort under this activity will be the projection of product water costs in different capacity plants.

Field tests and pretreatment studies

Request for FY 1968 is $500,000 or a reduction of $65,000 below FY 1967.

The decrease in the estimate for FY 1968 below FY 1967 results from the use of some pretreatment equipment purchased in FY 1967 for laboratory studies in the field test program.

A major obstacle to the development of a practical reverse osmosis system for economic desalting of natural brackish and sea waters is the influence of certain constituents in the feed waters such as carbonates and sulfates of calcium and magnesium, iron, manganese, silica, Boron, organics, etc., on the performance characteristics (membrane life, hydraulics, etc.) of the system components in extended service. In processing many waters by the reverse osmosis process, these constituents reach supersaturation levels or oxidize to insoluble forms. The deposition of these materials on membrane surfaces and brine flow channels cause significant reductions in flux rates.

Laboratory studies on pretreatment systems and methods that permit maximum removal of these precipitate-forming constituents in feed waters will have been completed in FY 1967. The laboratory-proven methods will be field tested in FY 1968 on a wide variety of natural waters (brackish, acid mine drainage, and irrigation return flows).

Energy recovery systems

Request for FY 1968 is $125,000 or an increase of $25,000 over FY 1967.

The increased funding for FY 1968 is needed to purchase high pressure pumps and other equipment.

Significant reduction in product water cost will result in larger plants if energy is recovered from process wastes. Development programs (work exchangers, turbines, etc.) initiated during FY 1967 to recover energy from waste brines will be continued in FY 1968 at about the same level with emphasis on the design, construction and operation of a small demonstration unit.

II. ELECTRODIALYSIS AND OTHER RELATED MEMBRANE PROCESSES

Request for FY 1968 is $1,150,000 or a decrease of $81,000 below FY 1967 The total program is $1,330,000 including $180,000 carried over from the previous year.

This request for funds provides for the development of the electrodialysis process and other related membrane processes including transport depletion and electrosorption. The FY 1968 development program for electrodialysis is based on an investigation to increase operating current densities largely through pilot plant studies and testing. Work in membrane and process development to improve the performance and economics of electrodialysis systems is also emphasized. In FY 1968, it is planned to continue the evaluation of the transport depletion process and to extend the development of the electrosorption process to a larger plant size. Finally, pretreatment studies and techniques will be extended to incude additional field tests on representative brackish and acid mine waters.

Pilot plants

Request for FY 1968 is $455,000 or a reduction of $30,000 below FY 1967. The total program is $535,000 including $80,000 carried over from the previous year.

The program for FY 1968 provides for design and construction of two pilot plants (a 50,000 gpd Nellen Stack and a 25,000 gpd electrodialysis unit to operate on low salinity, high hardness brackish water); evaluation of two 10,000 gpd transport depletion plants of alternate designs completed in FY 1967; and the evaluation of operational characteristics of promising pilot plant designs indicated in the supporting and continuing R&D programs. The electrosorption process will be ready for further development to a larger plant of 25,000 gpd capacity and funds are provided within this category for this purpose.

Process development

Request for FY 1968 is $155,000 or a reduction of $35,000 below FY 1967.

Process development work in FY 1968 will be principally a continuation of the development of electrodialysis stack components suitable for high temperature operation. Emphasis is placed on this area of investigation since developing the capability of operating electrodialysis plants at high temperatures can significantly lower the cost of desalted water by reducing both power consumption and required membrane area. Work initiated in FY 1967 will form the basis for this program and permit a slight reduction of funding in FY 1968.

Membrane development

Request for FY 1968 is $210,000 or a reduction of $21,000 below FY 1967. The total program is $260,000 including $50,000 carried over from the previous year.

Work in membrane development will consist of a continuation of studies to develop low cost membranes. Efforts to improve membrane evaluation techniques will be continued at the Bureau of Reclamation Engineering Laboratories, Denver, Colorado. A major effort in this field will be the evaluation of inorganic membranes for electrodialysis systems. Inorganic membranes have better chemical and physical stability and offer the potential of longer membrane service life than conventional organic membranes presently used. This effort, initiated in FY 1967, will be continued in FY 1968 to include evaluation of these membranes on different brackish waters.

System optimization

Request for FY 1968 is $75,000 or a reduction of $25,000 below FY 1967.

These studies, which comprise a continuing review program, will consist of an engineering and economic analysis of data resulting from separate investigations on electrodialysis and related membrane processes development. A decrease in funds requested is due to the completion of a major portion of electrodialysis process optimization studies in FY 1967.

Field tests and pretreatment studies

Request for FY 1968 is $255,000 or an increase of $30,000 over FY 1967. The total program is $305,000 including $50,000 carried over from the previous year.

The increase in funds is requested in this activity for FY 1968 to undertake a detailed survey of the existing electrodialysis plants to determine long term operating experience and cost-effectiveness of the feed pretreatment on product water costs.

One of the OSW objectives is to evaluate the feasibility of extending the electrodialysis process to treat acid mine drainage waters, irrigation return flows, and other special classes of chemically charged waters. In FY 1967, the economics of demineralizing acid mine waters for beneficial uses by electrodialysis will be determined in the field through a cooperative effort with the Bureau of Mines and the Federal Water Pollution Control Administration. Subsequent field tests will be conducted on other types of special waters at about the same level of funding as FY 1967. Additional pilot plant field tests evaluating different pretreatment systems will be intensified in FY 1968.

Special projects division

Funds available fiscal year 1967	$3, 420, 000
Funds requested fiscal year 1968	3, 515, 000
Increase	95, 000

Request for FY 1968 is $3,515,000 or an increase of $95,000 over FY 1967. The total program is $3,945,000 including $430,000 carried over from the previous year.

The Special Projects Program for FY 1968 provides for (1) the continued development of the crystallization processes, (2) the development of new or improved components for the crystallization processes, (3) design studies for a test bed plant, investigation of new promising processes at the bench scale and pilot plant level (particularly ion exchange) for the conversion of brackish waters and for the disposal of the effluent brines from coastal and inland desalination plants, and (4) evaluation of processes in the demineralization of acid mine drainage.

Major construction involved with the crystallization processes is being funded in FY 1967. Operation, maintenance, and modifications of these plants are scheduled for FY 1968. The resultant decrease in fund requirements for crystallization process in FY 1968 is offset by the increased emphasis on development of more reliable components with higher performance.

[In thousands of dollars]

Program	Amount available, 1967	Fiscal year 1968			Total available, 1968, compared to total available, 1967	Budget estimate, fiscal year 1968, compared to available, 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
I. Crystallization process development	2, 170	1, 700	100	1, 600	−470	−570
II. Component development	265	700		700	+435	+435
III. Application engineering	285	535		535	+250	+250
IV. New Processes	350	460	130	330	+110	−20
V. Brine disposal	250	450	200	250	+200	
VI. Pollution	100	100		100		
Total	3, 420	3, 945	430	3, 515	+525	+95

I. CRYSTALLIZATION PROCESS DEVELOPMENT

Request for FY 1968 is $1,600,000 or a reduction of $570,000 below FY 1967. The total program is $1,700,000 including $100,000 carried over from the previous year.

The vacuum freeze vapor compression process pilot plant at Wrightsville Beach Test Station has performed most satisfactorily to date, yielding engineering information on areas where improvement can be made. These improvements will be made in FY 1967 and a new mobile plant will be constructed for evaluation with brackish water. Funding required in FY 1968 will be to provide for operation and evaluation of these plants.

Detailed examination of the experimental data obtained from previous secondary refrigerant freezing process pilot plant operations points to the necessity for extensive modification or construction of a new pilot plant in FY 1967 to accelerate the development and evaluation of this process. Operation, test and evaluation will commence in FY 1968.

Development of the hydrate process in the pilot plants at Wrightsville Beach will continue, but at a somewhat lower level of effort than in FY 1967.

II. COMPONENT DEVELOPMENT

Request for FY 1968 is $700,000 or an increase of $435,000 over FY 1967.

The increase of $435,000 will be required to investigate further improvements in the efficiency of the vapor compressor, new devices for wash and separation of crystals and brine, and improved performance and reliability, and reduced costs for other components such as heat exchangers, debutanizers, and crystallizers.

III. APPLICATION ENGINEERING

Request for FY 1968 is $535,000 or an increase of $250,000 over FY 1967.

The increase of $250,000 will be chiefly for design studies for a test bed plant of the most advanced crystallization process.

IV. NEW PROCESSES

Request for FY 1968 is $330,000 or a reduction of $20,000 below FY 1967. The total program is $460,000 including $130,000 carried over from the previous year.

Funding required in FY 1968 is for laboratory and pilot plant field studies and evaluation of four new ion-exchange processes under investigation for use with brackish waters.

V. BRINE DISPOSAL

Request for FY 1968 is $250,000 or the same amount as FY 1967. The total program is $450,000 including $200,000 carried over from the previous year.

The program for FY 1968 covers studies of improved ponding techniques and underground disposal for brines from 6 large inland plants; continuation of work on brine disposal from large coastal plants; and applied research in support of engineering studies for the inland plants.

VI. POLLUTION

Request for FY 1968 is $100,000 or the same amount as FY 1967.

Funds required for FY 1968 will be used to support field testing with ion-exchange processes for the desalination of acid mine drainage. Other processes under the cognizance of Special Projects Division will not be available for application problems such as acid mine drainage and irrigation return flows until FY 1969.

Plant engineering division

Funds available fiscal year 1967	$2,477,000
Funds requested fiscal year 1968	1,600,000
Decrease	877,000

Request for FY 1968 is $1,600,000 or a reduction of $877,000 below FY 1967. The total program is $2,050,000 including $450,000 carried over from the previous year.

The OSW Plant Engineering Division (formerly "Engineering Services") program provides for (1) the construction, operation and maintenance of test facilities where pilot plants and other test programs can be conducted, and (2) the conduct of general engineering support services to the other program areas, including the development and preparation of designs, drawings and specifications and reports based upon the construction and operation of pilot plants and larger size plants.

The decrease in the budget estimate and the total FY 1968 program (including carryover) is due primarily to the reduction in construction activity at the West Coast Test Facility and the Brackish Water Test Facility.

[In thousands of dollars]

Program	Amount available, 1967	Fiscal year 1968			Total available, 1968 compared to total available, 1967	Budget estimate, fiscal year 1968 compared to available 1967
		Estimated total available	Unobligated balance from 1967	Budget estimate		
I. East coast test facility	400	410	----------	410	+10	+10
II. West coast test facility	1,465	510	----------	510	−955	−955
III. Brackish water test facility	564	510	350	160	−54	−404
IV. In-plant corrosion	48	40	----------	40	−8	−8
V. Freeport test facility	----------	400	----------	400	+400	+400
VI. Webster test facility	----------	80	----------	80	+80	+80
VII. Sea water conversion data book	----------	60	60	----------	+60	----------
VIII. Engineering development program	----------	40	40	----------	+40	----------
Total	2,477	2,050	450	1,600	−427	−877

I. EAST COAST TEST FACILITY

Request for FY 1968 is $410,000 or an increase of $10,000 over FY 1967.

The FY 1968 fund requirement is to provide for maintenance operation, and modifications to the site. The increase is due primarily to the need to purchase analytical laboratory equipment. Maintenance and operation expense is expected to be approximately the same as for FY 1967, with nine (9) pilot plants located at the facility and with the increased laboratory services being supplied to the contractors working at the facility.

The pilot plant development of sea water conversion processes by OSW is concentrated at this location in order to achieve economy of operation, better communication of results and to avoid duplication of activities. This site, which was donated to the Government by the State of North Carolina, is ideally suited for the purpose because of the availability of clean sea water, ease of accessibility to the site, and its protection from Atlantic Ocean storms and high tides by virtue of its being located approximately one mile from the Ocean itself.

II. WEST COAST TEST FACILITY

Request for FY 1968 is $510,000 or a reduction of $955,000 below FY 1967.

The large reduction in fund requirements is due to the fact that design and construction of the facilities ($1,291,000) will be essentially completed by the end of FY 1967. The estimate of $510,000 for FY 1968 is the expected cost for operation and maintenance during the budget year. This test facility, located on land leased from the San Diego Gas & Electric Company, provides a location for operating the 1,000,000 gpd advanced design distillation (Clair Engle) plant and the 17 mgd module and for testing other large plant modules and equipment.

III. BRACKISH WATER TEST FACILITY

Request for FY 1968 is $160,000 or a reduction of $404,000 below FY 1967 The total program is $510,000 including $350,000 carried over from the previous year.

This test facility will permit the concentration of OSW pilot plant testing of brackish waters with accompanying economy and efficiency of operations similar to those for sea water testing at Wrightsville Beach, North Carolina. It is planned to locate this facility at the Walker Air Force Base near Roswell, New Mexico. The FY 1968 program provides for completion of construction, partially funded in FY 1967, and the expected cost for operation and maintenance during the budget year. Reverse osmosis, vacuum freezing, electrodialysis, vapor compression, and multistage flash distillation pilot plants are scheduled for testing at the facility during FY 1968.

IV. IN-PLANT CORROSION

Request for FY 1968 is $40,000 or a reduction of $8,000 below FY 1967.

This is a continuing program of collecting, evaluating, and studying corrosion data from operating plants. A knowledge of in-plant corrosion is essential for selecting materials for future desalting plants and for a better understanding of present operating problems.

V. FREEPORT TEST FACILITY

Request for FY 1968 is $400,000 or an increase of $400,000 over FY 1967.

The FY 1968 estimate of $400,000 provides for operation of the Freeport Test Facility in FY 1968. This facility is expected to be constructed and completed in FY 1967. Design of the facility is included as a part of the O&M budget in FY 1967 since the facilities to be constructed are integrally related to the existing plant at Freeport and must be scheduled with the Freeport plants' scheduled downtime for maintenance and modifications.

The estimate of $400,000 provides for operation and maintenance of the facilities during FY 1968 which will implement the Oak Ridge National Laboratory's program that is aimed at the investigation and development of distillation processes. These funds will provide for on-site development of deaerator equipment, a falling-film evaporator pilot plant (high temperature operation, fluted tube designs, ect.), and sea water pretreatment units. Corrosion investigations, economical methods of treating product water to make it compatible with municipal distribution systems, and other related problems will also be tested at the facility during FY 1968.

VI. WEBSTER TEST FACILITY

Request for FY 1968 is $80,000 or an increase of $80,000 over FY 1967.

The FY 1968 estimate of $80,000 provides for the operation of the Webster Test Facility during the budget year. This facility is expected to be constructed and completed in FY 1967. Construction of the pretreatment test facility was included as a part of the O&M budget in FY 1967 since the facilities being constructed are integrally related to the existing plant maintenance and operation program and must be scheduled with the Webster plant's scheduled downtime for maintenance and modifications.

VII. SEA WATER CONVERSION DATA BOOK

While no funds are requested in FY 1968, the total program is $60,000 which represents the amount carried over from the previous year.

This provides for accumulation and incorporation of technical and design data into the Sea Water Conversion Data Book. The Data Book is a continuing effort to provide essential data and reference aids to designers and engineers; however, due to priorities established within the program in FY 1967, funds were not available for this work, thus resulting in the deferral of this effort to FY 1968.

VIII. ENGINEERING DEVELOPMENT PROGRAM

While no funds are requested in FY 1968, the total program is $40,000 which represents the amount carried over from the previous year.

This provides for contingencies arising from the operation of the test facilities. The pilot plant program is generally not definitive at the beginning of the fiscal year; hence, funds are required for additional services which arise during the year. This amount is considered a modest sum for this purpose.

(*d*) *Administration and coordination*

Funds available fiscal year 1967	$1, 485, 000
Funds requested fiscal year 1968	1, 550, 000
Increase	65, 000

This budget activity provides for (1) the necessary planning, supervision, and administration of the Office of Saline Water's research and development contract and grant program, (2) the planning, supervision and administration of the program analysis activities and feasibility studies and water economics investigations carried on by the OSW program, and (3) the necessary financial, procurement and administrative staffs that support the technical activities and insure that sound business management principles are applied.

The FY 1968 estimate of $1,550,000 represents an increase of $65,000 over the amount available in FY 1967 for this purpose. The increase results from the addition of four new positions during FY 1968 and an increase in the average salary to allow for higher grade positions. Despite the fact that the FY 1968 program budget is below the level of the FY 1967 estimate, the program has a critical need for the new positions requested in FY 1968. Over the past several years the Saline Water Program has received significant increases in its program while the personnel provided through the Administration and Coordination Budget have increased at a much lower rate. The program has, therefore, had difficulty in obtaining the technical and administrative support to manage the expanded programs.

The total obligational authority in FY 1967 (including carryover from FY 1966) is 109.9% higher than the amount provided in FY 1965. On the other hand, the personnel positions available to the program in FY 1967 over FY 1965 have only increased by 21.1%.

The four positions requested in FY 1968 are therefore required to enable the program staffing to catch up with the recent increases in program funding.

Regarding OSW's request for higher grade positions, past experience in recruiting for the positions has indicated that if OSW is to compete for the talent that is needed to initiate, plan and direct the expanding OSW activities, it must have the capability to offer qualified personnel higher salaries than it has been able to in the past and to promote and retain those individuals in the present OSW staff who are most worthy and qualified.

Itemization of estimate

	Actual 1966	Estimate 1967	Estimate 1968	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$17,428,486	$28,125,991	$24,482,000	−$3,643,991
Recovery of prior year obligations	−403,367			
Unobligated balance available, start of year	−1,182,110	−4,156,991	−3,500,000	+656,991
Unobligated balance available, end of year	+4,156,991	+3,500,000		−3,500,000
New obligational authority	20,000,000	27,469,000	20,982,000	−6,487,000
Appropriation	20,000,000	27,500,000	20,982,000	−6,518,000
Transfer to salaries and expenses, Office of the Secretary, Department of Interior		−31,000		+31,000
Adjusted appropriation	20,000,000	27,469,000	20,982,000	−6,487,000
Obligations by objects:				
11 Personnel compensation	994,336	1,293,000	1,323,000	+30,000
12 Personnel benefits	68,923	93,000	98,000	+5,000
21 Travel and transportation of persons	62,712	105,000	115,000	+10,000
22 Transportation of things	7,667	11,000	8,000	−3,000
23 Rent, communications, and utilities	44,374	50,000	50,000	
24 Printing and reproduction	231,401	85,000	85,000	
25 Other services	9,639,361	16,398,991	15,726,000	−672,991
Services of other agencies	4,250,633	4,950,000	4,537,000	−413,000
26 Supplies and materials	23,457	20,000	20,000	
31 Equipment	31,721	20,000	20,000	
32 Lands and structures		2,100,000		−2,100,000
41 Grants, subsidies, and contributions	2,073,901	3,000,000	2,500,000	−500,000
Total obligations	17,428,486	28,125,991	24,482,000	−3,643,991

TOTAL OBLIGATIONAL AUTHORITY AND CONSTRUCTION DEFERRAL

Chairman HAYDEN. The committee will be glad to have your specific comments on your "Salaries and expenses" item.

Dr. HUNTER. If I understand you correctly, you would like more detail on why our total authorization has been reduced, our request is less than last year.

Chairman HAYDEN. Yes.

Dr. HUNTER. In carrying out such a program, you do not always find everthing progressing at a smooth rate. In 1967 we provided the principal sum for the construction of a major module, of the order of a total investment of approximately $5 million. This module has now been funded and is under design and will be constructed within a year's period. In 1968 we had originally planned construction of a second module for the vertical evaporator process. In the budget we had a sum of approximately $6 million in the program for this purpose. In reviewing the progress on the vertical evaporator process, we find that we are not quite ready to make the design. We are, for example, just now modifying our Freeport, Tex., plant which is based on the vertical evaporator process, to add additional effects, that represents the current state of technology.

Before we initiate the design and construction of the vertical evaporator module, we would like to have the benefit of completing that construction and operating the plant under these conditions. So, we have deferred this item, which is a major item.

Recognizing the deferral of this item, you can see that the remaining items in the program actually have had a small increase, except for that one item.

COOPERATION WITH FEDERAL WATER POLLUTION CONTROL ADMINISTRATION

Chairman HAYDEN. I assume that you do work closely with the Federal Water Pollution Control Administration, in connection with the identification and treatment of pollutants in the water with which you deal.

Dr. HUNTER. Yes, sir; we are carrying out cooperative programs with the Federal Water Pollution Control Administration. I mentioned the acid mine water program, which is jointly funded and jointly staffed. I also mentioned the irrigation return-flow program, which is again jointly funded and jointly staffed. In the area of research, we do have a committee which includes Dr. Gillam, of our office, and a representative of the Federal Water Pollution Control Administration, as well as other Interior research agencies, in which they compare their research plans in order to avoid duplication and in order to take advantage of the work conducted by the other agencies.

So, we are working very closely together.

WASTE MATERIAL DISPOSAL

Chairman HAYDEN. What progress are you making in disposing of waste materials resulting from your desalting processes?

SEASHORE AND INLAND PLANTS

Dr. HUNTER. In the area of seashore plants, this problem is now within the range of solution by careful analysis. The remaining problem is in the area of inland plants. There are several different means by which you can dispose of wastes. There are three basic approaches.

EVAPORATION PONDS

One is that you can use evaporation ponds which evaporate the water and leave behind the salts. This is an expensive approach, because it ties up—for reasonable size plants, it ties up fairly good areas of land and it costs something to build and maintain such ponds. We are carrying out investigation of means of enhancing the evaporation rate from such ponds as a means of reducing their cost.

UNDERGROUND INJECTION OF BRINES

The second approach that can be taken is underground injection of the brines. This problem is very difficult, technically, because in many cases the permeability of the underground soils is not sufficient to allow injection to be made under economic costs. Moreover, there is always the danger that by injecting brines you will disturb the water balance and thus contaminate some fresh-water aquifer. We are beginning to look seriously into this problem in cooperation with other Interior agencies.

BRINE VOLUME REDUCTION AND CONVEYANCE

The third approach would be to reduce the volume of the brine to the point that we could effectively dispose of it by transporting it away. In order to do this, it would be necessary to greatly improve our technology. We find at the present time that the most economical range of operation is to produce brines that are still well below the point of effectively transporting them away. We are beginning to look more seriously at improving our technology so that we can go to greater concentration factors which would reduce the volume of the brine. It would also begin to make it possible to consider extracting viable byproducts from the brine, which is not currently the case. I think this problem will take us some time to resolve. I can only say that we will continue to devote considerable attention to it.

MEMBRANE PROGRAMS: ELECTRODIALYSIS AND REVERSE OSMOSIS PROCESSES

Chairman HAYDEN. What progress are you making on development of your membrane programs?

Dr. HUNTER. In the membrane program, there are two different processes; electrodialysis and reverse osmosis. We have just initiated the early pilot plant test on a variation of the electrodialysis process which we believe may offer very interesting economic potential. This is a variation we call a "transport depletion." In this process we replace the most troublesome membrane with a modified membrane type which permits us to operate a given plant with much greater through-put. It does have slightly less energy efficiency, and by means of the current pilot plant tests and a second series of pilot plant tests, we hope to determine if this will materially improve the cost.

In reverse osmosis, we are carrying on a number of research programs and a number of development programs seeking to improve these membranes. We are having significant success. This process is continually becoming more interesting because of the improvement in these membranes.

ENERGY RECOVERY SYSTEMS

Chairman HAYDEN. What success are you having in your programs to recover energy from waste brines?

Dr. **Hunter**. This, I believe, refers to the reverse osmosis process, where the brine stream is discharged at high pressure. In the fiscal 1968 program we are proposing to initiate investigation of energy-recovery systems. We have already performed a limited amount of work in this area, but have not yet been able to devote extensive funds. We will, in 1968.

Research at Webster, S. Dak.

Chairman **Hayden**. Where are you experimenting with your electrodialysis process to treat acid mine drainage waters, irrigation return flows, and other chemically charged waters?

Dr. **Hunter**. In Webster, S. Dak., we have our basic facility for the electrodialysis process. At that facility the last 2 years we have conducted extensive work on pretreatment to prevent damage to the process by handling difficult waters. This is the basis of our work.

ACID MINE WATER SITE TEST

We now have a contract with a company to simulate, in their laboratories, acid mine water and operate electrodialysis plants. If this is successful we will then take a pilot plant to an actual acid mine water site and operate it on real water. The site that this will be conducted at is in West Virginia, where the Federal Water Pollution Control Administration and Bureau of Mines have a facility.

IRRIGATION RETURN FLOW SITE TEST

The irrigation return flow water problem we will operate at a site in California on irrigation return flow, and this will include use of electrodialysis. The site in West Virginia is Elkins. The California site on irrigation return flow is Firebaugh, near Fresno.

PROJECT MANAGEMENT AND PLANT ENGINEERING

Chairman **Hayden**. Will you describe briefly your plan of work in connection with the Plant Engineering Division in fiscal year 1968?

Dr. **Hunter**. The Plant Engineering Division has two functions. One is the plant engineering per se; the other is the project manager of the MWD project and the Saudi Arabian project. In the plant engineering portion of this group, they have the responsibility for the operation and maintenance of each of our major test beds and each of our test stations. That includes the Wrightsville Beach, N.C., test station. It will include the test station at San Diego, which is now under construction. It will include the operation and maintenance of the plants at Webster, S. Dak.; Roswell, N. Mex.; and Freeport, Tex. In the event that we are involved in the construction of a major program, as in the case of the Metropolitan Water District plant and in Saudi Arabia, this would also come under this division. This unit also is responsible for providing the non-water-desalting engineering design. That is, in the case of Saudi Arabia, they will be responsible for the design of the plant buildings, the boilers, the generators, turbines, all the switch gear. The Developmental Division would be responsible for the design of the desalting train itself.

1967 PROGRAM DEFERRALS

Chairman HAYDEN. The Bureau of the Budget has advised the committee that $3 million in expenditures and $3½ million in your program level are to be deferred or cut back. The description is that there will be a slower pace of research and development. Specifically, what have you had to defer, and in what amounts?

Dr. HUNTER. This deferral was distributed between our various divisions. In the area of research approximately $850,000 of research activity has been deferred; in the Distillation Division, just over $1,200,000; in the membrane area, just over a half million dollars; in special projects, just over $400,000; and plant engineering has been about $450,000.

These programs that are deferred mean that things that we would probably have initiated late in this year will be carried over into the beginning of 1968. From our own viewpoint, I would like to comment that because of our limited staff it is highly questionable that we could have effectively contracted out this money, even without the request.

NONDISRUPTION OF PROGRAMS

Chairman HAYDEN. What effect will these deferrals have on your fiscal year 1968 and future programs?

Dr. HUNTER. As I pointed out, including these deferrals our 1968 program will be just over $26 million. I think this will allow us to continue effectively in our efforts to develop economic water. I do not think that we will have any serious disruption of the program.

ADMINISTRATION AND COORDINATION INCREASE

Chairman HAYDEN. For "Administration and coordination," you propose an appropriation of $1,550,000, which is $65,000 more than you had last year.

ADDITIONAL POSITIONS

You indicate that this amount will be for four new positions. Would you please explain why it is necessary that you bring four new employees aboard?

Dr. HUNTER. Sir, we are requesting five new positions; four of those are under our salaries and expenses authorization, one of them is under the operation and maintenance authorization. So, if we put these together, we would then have a total of five new positions. I pointed out that the rate of growth of our total obligation authority has been much greater than the rate of growth of our staff. At the same time, the complexities of the program have increased.

TECHNIQUES DEVELOPMENT

We are now facing some of the real problems. We are trying to develop techniques to solve real field operation problems. I think the proper management of this program will require at least these additional positions.

ECONOMIC ANALYSIS INVOLVEMENT

I have also emphasized that in order to effectively guide this program we are becoming more and more involved in economic analysis and we are now trying to initiate an automation of our calculations by use of computers, so that we will be able to conduct a true economic cost effectiveness study. This will be used to guide our program.

I think the addition of these new positions will be returned many times over in the effectiveness of the program.

1967 AND 1968 PERSONNEL INCREASES

Chairman Hayden. How many employees did you add in the fiscal year 1967 to your fiscal year 1966 rolls?

Dr. Hunter. Our total authorization in 1966 was 110.

Chairman Hayden. I want the actual number of employees.

Dr. Hunter. In 1966 the actual number authorized was 116. We had on board 110. In 1967 our authorization is 132. I do not know exactly how many we have on board now. We have a number of actions in process. The number changes almost daily. We are then asking to go to 137 in 1968. So there was an addition of 16 between 1966 and 1967, and an addition of five between 1967 and 1968.

OPERATION AND MAINTENANCE

Chairman Hayden. I will place in the record the justification statement in support of your request for $2,300,000 for "Operation and maintenance" activities in fiscal year 1968. This is $51,000 less than was appropriated in the prior fiscal year.

(The justification follows:)

Appropriation and total available, 1966	$2, 485, 000
Appropriation and total available, 1967	2, 351, 000

SUMMARY OF INCREASES AND DECREASES, 1968

Operation and Maintenance:	
Increase in operation and maintenance costs	+$460, 000
Decrease in plant modifications	−511, 000
Net decrease, 1968	−51, 000
Budget estimate, 1968	2, 300, 000

Analysis by activities

Activity	Fiscal year 1966 amount available	Fiscal year 1967 appropriation and available	Fiscal year 1968 estimate	Increase (+), or decrease (−) over 1967
1. Operation and maintenance	$1, 817, 799	$2, 139, 000	$2, 088, 000	−$51, 000
2. Administration	206, 406	212, 000	212, 000	
Unobligated balance lapsing	460, 795			
Total	2, 485, 000	2, 351, 000	2, 300, 000	−51, 000

Justification Operation and Maintenance Appropriation

This appropriation provides the Department of the Interior's Office of Saline Water with the necessary funds for the operation, maintenance and modification of the Office of Saline Water's demonstration plants that were constructed and are operated under authority contained in Public Law 85–883 (as amended by

Public Law 87–295). Included in this FY 1968 request for appropriations are: (1) funds to cover the normal operation and maintenance costs of the demonstration plants located at Freeport, Texas; San Diego, California; Webster, South Dakota; and Roswell, New Mexico, (2) funds to cover necessary modifications to these plants to increase their usefulness to the program, and (3) the salaries and expenses of OSW employees associated with the above program activities.

The FY 1968 estimate of $2,300,000 is a decrease of $51,000 below the amount available for FY 1967 of $2,351,000. The decrease is the result of a substantial decrease in modifications and a smaller increase for operating costs, principally for the Clair Engle plant.

A detailed analysis of the Program follows.

	Available, fiscal year 1967	Requested, fiscal year 1968	Increase or decrease
(*a*) Operating costs:			
Freeport, Tex	$500,000	$535,000	+$35,000
San Diego, Calif	150,000	550,000	+400,000
Webster, S. Dak	200,000	200,000	
Roswell, N. Mex	500,000	525,000	+25,000
Total, operating costs	1,350,000	1,810,000	+460,000
(*b*) Modifications:			
Freeport, Tex	250,000		−250,000
San Diego, Calif	160,000	109,000	−51,000
Webster, S. Dak	204,000	120,000	−84,000
Roswell, N. Mex	175,000	49,000	−126,000
Total, modifications	789,000	278,000	−511,000
(*c*) Administration	212,000	212,000	
Grand total	2,351,000	2,300,000	−51,000

(*a*) *Operation and maintenance*

The estimate for FY 1968 is $1,810,000 an increase of $460,000 over FY 1967. This increase in operating costs is due to the following factors:

I. *Freeport, Tex.*

Funds available fiscal year 1967	$500,000
Funds requested fiscal year 1968	535,000
Increase	35,000

The increase of $35,000 in FY 1968 reflects the increased emphasis placed on the process development and materials studies being carried out at this plant. Improved instrumentation has been added to the plant that will provide the program with more detailed information on the plant's performance. The increased cost results from the assignment of two additional contractor personnel associated with this effort.

II. *San Diego, Calif.*

Funds available fiscal year 1967	$150,000
Funds requested fiscal year 1968	550,000
Increase	400,000

The replacement plant for the Point Loma Distillation Plant is currently under construction and is expected to be completed during the last quarter of FY 1967. The increase of $400,000 in FY 1968 reflects the funding requirement to cover a full year's operation and maintenance program for the plant.

III. *Webster, S. Dak.*

Funds available fiscal year 1967	$200,000
Funds requested fiscal year 1968	200,000
No change	0

The operating and maintenance program for the Webster Plant is expected to require the same funding in FY 1968 as it received in FY 1967.

IV. *Roswell, N. Mex.*

Funds available fiscal year 1967	$500, 000
Funds requested fiscal year 1968	525, 000
Increase	25, 000

The increase of $25,000 in FY 1968 reflects increased emphasis that will be placed on the development program and materials studies conducted at Roswell. The increase reflects the addition of one contractor position to handle the program.

(*b*) *Plant modifications*

The estimate for FY 1968 is $278,000 a decrease of $511,000 below the FY 1967 program. Plant modifications planned for FY 1968 as compared to FY 1967 are as follows:

I. *Freeport, Tex.*

Funds available fiscal year 1967	$250, 000
Funds requested fiscal year 1968	0
Decrease	250, 000

There are no modifications planned to the Freeport Plant in FY 1968 after expansion of the plant to 17 effects and the construction associated with the test facility at Freeport are completed in FY 1967.

II. *San Diego, Calif.*

Funds available fiscal year 1967	$160, 000
Funds requested fiscal year 1968	109, 000
Decrease	51, 000

The decrease of $51,000 in FY 1968 represents a reduction in modification activity associated with the new Clair Engle Desalting Plant. The funds in FY 1968 are required to initiate the design and engineering of equipment needed for high temperature operation and for the testing of alternate methods of feed water pretreatment to remove scale forming compounds.

III. *Webster, S. Dak.*

Funds available fiscal year 1967	$204, 000
Funds requested fiscal year 1968	120, 000
Decrease	84, 000

Many minor changes are planned in FY 1968 for the Webster Plant that will total $120,000. These include changes in the pretreatment system to keep fouling materials out of the membrane stacks. The FY 1968 development program for this plant will consist of sustained production runs to test several feed water pretreatment methods.

IV. *Rosewell, N. Mex.*

Funds available fiscal year 1967	$175, 000
Funds requested fiscal year 1968	49, 000
Decrease	126, 000

The decrease of $126,000 in FY 1968 is due to expected completion in FY 1967 of modifications in a deaeration system and addition of a cold lime-soda pretreatment system. Minor modifications to major items of equipment are planned for FY 1968.

(*c*) *Administration*

Funds available fiscal year 1967	$212, 000
Funds requested fiscal year 1968	212, 000
No change	0

This budget activity provides for the necessary technical and administrative planning, supervision and management of the Office of Saline Water's demonstration plant program.

The FY 1968 estimate of $212,000 is the same as the amount available for FY 1967 and reflects planned economies that will absorb the costs of an additional position in FY 1968 to handle the increased activity associated with the expanded operating and test programs of the four demonstration plants expected to be in operation during FY 1968. In FY 1967 only three plants were in operation for the full year.

Itemization of estimate

	Actual, 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease(−)
Program and financing:				
Total obligations	$2,024,205	$2,351,000	$2,300,000	−$51,000
Unobligated balance lapsing	+460,795	----------	----------	----------
New obligational authority (appropriation)	2,485,000	2,351,000	2,300,000	−51,000
Obligations by objects:				
11 Personnel compensation	215,024	210,000	224,000	+14,000
12 Personnel benefits	15,660	15,000	17,000	+2,000
21 Travel and transportation of persons	5,436	5,000	3,000	−2,000
22 Transportation of things	241	1,000	1,000	----------
23 Rent, communications, and utilities	204,299	238,000	235,000	−3,000
24 Printing and reproduction	290	8,000	8,000	----------
25 Other services	1,579,767	1,267,000	1,207,000	−60,000
Services of other agencies	3,113	5,000	3,000	−2,000
26 Supplies and materials	375	1,000	1,000	----------
31 Equipment	----------	1,000	1,000	----------
32 Lands and structures	----------	600,000	600,000	----------
Total obligations	2,024,205	2,351,000	2,300,000	−51,000

Clair Engle Plant, San Diego, Calif.

Chairman Hayden. Do you have any particular comment on the operation and maintenance program for the coming year?

Dr. Hunter. The operation and maintenance program for the coming year will face the additional burden of supporting the operation of our Clair Engle plant near San Diego. You will recall the plant we originally had there was moved to Guantanamo, Cuba, and we are now constructing a replacement which will be a very advanced distillation plant. So, in 1968 that plant will be in operation and we will have to provide funds to carry out its operation and maintenance. This will require some addition in the operation burden out of this budget.

Modification Reduction

On the other side, to balance this, however, we are making in 1967 extensive modifications to our field test facilities which come out of the same appropriation. In 1968 we have relatively few modifications programed. So the combination of the additional operating expense with the reduction of modification costs has produced a slight change that you have commented on.

Chairman Hayden. Do you have any questions, Senator Bartlett?

EMPLOYMENT DIFFICULTIES

Senator Bartlett. Do you have trouble, Dr. Hunter, in recruiting people technically qualified?

Dr. Hunter. Yes, sir, we do. I think our position is no different than almost anyone else's I know of. Highly qualified people are in short supply. We also have difficulty because of the limitation in senior grades. As you know, we always work against a ceiling on the higher grades because we do not have in-house laboratories and extensive facilities. Even our field test facilities are operated under contract. We end up with somewhat higher percents of our positions being in the senior grades. We do not have need for many technicians and such people.

Yes, we do have a problem there.

PROFESSIONAL AND NONPROFESSIONAL PERSONNEL

Senator BARTLETT. Of your total staff, how many are on the professional level and how many on the clerical? You may put it in the record.

Dr. Hunter. Yes, sir; we will be happy to.

(The information follows:)

Actual permanent personnel as of Feb. 28, 1967

Professional	59
Stenographic and clerical	36
Operation and maintenance [1]	10
Total	105

[1] East Coast Test Facility, Wrightsville Beach, N.C.

POTENTIAL BRINE BYPRODUCTS

Senator BARTLETT. You mentioned a while back the potential that exists in respect to isolating valuable byproducts from brine. What would some of those be?

Dr. HUNTER. Of course, there is a great deal of salt in it. Chlorine would be a valuable byproduct. If we had a great enough concentration ratio we could also extract profitably, I think, bromine, sulfuric acid, magnesium, potassium. You see, water is quite rich in chemicals. As you know, the Dow Co. uses sea water to provide a source of magnesium for a large magnesium plant down in Texas.

Senator BARTLETT. A goodly array?

Dr. HUNTER. Yes, there are quite a few things to be done if we can achieve practical operation at good concentration ratios.

SAUDI ARABIA PLANT OPERATION

Senator BARTLETT. Did you say Saudi Arabia intends to finance the plant that is to be built there on its own?

Dr. HUNTER. Yes, sir. I would like to give you a little more history of that operation. We believe that people who want to buy plants are interested in buying water. They are not particularly interested in buying an experiment. So we feel that as well as discovering technology we must reduce this to a point of practical demonstration so that a prospective owner can buy with confidence that he will get water. We have then undertaken what we call a universal 2½ million-gallon-per-day plant design. This is designed so that it can be procured with alternative selection to optimize it for a great many locations.

The first practical demonstration of this will be the Saudi Arabian plant. In other words, we have proposed a method of design which is rather complex because it allows you to make selections to optimize to your particular circumstances.

Plant Size and Water Source

Senator Bartlett. How big will that one be?

Dr. Hunter. That is a basic stream of two and a half million gallons.

Chairman Hayden. May I inquire? Do you get the water out of the Persian Gulf?

Dr. Hunter. Yes, sir. So then in order to test that, we have properly taken into account all of the factors, we welcome the opportunity of working with the Saudi Arabian Government where we will apply the design procedures developed under this universal design to a real plant. We therefore are contributing the design of the water train. The Saudi Arabian Government is providing all of the money for design of the nonwater train and erection construction, procurement, and everything else. They are putting in approximately $18 million into the plant of their own money.

U.S. Plant Expenditures

Senator Bartlett. How much have we put in so far?

Dr. Hunter. I think to modify that design and adapt it to the particular circumstances in Saudi Arabia cost us approximately $25,000 to $30,000.

Senator Bartlett. That is all we have invested?

Dr. Hunter. We have also invested the time of some of our staff, currently one man and part-time of a secretary. We will very soon have to add a field engineer at the site to observe the construction.

Senator Bartlett. There would be no reimbursement for any of these charges?

Dr. Hunter. No. We will bear the expense of our own staff. I would like to comment that I think the benefit we have received in better understanding what actual field requirements for such a plant are have more than outweighed any expense we will encounter.

WATER FOR CITY OF JIDDA

Senator Bartlett. Where will they use this water? Two and a half million gallons a day won't make the desert bloom.

Dr. Hunter. They are going to build two streams so that they will have a total capacity of 5 million gallons per day. They do plan a series of additions at intervals in the future. The water will go to the city of Jidda. Currently the city is supplied by water from two separate waddies. These are rivers that are dry part of the year. That water has been obtained at the expense of taking out of production some agricultural areas.

So, the Saudi Arabians are very interested in finding alternative supplies for the city which is growing rapidly, and allowing the water from the waddies to again be used for the earlier purpose of agriculture.

Senator Bartlett. Will this two and a half million gallons be enough to supply the city?

Dr. Hunter. It will be enough to solve their immediate problems and they will, as I say, by a series of progressive procurement of desalting equipment take care of additional requirements as they come along.

COOPERATIVE EFFORT IN ISRAEL

Senator BARTLETT. In his prepared statement Assistant Secretary DiLuzio mentioned cooperative effort that has been taking place in Israel. He said:

> We have made no commitment of financial support for the construction and operation of this plant.

This leads me to ask if negotiations looking toward that end have been undertaken?

Dr. HUNTER. As you know, Ambassador Bunker made a trip to Israel recently where he was examining the general requirements for such a plant. I do not know of any commitments that were made—I know that no commitments have been made by the Department of the Interior to participate in the construction. I also do not know of any commitments that he has made. I do not know what will happen in the future.

Senator BARTLETT. You do not know whether Israel has asked for this?

Dr. HUNTER. I do not know whether they have asked or not. I certainly have not heard of any request.

PLANT PROCESS VARIANCES

Senator BARTLETT. Now your plants at Freeport, Tex.; San Diego, Calif.; Webster, S. Dak.; and Roswell, N. Mex., do each of these seek to use a different process?

Dr. HUNTER. Yes, sir. The plant at Webster, is an electrodialysis plant. We also operate at that facility some small pilot plants and will on different processes. The Roswell plant is a distillation plant of a variety known as vapor compression. The Freeport plant is a vertical evaporator distillation plant. The plant under construction at the San Diego location is a multistage flash plant which will permit very high temperature operation.

Chairman HAYDEN. Will that duplicate the plant you had before?

Dr. HUNTER. Duplicate is not quite a strong enough word. It will more than duplicate it. It will be considerably advanced. It replaces it in our program, but technically it is not a duplicate. It is an advance.

Chairman HAYDEN. It will produce a greater quantity of water?

Dr. HUNTER. It will be designed to produce the same normal quantity of water. It is simply of a more advanced technical design. It will produce this water using approximately half as much energy input. It will operate at a significantly higher temperature and thus will be quite a contribution in the technology.

FEASIBILITY STUDY

Senator BARTLETT. You spoke about the possibility of a plant capable of supplying a billion gallons a day. How would that compare in size with the plant proposed for Los Angeles?

Dr. HUNTER. First, I spoke of a billion-gallon-per-day plant as a feasibility study.

Senator BARTLETT. Yes.

Dr. HUNTER. There are no plans at this time to construct it. I personally think it will be technically possible some day to do so. Such a plant would be approximately seven times larger than the Bolser Island MWD plant.

Senator BARTLETT. Seven times?

Dr. HUNTER. Yes.

QUANTITATIVE STUDY AND NEW PROCESS EVALUATION

Senator BARTLETT. You spoke on page 4 of the quantitative study and evaluation of promising new processes. Are you hopeful that they can be brought into existence?

Dr. HUNTER. I think we must realize that the prospect of finding a truly significant new process is small but the necessity of searching for it, I think, is real. We have in the course of our history initiated the reverse osmosis process, which is at the time a brandnew process. It is now becoming a very important part of our program. Industry has taken this process up with great enthusiasm. The chance of doing this again, I think, is real. We certainly hope to do it.

I do not think that we can base a program on the firm expectation that we will invent something.

Senator BARTLETT. But you cannot deny yourself and the country opportunities for discovery of new methods?

Dr. HUNTER. The opportunity is real. We have done it before. There is no reason why we can't do it again.

Senator BARTLETT. That is one reason why your office is where it is?

Dr. HUNTER. That is right.

SIMILAR RESEARCH BY OTHER NATIONS

Senator BARTLETT. Tell me, are there any other nations engaged in similar research and activity?

Dr. HUNTER. Yes; a number of nations are engaged and the number is growing rapidly. The English actually were in this in an extensive manner before we were. They are continuing and accelerating their program. Russia, of course, has a great many areas within their country which have drastic water problems, and they are now mounting an extensive program. We get some information on their program, not as much as I would like to have, but we are making efforts to increase the exchange.

France is carrying on a somewhat smaller program, but rather aggressive. They are very much interested in this primarily from the viewpoint of exporting the technology. Israel is extremely active in the field. Especially when you consider it in relation to their natural resources, they are mounting a very aggressive program. Germany is now in it and with the expectation primarily of selling plants. The Dutch are in it and are selling plants. The Japanese are in it and have sold plants. The Italians are now trying to establish a national program. They have just created a national center for such activity and are beginning to procure experimental equipment.

At the International Desalting Symposium in 1965 the Egyptians expressed interest in establishing a national program. Of course, the Greeks have been interested in this primarily in smaller plants.

They are now becoming interested in larger plants. So this is something that a great many countries are vitally interested in and most of them are moving rapidly to establish national programs.

EARLIEST KNOWN DISTILLATION STUDIES

Senator BARTLETT. How old is the art, if I could so term it?

Dr. HUNTER. I think the earliest reference I heard of this was back in approximately 2000 B.C. where in the Indus Valley there was a discussion of means of purifying bad water I think they discussed distillation. Early Greek philosophers taught the principles of distillation. I believe that Caesar, in some of his siege armies used crude distillation stills to provide fresh water. So this is quite an old art. The problem has been to make it economic. I would like to point out that this whole problem is a matter of economics.

ECONOMIC PROBLEM

We certainly know many ways to desalt water. But to understand the economics, if you look at most process industries they produce a product for a few pennies per pound. We have as a goal to produce our product for 1 to 5 cents per ton. This is an economic objective that has never been faced before by any process industry. So this is our problem.

CONTROL OF SALT CRYSTALLIZATION IN FREEZING PROCESS

Senator BARTLETT. You mentioned as one of your requirements the need to know how an ice crystal is formed and excludes salt. Will you explain that a little bit to me?

Dr. HUNTER. When an ice crystal is formed by virtue of its molecular structure it tends to exclude salt. If we know exactly how this process occurs, how does a crystal decide to form at this point, around this particular molecule, we will then have the possible means of better controlling the growth of crystals in the freezing process. We may be able to control the shape that they take, which has a major effect upon our ability to wash the brine from the surface. We find, for example, that if we get too many crystals started in a crystallizer that they will not grow to a large size, and we cannot effectively wash them. If they grow in the wrong manner, they will be either spongy and include pockets of brine and we can't wash them, or they will have a shape that is difficult to wash.

So we must know exactly how they form in order to be able to control their formation and growth.

ICEBERG SALT CONTENT AND FORMATION

Senator BARTLETT. Let us assume an iceberg is floating around the North Atlantic, and the assumption is probably correct. Is it free of salt?

Dr. HUNTER. It is essentially free of salt, but this is a process that occurs—first off, they generally don't freeze out of the seawater. They are formed by precipitation. To the extent that they are formed by freezing seawater, it is a very slow process and would be entirely uneconomic to try to duplicate nature. So, we cannot afford such a leisurely production of ice.

Senator BARTLETT. We can't afford to go out there and hoist them aboard and let them melt?

Dr. HUNTER. It has been proposed at various times, for example, to tow icebergs from either the North Pole or the South Pole and bring them up to southern California and melt them in order to get fresh water. It is not quite as ridiculous as it sounds, but it does not really quite meet the test of economic practicality.

Senator BARTLETT. I am in a geographical situation to suggest a closer source of supply than either the North or South Pole. I have no more questions.

Thank you.

Chairman HAYDEN. We thank you for your appearance, sir.

Dr. HUNTER. Thank you very much.

FRIDAY, MARCH 10, 1967.

FEDERAL DEVELOPMENT PLANNING COMMITTEES FOR ALASKA

SALARIES AND EXPENSES

STATEMENTS OF HON. ROSS DAVIS, ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT, DEPARTMENT OF COMMERCE; AND JOSEPH H. FITZGERALD, CHAIRMAN, FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA; ACCOMPANIED BY JOHN W. WALKER, BUDGET OFFICER, ECONOMIC DEVELOPMENT ADMINISTRATION; DR. DOUGLAS JONES, CHIEF ECONOMIST FOR FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA; DAVID HICKOK, NATURAL RESOURCES OFFICER, OFFICE OF REGIONAL DEVELOPMENT PLANNING, ECONOMIC DEVELOPMENT ADMINISTRATION; AND HARRY G. KIRST, ASSISTANT CHIEF, BUDGET COORDINATION DIVISION, OFFICE OF BUDGET AND FINANCE

BUDGET REQUEST

Chairman HAYDEN. We will next hear from the Federal Development Planning Committees for Alaska.

Senator BARTLETT (presiding). The proposed appropriation for the Federal Development Planning Committees for Alaska in fiscal year 1968 is $325,000, an increase of $135,000 over the amount appropriated for fiscal year 1967. The justification statement for this appropriation request will be printed in the record.

(The justification follows:)

An appropriation of $325,000 is requested in fiscal year 1968 for the Federal Development Planning Committees for Alaska. This is an increase of $135,000 over the 1967 base. Specifically, an increase of $159,000 is requested for the Federal Field Committee for Development Planning in Alaska which is partially offset by a decrease of $24,000 for the President's Review Committee for Development Planning in Alaska.

The two Committees were established by Executive Order 11182 of October 2, 1964. They superseded the Federal Reconstruction and Development Planning Commission for Alaska, which had been set up to handle the reconstruction necessitated by the March 27, 1964 earthquake. When the reconstruction task was largely over, the Commission chairman, Senator Anderson, recommended development planning arrangements more suitable for the longer run, and Executive Order 11182 was issued to carry the recommendation out.

Federal Field Committee

The Executive Order stipulated that the Federal Field Committee shall consist of a chairman and two public members, each a Presidential appointee, plus field representatives of the following Federal Departments and agencies: Departments of Defense; Interior; Agriculture; Commerce; Labor; Health, Education and

Welfare; Housing and Home Finance Agency; Federal Aviation Agency; Small Business Administration; and Federal Power Commission. Personnel from these Departments and agencies were subsequently designated, and the chairman of the Field Committee was appointed and installed in office. A small initial professional staff was assembled to assist the chairman in discharging the Committee's responsibilities.

The Committee undertook a general overview of the economic condition of the State as a basis of future systematic planning. Accordingly, it surveyed the economic development potential of the State, the major fields of economic activity and pointed out the areas in which Federal and State programs could assist in achieving that potential. A conceptual report entitled "Alaska Economic Development and Public Policy" was completed and sent to the President in October 1966 jointly by the Field Committee and the President's Review Committee.

President's Review Committee

The Review Committee is composed of the heads of the Federal Departments and agencies represented on the Field Committee. The Committee provides general direction and guidance to the Field Committee. It also reviews and comments on tentative plans or recommendations of the Field Committee, considers the final plans and recommendations of the Field Committee, and transmits them, together with its own comments, to the President and the heads of interested Federal agencies.

Staff support for the Review Committee has been performed by a staff assistant and his secretary. However, during fiscal year 1967 the Economic Development Administration in the Department of Commerce will assume the responsibility of providing the necessary staff services.

Fiscal year 1967 activities

Transmittal of the above-mentioned report, "Alaska Economic Development and Public Policy," to the President initiated the second phase of the Field Committee's activities—the task of initiating functional, specific and detailed planning in priority areas. Objectives will be to plan detailed programs and policies in the following areas:

a. Economic programs to assist Native groups;
b. Alaska recreation and tourism;
c. Transportation and analysis—tying transportation development to priority economic opportunities;
d. Resources development with emphasis on minerals; and
e. Trade relations analysis between Japan and Alaska and Canada and Alaska.

Complementing these efforts have been research and surveys in a number of other areas including analysis of the Alaska Communications System, the State's tax incentive program, and a survey of State power development potential.

Since the Field Committee staff is not large enough to engage in all areas of planning and program need effectively, some research needs will be met under other Federal agencies' programs cooperating with the Field Committee, by short detail assignments of Federal personnel and through consultants. The scope of such available aid is, however, too little for the development of functional detail planning in depth, and further monetary assistance during fiscal year 1967 is being given to the Field Committee by the Economic Development Administration in the form of technical assistance grants and contracts.

ANALYSIS OF PROGRAM REQUIREMENTS BY ACTIVITY AND OBJECT OF EXPENDITURE, FISCAL YEARS 1967 AND 1968

Program by activity

[Dollar amounts in thousands]

Activity	Fiscal year 1967		Fiscal year 1968		Increase	
	Positions	Amount	Positions	Amount	Positions	Amount
Field committee	7	$166	14	$325	+7	+$159
Review committee		24				−24
Total	7	190	14	325	+7	+135

Program by object of expenditure

[Dollar amounts in thousands]

Activity	Fiscal year 1967		Fiscal year 1968		Increase	
	Positions	Amount	Positions	Amount	Positions	Amount
Object Classification						
Personnel compensation:						
Permanent positions	7	$98	14	$161	+7	+$63
Positions other than permanent		18		20		+2
Other personnel compensation		21		40		+19
Total personnel compensation	7	137	14	221	+7	+84
Personnel benefits		8		13		+5
Travel and transportation of persons		21		49		+28
Transportation of things		3		5		+2
Rent, communications, and utilities		10		15		+5
Printing and reproduction		3		4		+1
Other services		4		6		+2
Payment to working capital fund		2		4		+2
Supplies and materials		1		2		+1
Equipment		1		6		+5
Total obligations	7	190	14	325	+7	+135

JUSTIFICATION OF REQUIREMENTS

Federal Field Committee

Fiscal year 1968 will see the completion of the Field Committee's second-phase transitional operations (i.e., getting from the broad, strategic area of planning to the specific, detailed study of functional problems). The five program planning areas beginning in FY 1967 will require assimilation and implementation—i.e., detail staff work with Federal and State agencies to forge the means whereby policies developed in each study area may be implemented for the enhancement of the State's long-term economy. In addition, other functional areas of program concern must be subjected to review and planning scrutiny. This evolution into a third phase of Field Committee activity—policy implementation and inhouse capacity for continuing studies—will require additional staff and dollar resources.

Under this concept, development planning is considered to be not a one-time effort, but a continuous process. The staff of the Field Committee represents a permanent capability for relating, on a continuing basis, public policies with the needs of economic and resource development.

The fiscal year 1967 staff consisting of a Federal Chairman, three professional assistants, and three secretaries should be increased so that the staff complement includes the Federal Chairman, a planning director and six professional specialists in the following areas: (1) Native affairs, (2) natural resources, (3) economic analysis, (4) recreation and tourism, (5) industrial development, and (6) transportation and power. Three additional secretaries will also be required. This will permit full-time professional coverage in each of the major functional areas.

Staff travel expenses, office rents and communications systems costs, agency salary reimbursements and travel costs for people on detail to the Federal Field Committee, printing and reproduction costs, supplies and materials, and equipment, all need to be proportionately increased in accordance with the basic staff increase.

President's Review Committee

Partially offsetting the additional Field Committee needs is a decrease of $24,000 in Review Committee requirements for 1968. The Economic Development Administration (EDA) in the Department of Commerce provides staff support for regional economic planning as authorized under Title V of the Public Works and Economic Development Act of 1965. In order to provide uniformity in staff support and services between various regional planning endeavors, EDA has been delegated the additional duty of providing staff services to the President's Review Committee. EDA has not required additional resources for this function, and the funds required to finance a staff assistant and secretary to the Review Committee for the last half of fiscal year 1967 will be transferred to the Field Committee.

Requirements by object classification

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Personnel compensation:			
Permanent positions	98	161	+63
Consultants and public service members	18	20	+2
Cost-of-living allowance	21	40	+19
Total	137	221	+84

The increase of $84,000 is required to provide for the additional staff requested for 1968. Of this amount, $63,000 is needed for salary payments of permanent employees and $19,000 for increased cost of living allowance (25% of annual salaries) given employees stationed in Alaska. An additional $2,000 is requested for expenses of public member to be assigned to committees and for other consultants.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Personnel benefits	8	13	+5

This classification covers the Government's share of the Civil Service Retirement Fund, Social Security tax, Group Life Insurance, and Health Benefits program. Employee benefit estimates are based on wage compensation. They approximate 7.3% of the compensation costs, exclusive of the cost-of-living allowance shown above.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Travel and transportation of persons	21	49	+28

An estimated $41,000 will be needed in 1968 for the transportation and per diem expenses of the chairman of the Field Committee and his professional staff assistants when they travel to Washington, D.C., to consult with the Review Committee and other Government officials in the furtherance of program objectives. It also covers their travel in Alaska. The remaining $8,000 is required for the travel of consultants and public service members.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Transportation of things	3	5	+2

The estimate covers the cost of transportation of materials, supplies, equipment, etc.; including household goods of Government personnel transferred to Alaska. The increase of $2,000 is predicated on the increase in staff for the Federal Field Committee in 1968.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Rent, communications, and utilities	10	15	+5

The estimates include the cost of various communication facilities such as local and long distance telephone service, teletype, and penalty mail charges, as well as the cost of renting commercial office space in Alaska. Increased needs for these charges result from the additional staff requested for 1968.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Printing and reproduction	3	4	+1

The estimate covers expenses of reproducing reports and informational and administrative material required to support program operations. Additional costs will result from the increased staff level in 1968.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Other services	4	6	+2

This estimate covers contracts with educational institutions in Alaska. The University of Alaska is the center of advanced studies in the State presently engaged in major scientific research in areas affecting economic development. In addition, Alaska Methodist University has recently established a college of business and economics. The Field Committee plans to take advantage of these capabilities to accomplish its program objectives.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Payment to working capital fund	2	4	+2

Payments to the Department of Commerce's Working Capital Fund cover the cost of administrative support such as accounting, personnel, and administrative services.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Supplies and materials	1	2	+1

The estimates provide for miscellaneous expendable office supplies and materials required in the normal course of program operations. The amounts shown are based on an annual expenditure of approximately $150 per employee.

[In thousands of dollars]

	1967	1968	Increase (+) or decrease (−)
Equipment	1	6	+5

This item is a one-time expense of procuring the necessary office equipment and furnishings for the additional employees requested in 1968.

Analysis of staffing requirements, fiscal years 1967 and 1968

	Fiscal year 1967		Fiscal year 1968		Increase	
	Positions	Annual Salary	Positions	Annual Salary	Positions	Annual Salary
Position title and grade:						
Field committee:						
Chairman (GS-18)	1	$25,890	1	$25,890		
Staff assistant (GS-15)	3	55,078	5	94,524	+2	+$39,446
Staff assistant (GS-14)			2	30,212	+2	+30,212
Secretary (GS-7)	1	6,664	1	6,877		+213
Secretary (GS-6)	1	5,867	1	6,065		+198
Secretary (GS-5)	1	5,683	4	21,852	+3	+16,169
Total permanent positions	7	99,182	14	185,420	+7	+86,238
Pay above stated annual rate		381				−381
Less lapses		−16,446		−24,315		−7,869
Positions abolished during the year		14,737				−14,737
Permanent positions		97,854		161,105		+63,251
Intermittent employment		18,000		20,000		+2,000
Cost-of-living allowance		20,775		40,351		+19,576
Total personnel compensation		136,629		221,456		+84,827

PREPARED STATEMENT

Mr. Davis. Mr. Chairman, I have a short statement which I will, with your permission, put into the record.

(The statement follows:)

Mr. Chairman, I am the alternate for the Chairman of the *President's Review Committee for Development Planning* in Alaska. It is my privilege to appear before you today to discuss the activities of the Review Committee. Mr. FitzGerald, Chairman of the *Federal Field Committee*, who is also appearing before you today, will make a statement covering the Field Committee's programs.

REVIEW COMMITTEE

Both committees for development planning in Alaska were established by Executive Order 11182 on October 2, 1964. Subsection 12 of this order cites the function of the Review Committee, to wit:

"The Review Committee shall provide general direction and guidance to the Field Committee; receive, review, and comment on the tentative plans or recommendations of the Field Committee; and receive and consider the final plans and recommendations of the Field Committee and transmit them, together with its own comments, to the President and the heads of interested Federal agencies."

Members of the Review Committee are: the Secretaries of Commerce (who is the Chairman), Defense, Interior, Agriculture, Labor, HEW and HUD; the administrators of the Federal Aviation Agency and the Small Business Administration; the Chairman of the Federal Power Commission; and two public members. Each of the Federal members may designate an alternate to represent him at the Committee's meetings.

CALENDAR YEAR 1966 ACTIVITIES

The Review Committee met twice in calendar year 1966, in January and November. On these occasions it offered guidance to the formative efforts of the Field Committee and endorsed its planning program. The Committee's major effort during the past year has been to review and make recommendations on the Field Committee's first annual report. This report entitled "Economic Development in Alaska" was transmitted to the President in August 1966.

CURRENT ACTIVITIES

The present work of the Field Committee is directed toward analysis and planning pertinent to specific development subject areas. These efforts will produce highly specific program and policy recommendations for consideration of the Review Committee and the President. No money is requested for activities of the Review Committee in fiscal year 1968.

Alaska has much of the Nation's store of untapped natural resources. She can become one of the greater contributors to our growing National economy.

FUTURE COMMITTEES' CONTRIBUTIONS

I feel that the contributions which these Committees can make toward formulating effective Federal-State action in Alaska are substantial and should be continued. The Field Committee has already developed the basic guidelines for a comprehensive and coordinated development program. This budget request is a limited budget for marshalling Governmental resources to accomplish Alaskan development in a sensible manner. The Federal Government now makes substantial investments in Alaska. By using these existing amounts effectively through planning, we can lessen the need to spend additional sums for programs designed to cure symptoms rather than to provide solutions. This means that the small Federal input in this Budget can result in large outputs in terms of increases in both the State and National economies.

Mr. FitzGerald can tell you more about this, and we will be glad to answer any questions the Subcommittee may have.

STATE SUPPORT

Mr. DAVIS. I would like to make just two comments and then turn the testimony over to Mr. FitzGerald.

The first is that it seems clear to me that the success of our planning effort in Alaska, the significance of it, is dependent upon the participation of the State and people of Alaska. Therefore, in Mr. Fitzgerald's efforts we are looking to, and I believe we are receiving, the participation and support of the people from Alaska.

CURRENT AND FUTURE BUDGET REQUESTS

The second point has to do with what we are buying with this budget we are requesting today and budgets which we will request in the future.

What we are looking for is not just a plan but a method of achieving better utilization of resources. Federal resources, of course, are our primary responsibility but all resources are of interest in achieving the potentials, which are many, of the State of Alaska. With that, Mr. FitzGerald will give you a little more detail about what we are doing.

FEDERAL INTEREST

Senator BARTLETT. Thank you, Mr. Davis. Let me ask you if you have found in Washington an interest in this activity and a desire to make it successful. I will add as a postscript that the members of the Federal Review Committee in Washington are the Secretary of Commerce, as Chairman, and the Secretaries of Defense, Interior, Agriculture, Labor, HEW, and HUD, and the Administrator of the Federal Aviation Agency, the Administrator of the Small Business Administration, and the Chairman of the Federal Power Commission on the Federal level. Do you discover an interest in this activity on the part of the several agencies?

Mr. DAVIS. Yes, Mr. Chairman, I think there is an interest.

At the risk of sounding facetious I think we in the Federal Establishment, and I am a longtime civil servant, as perhaps you know, are really trying to do a job. The question that is always before us, particularly for cooperative efforts where a number of agencies are involved, is what is the job and how do you do it? What is lacking, in my judgment, in present-day efforts among the agencies to mount a cooperative program in a place, in this case Alaska, is some common language to discuss the total problem. If you can get this common language then the efforts of the agencies will tend to fall into place and, in total, represent a comprehensive and sensible, cooperative effort to achieve something. The problem, as I see it, is that the various agencies have rather parochial interests and no common language to relate these interests in a larger pattern.

Take the problems of the natives. Somebody sees housing as the problem. Somebody sees education as the problem. Somebody sees health as the problem. These are all problems but somehow we have to get a large enough perspective so that we do not devote all our efforts to treating symptoms instead of finding fundamental solutions.

INTERAGENCY COOPERATION

Now, in my judgment, efforts such as those represented by Mr. FitzGerald and the Federal fieldmen are extremely important and may be a kind of sleeper because if, through this effort, we can come up with a comprehensive and sensible program which can be costed out and roles assigned to each of the appropriate agencies, these roles will then start to develop the kind of Federal-State relationship and participation that I think all of us would like to have. So, the common language, if you will, is not a static thing, it is a dynamic thing. It really identifies problems, it identifies and states what the people want, what the Federal Government wants. It proposes certain courses of action which move toward solutions. It also carries with it, and this is extremely important, a good sense of priority, what should be done first.

If all the people sitting around the table looking at the plan agree in a general way as to the course of action it proposes and the priority that it proposes, we start to see something that is comprehensible as well as comprehensive, and some efficient movement toward the goal.

Senator BARTLETT. I think your two points are absolutely valid. I do see a difficulty on the Federal level of having the Defense Department coordinate its plans and activities with those of the Agriculture Department, for example. Nevertheless, this must be done if a rounded Federal program can be evolved. I am particularly glad to hear you make reference to the native problem. All of us, of course, know that the underlying key is to improve the natives' economic lot and we have not moved forward in a considered manner on this.

As a result, we treat their housing problems separately. We try to improve their health as a separate project. Education is off by itself. I think all who are familiar with these matters know that these separated programs do not constitute the answer. It just constitutes an opportunity for them to live a little longer, a little better until we come to grips with that account, the improvement in their economy. I would like to ask you this, Mr. Secretary: Can it be said that, in spending whatever money it spends on the Federal Committee, the Federal Government is making a unique contribution to Alaska, that this is doing something that perhaps ought not to be done because it is so unique?

PLANNING COMMITTEES

My idea there is that perhaps in a broad sense this activity might be comparable to the river commissions which have had planning duties, which have been established in several different regions of the United States over the years and upon which large sums of Federal money have been expended.

Mr. DAVIS. Certainly this kind of effort is not unique. We are doing it in many different ways but you have to go no further than the kind of activity involved in setting up regional commissions such as Appalachia. So this in my judgment represents nothing new and perhaps a rather modest effort in terms of Alaska. But I think it is an effort that is commensurate with our capabilities at this time.

Senator BARTLETT. I am glad to hear you say that. Thank you. Mr. Davis.

Mr. FitzGerald.

FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA

PREPARED STATEMENT

Mr. FITZGERALD. Mr. Chairman, I do have a statement. I will be very happy to submit it for the r cord.

Senator BARTLETT. It will be included in the record.

(The statement follows:)

Mr. Chairman and Members of the Subcommittee, may I express my appreciation for the opportunity to appear before you and testify in support of the budget request of the Federal Field Committee for Development Planning in Alaska for Fiscal Year 1968 in the amount of $325,000.

Fiscal 1968 will mark the third full year of operations by the Federal Field Committee, and our programs and activities will represent the logical extension of the development planning and programming accomplished during the prior two years.

Initial Accomplishments

The challenge of economic development in Alaska is great. While the State has extensive resources (timber, fisheries, oil, gas, minerals), their full development depends on the solution of complex production, transportation, and cost problems. Recognizing the nature of the challenge, we concentrated, in our first year, on a broad evaluation of the economic potential of the State, the steps which government could usefully take to encourage development, and the basic problems which would have to be solved in each field before the State could achieve a broad industrial base. This work was done largely through a state-federal task force arrangement in which the principal agencies of the two governments assisted. The results of this effort are now available to the public in a report submitted to the President by former Secretary of Commerce John T. Connor as Chairman of the President's Review Committee for Development Planning in Alaska and myself as Chairman of the Federal Field Committee.

Current Activities

With the broad outline of the development task accomplished, the Federal Field Committee, in its second year of operations, turned its attention to a series of specific projects in selected areas that showed promise of significant economic development or presented problems which could impede development. In selecting this course, we recognized that detailed research and planning projects would impose a heavy workload beyond the capability of the small staff of the Federal Field Committee. Accordingly, after receiving endorsement of our general program from the President's Review Committee in Washington, last November, arrangements were made with the Economic Development Administration for grants of research funds to be used during the remainder of Fiscal 1967. These funds have enabled us to launch the following studies:

Planning and Research Projects Being Sponsored by or Participated in by the Federal Field Committee, Fiscal 1967]

I. INTERNATIONAL TRADE AND ECONOMIC RELATIONS

1. Alaska-Japan Trade Relations.
2. Alaska-Canadian Economic Relations.

II. DEVELOPMENT OF BASIC RESOURCES

1. Fisheries Marketing Practices.
2. Minerals and Mining Laws and Practices.
3. Recreation and Government Programs.
4. Study of the Public Land Laws affecting Alaska. A joint project with the Public Land Law Review Commission.
5. Agriculture's Future in Alaska. A study by the University of Alaska for the U.S. Department of Agriculture with limited participation by the Federal Field Committee.

III. BASIC SERVICES

1. Transportation and Economic Development.
2. Federal Power Commission's Alaska Power Survey. Participation by the Federal Field Committee staff on task force assignments.
3. Sale of the Alaska Communication System. Economic Analysis of the system and participation in planning for disposal.

IV. FINANCE AND ECONOMIC INFORMATION

1. Aggregate Income Model.
2. Taxation and Economic Development.

3. Technical advice on study by state of basic data gathering and processing system (Lockheed Contract).

As Alaska is entering a period of intensive resource development with both domestic and international markets for its products, the current planning and research program is designed to explore both the problems of production—including essential services such as transportation and power—and the problems of marketing, internationally and domestically. These studies will be completed this summer; and the results will, in good measure, dictate the direction and content of our specific projects in fiscal year 1968. In a sense, these studies are the essential bridge between the overview of our first year and the comprehensive and integrated planning of our third year.

FISCAL YEAR 1968 ACTIVITIES

Accordingly, as we move into fiscal year 1968, we will pull together the threads of our major projects and begin to develop a comprehensive program for the economic development of the State. Our goal is at once to achieve a practical program based on what State and Federal agencies are now authorized to do and can be expected to accomplish and also to functionally integrate Federal and State programs in a timely way so that they contribute the maximum amount to economic growth within the funds available. We believe that the new budgeting techniques now being applied throughout the Federal government provide a very useful tool for this purpose, and we will be extending the application of these techniques on an interagency basis.

STAFFING REQUEST

Our goal is ambitious, and its accomplishment will involve a very major effort by all of the Federal agencies which are members of the Federal Field Committee. We have, therefore, given extensive consideration to the work procedures that should be employed and how this can best be done while keeping the staff of the Federal Field Committee to the smallest number practical. In our joint efforts with the State, we work through task forces composed of all interested State and Federal agencies; and this practice will be continued. To make this procedure fully effective and to keep our work on a tight time schedule, we believe that there should be a first-rate professional analyst assigned in each major area of economic development. Therefore, we are requesting that our present authorized staff of seven be increased to fourteen in fiscal year 1968. Our present staff level consists of a Federal Chairman, three professional assistants, and three secretaries. We feel, in order to coordinate agency work and assure that completed plans will be of the highest quality and produced on time, that we will need four additional professionals and three additional secretaries.

Therefore, in 1968 our chief economist will be the planning director with responsibility for overall economic analysis and the design, monitorship, and preparation of contractual and staff studies and reports. Working directly with each State-Federal task force in the major functional areas will be a specialist from the staff of the Federal Field Committee. Specialists will be assigned in the following six areas: (1) Native Affairs, (2) Natural Resources, (3) Economic Analysis, (4) Recreation and Tourism, (5) Industrial Development, and (6) Transportation, Communications and Power.

As the principal agency for coordinated Federal-State planning in Alaska, a very important, legitimate, but time-consuming activity for us is dealing with day-to-day and week-to-week coordination of existing or imminent programs of the many agencies operating in the State. This aspect of our task increases in size as we gather a momentum of confidence and competence. This "constructive clearinghouse" function is working very well and, it is fair to say, results in enhancing the success of many government programs which cut across agency lines. Specialists in the several named fields will greatly contribute to this dimension of our activity as well.

FEDERAL-STATE RELATIONS

I would like to say a final word about the machinery which we and the state administration have established for joint research and development planning in Alaska. Joint State and Federal planning on a large scale is a comparatively recent development, and we are frankly experimenting with the most effective way to achieve the results which both the Federal and State governments desire. The initial machinery which we described in our appearance before this Committee last year is generally considered to be successful. As there has been a recent change of administration in Alaska, it is necessary to reestablish relations with the various levels of State government; and this work is now in process. We believe that we are making good progress and that we have the full and enthusiastic support of the new Governor and his administration.

I will try to answer any questions which you may have concerning the Federal Field Committee's program and our request for an increase in fiscal year 1968.

Mr. FitzGerald. I should like to say that the Secretary has, in a very eloquent manner, put his finger on the core of our activities and the job which we are trying to do in Alaska.

FEDERAL FIELD COMMITTEE ACTIVITIES

Executive Order 11182, dated October 2, 1964, sets forth in two short paragraphs the very heart of this matter.

(1) "The Federal Field Committee is the principal instrumentality for developing coordinated plans for Federal programs which contribute to economic and resources development in Alaska and for recommending appropriate action by the Federal Government to carry out these plans"—this being done through the President's Review Committee.

(2) "The Federal Field Committee (also cooperates) with representatives designated by the Governor of Alaska in making and fostering surveys and studies to provide data for the development of plans and programs for economic and resources development in Alaska."

The Federal Field Committee members were appointed in 1965, and we are, therefore, completing our second year of existence. It is, as has been stated, an interagency committee composed of representatives of the nine principal Federal agencies operating in the State of Alaska and a representative from the Federal Power Commission. As an interagency group we act collectively and as equals, attempting to harness all of the programs of the Federal Government which can be used for economic development.

FEDERAL-STATE INPUTS

The Federal input in Alaska is high and where we can make it contribute to economic growth we are, it seems to me, making an extremely wise use of Federal funds.

I would also like to stress that the agencies are equal partners in our efforts and what they do constitute voluntary actions. This procedure has produced a very high degree of cooperation and we do not have interagency cooperation problems.

ECONOMIC DEVELOPMENT ADMINISTRATION

I would further like to say that we have had the greatest amount of support from the Economic Development Administration of the Department of Commerce. Without them our work this year would have been seriously impeded. They understood our problems. They have helped us directly. I think we could not have a better working relationship.

In addition to the work which we do within the Federal Government, it is also part of our mission to work with the State to achieve a full State and Federal participation in development planning so that what is ultimately developed are truly joint plans, conceived in pursuit of the joint goals of the Federal and State governments in Alaska, and, hopefully, these joint plans will be translated by the two governments into programs of their various agencies.

INITIAL ACCOMPLISHMENTS

In our first year we took a broad look at the economy of Alaska, its potential for development, its problems, and the areas in which Government can and should take action to assist in economic development. We have summarized our findings in a public document in the form of a report to the President, Mr. Chairman.

Briefly stated, we view Alaska as a development problem. The State, as you know, is largely undeveloped at this time. The landmass is by far the largest of our States. Yet it has by the latest estimate only 273,000 people.

Senator BARTLETT. Does that include the military?

Mr. FITZGERALD. It does include the military, Mr. Chairman.

ALASKA POTENTIAL

But very fortunately, or so it seems to me, Alaska has vast potential in fields which are of great importance to the United States as a whole. At this time Alaska is in the process of becoming one of the largest oil and gas producers in the United States. The direct and immediate benefits of this production are for the whole of the country. We consume virtually none of this fuel in Alaska. It goes to other parts of the United States.

In the field of minerals we have hardly begun to exploit our potential but we are in a position to exploit it. Today we have moved from a nation with surplus stockpile problems to a nation in search of additional supplies. Our self-sufficiency in minerals has dropped from 80 percent to a low 50 percent. Thus the contribution which Alaska can make in the field of minerals is very, very great.

A similar contribution obviously can be made by our recreational resources. As the last undeveloped land in the United States, Alaska's recreational potential is virtually unlimited. I would like also to point out what may be a real sleeper in terms of economic development of benefit to the United States, and that is the Continental Shelf which lies off Alaska. Over 50 percent of the entire Continental Shelf of the United States is off the Alaska coast. The square mile area of that shelf is actually greater than the square mile land area of all of Alaska.

CONTINENTAL SHELF

Now, we know that the Continental Shelf can be one of our best sources for minerals. It is also true that as we move into the Arctic and it becomes more difficult to do things on the land, we may not find a corresponding increase in difficulty in working under the water.

Accordingly the Continental Shelf off Alaska may prove to be one of our greatest mineral producing areas. It is equally true that the Continental Shelf can be the primary source of many fishery products. We can look forward in the future, assuming that the resources are well and properly managed, to the fishery resources of the Alaskan waters being developed in a very broad way. For example, it can in accordance with your own bill, Mr. Chairman, be the location for the production of fish protein concentrates which are so badly needed in this world.

NATIVE PROBLEM

Thus we know that Alaska has not only things that are good for its own development but it has what America needs, and the development of Alaska in this context is a real challenge to the United States as a nation. But just as we see that we have great resources, I think we must recognize that we also have great problems in Alaska. There is, first, the one you briefly alluded to, Mr. Chairman, the problem of natives. This is largely confined to western Alaska. I say "largely" only in the sense that the greatest proportion of the needy people live there. But in this area we have virtually no development today. Hardly a road. Very few ports. No industry other than some Government research, FAA installations, and things of that sort, a little fishing, but not nearly enough. So we find as we get into the problem that these people are not only largely unemployed but have never been employed; that possibly 80 percent of the people are unemployed, at any one time. This is intolerable and poses a real development problem for the United States. It is one to which we are, of course, giving the highest priority at this time.

HIGH COSTS IN ALASKA

Also, being a small State in terms of population, we lack the cost advantages that size affords. You will find in Alaska that things tend to cost far more than they do in the rest of the United States. This is in part the result of smallness. It also is a common phenomenon of any effort to settle and operate in the Arctic and sub-Arctic areas of the world. The same phenomenon can be observed in northern Canada, Greenland, northern Norway, northern Russia, and Alaska.

So, in a sense one of the overriding problems in development will always be the cost problem, with the consequence that the Government must concentrate on the provision of basic services, transportation, power, and so forth, at the lowest possible cost.

LEADTIME FOR DEVELOPMENT

I also must say on the problem of development that we must never overlook the leadtime factor. We wish to open up the minerals. We wish to develop the north. But we cannot do this overnight or in a few years. There is a definite leadtime involved. We regard this as one of the critical problems which we must work with, and also a frustrating problem in an impatient world.

MACHINERY FOR RESOURCE DEVELOPMENT

The point on which I want to conclude this discussion is that the United States can program, through the machinery that we have set up, the roads, the railroads, the power, and other things needed for resource development, and that, if we do this frankly and specifically on a developmental basis, the capital costs which the U.S. Government will invest will come back in full. It will be an economically sound venture from the standpoint of the United States.

ADDITIONAL PERSONNEL

Mr. Chairman, I have strayed a bit from justifying our budget. We have asked for an increase in personnel this year and an increase in funds. I would like to say a few words about our request.

As I mentioned before, in our first year we did a general survey of the economic potential and the roadblocks to development. This task could be done with relatively few people, and this is the way it was done. In our second year, as we moved into more specific problems, attempting to get at some of the fundamentals that we needed in our planning, we found that this type of work required additional personnel. The Economic Development Administration assisted us, allocating funds under Title 3 of the Economic Development Act, which covers technical assistance and some funds under Title 5 which deals with regional planning commissions. These funds have enabled us to carry on a series of specific projects.

In the coming year we do not expect to have funds from Title 5 available to us. We intend, instead, to be substituting personnel on our own staff. We believe this will be the most efficient way to operate. What we specifically propose to do is to have six professionals under a planning director. As specialists, they will be dealing in the following areas: Native affairs, natural resources, economic analysis, recreation and tourism, industrial development, and finally transportation, communications and power.

These people will be working full time in their assigned areas, coordinating State and Federal task force activities and producing what we hope will be the foundation for a comprehensive long-range development program for Alaska.

Senator BARTLETT. Does that conclude your statement, Mr. Chairman?

Mr. FITZGERALD. It does.

FEDERAL REVIEW COMMITTEE

Senator BARTLETT. We note that appropriations are not requested for the coming fiscal year for the Federal Review Committee. Will you explain the reason for this?

Mr. DAVIS. We are going to pick up the expenses of that in our regular Commerce Department budget.

Senator BARTLETT. How much will that amount to approximately?

Mr. DAVIS. It was $24,000. I assume it will be something analogous to that in our 1968 budget.

DEPARTMENT OF COMMERCE FINANCING

Senator BARTLETT. Did you reimburse the Economic Development Administration for services which it has performed?

Mr. FITZGERALD. The arrangement which we have is that we pay 2 percent of our budget to the Department of Commerce for general administrative services, Mr. Chairman. The Economic Development

Administration has given us research assistance funds, but we have not transferred funds of any kind to it.

Senator BARTLETT. It is a grant by them to you?

Mr. FITZGERALD. Yes.

Senator BARTLETT. How much does that amount to in this fiscal year?

Mr. FITZGERALD. We were allocated $93,000 under Title 5. Then there was approximately $60,000 for a Japanese-Alaskan trade study. There will be a further allocation of approximately $200,000 to be used by the Public Land Law Review Commission, in a review of Alaskan land problems. These funds are in the process of being transferred at the present time.

NEW POSITIONS

Senator BARTLETT. Now you asked for these additional people for the next fiscal year. Will they be brand new? By that I mean will they replace people who have been on your staff and who have been paid for by grants from other agencies?

Mr. FITZGERALD. The appropriation will permit us to pick up on our budget several people who are already working for us, but under funds which are being transferred to us from EDA.

Senator BARTLETT. Actually then it will not be an added cost to the Federal Government?

Mr. FITZGERALD. There will be some.

Senator BARTLETT. How much? How many people will be involved and how much money? You can put that in the record later.

(The information follows:)

The Economic Development Administration has transferred $93,000 from Title V funds for use by the Federal Field Committee in fiscal year 1967.

In addition to using these funds for contractual research projects, the Federal Field Committee has employed seven professionals on a full-time or part-time basis. Present plans contemplate the use of three of these professional positions on the Field Committee's payroll in 1968.

The Title V funds transferred to the Field Committee in 1967 will be used by the Economic Development Administration in 1968 for other facets of its regional development program.

RESIDENT FIELD COMMITTEE EMPLOYEES

Senator BARTLETT. Are any of the employees of the field committee residents of Alaska?

Mr. FITZGERALD. They are all residents of Alaska. Some of us also consider ourselves voting citizens of the State. I am. I was in Alaska when I was appointed. Mr. Arnold is. Mrs. Wonnecke is. I would say that we are entirely Alaskans.

Senator BARTLETT. There will be no objection to that from me.

Whether or not residents of Alaska, the Federal cost of living allowance is paid; is that right?

Mr. FITZGERALD. Yes. The difference is this—if personnel are appointed from the 48 contiguous States, when they come up, they are entitled to a trip every 2 years back to their original home at Government expense. This includes their families, too.

Senator BARTLETT. And it comes out of the regular appropriation?

Mr. FITZGERALD. Yes.

Senator BARTLETT. For each agency?

Mr. FitzGerald. But if a person is appointed in Alaska, as, for example, I was, he has no such right.

Senator Bartlett. You pay for your own trip if you take one?

Mr. FitzGerald. Yes.

Senator Bartlett. I remember in that connection the anguish displayed by the head of an agency up there one time, who was not too well-funded, when an employee and his wife were going out and they had nine children.

TRAVEL FUNDS

Will you please explain the need for the $28,000 increase in your travel allowance for the coming year?

Mr. FitzGerald. Yes. One of the things we find is that in working with problems such as the native problem, people have to get our and travel. In Alaska this involves considerable distances and a fairly large expenditure of funds. We feel that this kind of expenditure is absolutely essential to the efficient accomplishment of our work.

Senator Bartlett. For one reason or another, I was required to do considrable traveling about Alaska in the year 1966, and also 1965. I will agree with you that travel is somewhat more costly there. What is your travel budget now?

Mr. FitzGerald. $21,000.

Senator Bartlett. So you need to more than double it? Are you facing difficulties now?

Mr. FitzGerald. No. My last reading on our budget, which was in December, indicated that we were almost exactly on a month-to-month basis in accordance with our appropriations.

Senator Bartlett. Then the committee should infer that, although you have held the line in respect to travel, you see an imperative need for stepping it up so that your people can get out in the field?

Mr. FitzGerald. I believe that with new people on board dealing with specific problems they will have to get out in the field and that they will spend a higher proportion of their time in the field, than I do, for example.

LOCKHEED CONTRACT

Senator Bartlett. You mention here in your prepared statement which has been placed in the record, under the heading, "Finance and Economic Information," a point which you number three and label in this manner: "Technical Advice on Studies by State of Basic Data Gathering and Processing System, Lockheed Contract." What is this?

Mr. FitzGerald. Mr. Chairman, the State of Alaska has a contract with Lockheed to study its data-gathering systems and to help devise a completely effective, modern system. We put that down because we are doing certain work which brings us very close to the data-gathering problem, and we have on an informal advisory basis discussed this in great detail with the State people and with the Lockheed people.

STUDY OF AGRICULTURE IN ALASKA

Senator Bartlett. You mentioned a study of agriculture's future in Alaska being made by the University of Alaska for the Department of Agriculture with limited participation by the Federal Field committee. Is that participation in the form of manpower and money, or just one of them?

Mr. FitzGerald. It would only be in the form of manpower. At the present time we do not have anybody aboard or in sight who would be a specialist in this area. While we naturally want to assist them in any way that is possible for us to do, we believe that under the circumstances our input will have to be limited. That is why we stated it that way.

Federal-State Cooperation

Senator Bartlett. You mentioned, and so did Secretary Davis' that this is a cooperative effort involving the Federal Government and the State government. Will you tell us something about the measure of cooperation being accorded by the State and how your relationships are with the State?

Mr. FitzGerald. When the committee was first established in 1965, I wrote to Governor Egan and we set up a joint meeting between State and Federal people to review the manner in which we should operate. We agreed at that meeting to establish a series of joint State-Federal task forces, each task force being assigned to a specific field of resource development. When we did this, we also agreed that the task forces should be chaired roughly 50 percent of the time by Federal people, and 50 percent by State people. To prevent any one task force from becoming either federally dominated or State dominated, we also provided for a change in the chairmanship each year. Thus if a task force was chaired 1 year by a Federal employee, it would be chaired by a State employee the next year, and so on.

These task forces worked in their specific fields and produced a number of reports. They have also been of great assistance in the general work that we are doing and in addition they have contributed to projects which, while part of our general program, came under the direction of a single agency. For example, the Federal Power Commission made a specific Alaska power study. Both State and Federal agencies have contributed to this.

Last year was an election year and we had a change of State administration which, of course, requires us in a sense to restructure our task force organization. This we are in the process of doing. The Governor has given us assurance of the State's full cooperation, and has expressed his great interest in development planning. We anticipate that we will be able to work with the State and proceed towards the general goals which we share.

State Planning Agency

Senator Bartlett. Yours, of course, is essentially a planning agency. Does the State have a comparable agency?

Mr. FitzGerald. It has a Commissioner for Planning. He is in the process of organizing his office. In addition there has been an EDA grant to the State for planning districts—economic districts—in Alaska. The administration has indicated its desire to establish these immediately, and they are in the process of being set up.

ALASKA COMMUNICATION SYSTEM

Senator BARTLETT. Thank you. I have no further questions, but before we conclude, Mr. Secretary, I want to make a comment regarding one statement made by Mr. FitzGerald in his prepared report. This relates to the proposed sale of the Alaska Communication System, the economic analysis of the system and participation in planning for its disposal. I want you particularly to know that in preparation of the bill prior to being considered by the Armed Services Committee last year, a bill which I introduced, Mr. FitzGerald delegated Dr. Jones, who is in the room now, to come to Washington to assist in making studies essential to the committee when it considered the bill. I will simply say that his work here was invaluable. I have a feeling that the bill would not have been approved by the committee as it was had he not been assigned to this task and had he not done so very well.

As a result of the Federal Field committee's activity in this regard, we hopefully look forward to passage of the bill by the Senate this year without further committee hearings. We got it over to the House so late last year that we didn't have time to have it taken up by the corresponding committee there. I think it is a very interesting footnote to history that this was the first piece of legislation ever considered by the Preparedness Subcommittee of the Senate Armed Services Committee. Heretofore all their work was in connection with investigations, but this time is the first time they considered legislation. You may not be surprised when I add in a more general way that I think that under Mr. FitzGerald's leadership within Alaska and the leadership of those of you here, we have already made notable achievements on behalf of the future development of Alaska.

SUBCOMMITTEE RECESS

The subcommittee will adjourn until 10 o'clock, Monday, March 13, 1967, when the Forest Service will be heard.

(Whereupon, at 12 noon, Friday, March 10, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Monday, March 13, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

MONDAY, MARCH 13, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senators Byrd, Bartlett, Proxmire, Mundt, and Young.

U.S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

STATEMENT OF JOHN A. BAKER, ASSISTANT SECRETARY OF AGRICULTURE; ACCOMPANIED BY E. P. CLIFF, CHIEF, FOREST SERVICE; A. W. GREELEY, ASSOCIATE CHIEF, FOREST SERVICE; C. W. HENDEE, DEPUTY CHIEF, FOREST SERVICE; M. M. NELSON, DEPUTY CHIEF, FOREST SERVICE; G. M. JEMISON, DEPUTY CHIEF, FOREST SERVICE; J. R. McGUIRE, DIRECTOR, PACIFIC SOUTHWEST STATION, FOREST SERVICE; R. F. DROEGE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE; B. H. PAYNE, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE; G. D. FOX, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE; A. R. SPILLERS, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE; M. B. DICKERMAN, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE; AND R. J. COSTLEY, DIRECTOR, DIVISION OF RECREATION AND LAND USES, FOREST SERVICE; AND J. J. BYRNE, DIRECTOR, DIVISION OF ENGINEERING, FOREST SERVICE; R. Z. CALLAHAM, ASSISTANT TO DEPUTY CHIEF, FOREST SERVICE; R. L. YOUNGS, ASSISTANT TO DEPUTY CHIEF, FOREST SERVICE; W. M. IRBY, BUDGET OFFICER, FOREST SERVICE; AND CHARLES L. GRANT, DIRECTOR OF FINANCE, DEPARTMENT OF AGRICULTURE

BUDGET REQUEST

Chairman HAYDEN. The subcommittee will be in order.

Again, today, Assistant Secretary of Agriculture John A. Baker is here to begin the Forest Service presentation of its fiscal year 1968 budget.

Mr. Secretary, we will be glad to hear your statement at this time.

EXPRESSION OF APPRECIATION TO COMMITTEE

Mr. BAKER. Thank you, Mr. Chairman. It is also a pleasure to appear before your committee to consider the proposed budget for the fiscal year 1968 for the Forest Service in the Department of Agriculture.

If I may, Mr. Chairman, without embarrassment to you, I would like at this time to just say a strong and firm word, sir, for the great contributions that we feel that you have made to the field of conservation, in preservation, use and development of the Nation's natural resources, not just in the forest itself, but across the whole field of the relationship of man to his environment, and the building for a good environment for man, now and in the future.

Chairman HAYDEN. Somebody who knew about that had to point it out to me.

Mr. BAKER. I want to just introduce our testimony this morning by saying that, Mr. Chairman, because it has been a grand, public-spirited contribution that you and your committee have made and I wanted to put that in the record at this time.

BUDGETARY DELIBERATIONS

These budget estimates that we present this morning reflect two basic facts. The first is that we are trying to do our part to fight inflation as well as to avoid deficits. The second fact is that Forest Service programs, in conservation, in research, in the advancement of human welfare, are of such importance to an expanding population and economy that we must carry them on at a high level of intensity and efficiency.

SERVICE PERSONNEL

Mr. Chairman, as you well know, the Forest Service and the men and women of the Forest Service are a highly capable, highly competent group of people. They are dedicated to the public service, and to the efficiency and effectiveness of their organizational structure and their administrative devices.

The Department's total program of conservation has found the work of the Forest Service to be an integral part of the Department's rural areas development program and its resource conservation and development program for both public and private lands, which in very many, many cases are intermingled. The very effectiveness, dedication, and capability of the people in the Forest Service makes a contribution through their work to the broad aims of the Department of Agriculture in these fields.

PROGRESS

In recent years, particularly in those areas and on the forests where public use has materially increased, management activities and investments have had to keep pace. More timber is being sold. Receipts have increased. New recreation sites are being developed. Range allotments are being revegetated and structural improvements added. Water quality and yield are being improved. Resource protection has been stepped up. Research has been accelerated and small gains have been made in State and private forestry activities.

All these things and more have been made possible with the help of this committee in recent years.

In the years ahead, similar attention will be necessary if the Nation's forests are to withstand increasing pressures to provide the resources and services they are capable of providing, and for which there is a growing public demand.

1968 PROGRAM INCREASES

For the immediate present, we believe the budget proposed will permit maintenance of a level of activity which is adequate, although the backlog of deferred work continues to grow. This budget will permit continued progress. Specifically it proposes the following program increases: $7,850,000 for forest land management; $1,573,000 for forest research; $100,000 for State and private forestry cooperation; $14,192,000 for forest roads and trails under authorization of the Federal-Aid Highway Act.

Part of the proposed increase will enable us to make an additional 280 million board feet of timber available to meet industry needs. You know the story of outdoor recreation pressures and related water pollution problems. Part of the increase will be used for development of recreation facilities at national recreation areas, and similar sites, and for upgrading waste treatment systems at heavily used recreation areas. Another part will finance acceleration of the land exchange program to reduce costs and improve management. Many other examples are in the material before you.

Forest Roads and Trails

The largest increase proposed is for the forest roads and trails appropriation. Our estimates include a request to obligate $120 million of the $170 million contract authorization made available by the Federal-Aid Highway Act of 1966. We can handle such an increase efficiently and effectively.

This increase is vitally needed, not only to get on with the job of providing access to national forest resources as contemplated by the 10-year development program but also for meeting demands imposed by the many new programs such as Appalachia, national recreation areas, land and water conservation fund, new reservoir construction.

We believe that this proposed program increase represents a wise investment of public money at this time. Roads that give access to national forest resources pay their way over a period of years through greater revenues and at the same time facilitate expanded uses. The existence of a more complete road system will permit an intensity of protection, management, and use that would not otherwise be possible.

FOREST LAND MANAGEMENT

In addition, we have proposed some adjustments in the forest land management appropriation as a result of changes in our blister rust program in Montana as outlined on a separate statement furnished to you.

FOREST RESEARCH

Completion in 1966 of a "National Program of Research for Agriculture" provides a new guide for development of future forestry research. The program increases proposed in this budget follow recommendations of the national program to accelerate high priority research.

Included is more research to produce genetically superior trees, to increase water yield and reduce erosion, to improve recreation planning and management, to protect forests from insects, diseases, and fire, and find new uses for low-quality timber.

Of especially high priority in needed research expansion are: Outdoor recreation, greater attention to beauty and esthetics, and the relationship of forests to a more prosperous rural America and a more rapid rate of economic growth in rural areas.

RESEARCH LABORATORY, FOREST PRODUCTS LABORATORY, MADISON, WIS.

The estimates also include funds for the wood chemistry building at the Forest Products Laboratory in Madison, Wis., which has been deferred since fiscal year 1966. This facility, as noted by the Senate Appropriations Committee last year is essential to progress in control of air and water pollution from pulp and paper manufacture.

FORESTRY SCIENCES LABORATORY, ALBUQUERQUE, N. MEX.

Funds are also included for construction of a Forestry Sciences Laboratory at Albuquerque, N. Mex. This laboratory will provide modern equipment for research on the management and rehabilitation of eroded forests and range watersheds and on controls for destructive forest insects and diseases in the Southwest.

ACCELERATION OF FORESTRY RESEARCH

Because research supports all forest resource programs and other forestry programs on both private and public lands, the research effort must keep pace with or preferably lead action programs. Forestry portions of the new long-range study of agricultural research need to be implemented promptly if the rural forested areas and the Nation's economy are to benefit fully.

We need to continue and accelerate the impressive advances in forestry knowledge obtained through systematic research. As you know, much of our research is done cooperatively with States, universities, industries, institutions, or individuals.

STATE AND PRIVATE FORESTRY COOPERATION

Cooperative forestry programs are increasingly important, and we are pleased with our relations with the States, and with private forestry generally. Yet there is a great residual need remaining on non-Federal lands to accelerate fire control, to promote forest management, and to find commercial outlets for presently unusable or low-value species.

We're not doing as well on this front as we should. This work has a high priority for strengthening.

Better protection against loss of life and property from forest fire and improved forest management of State and private lands are essential if we are to even come close to meeting the broad range of growing demands upon all forest land resources.

About three-fourths of the Nation's commercial forest land is in State, industrial, farm, and other non-Federal ownership. These lands supply about three-fourths of the Nation's cut of pulpwood, sawtimber, and other industrial forest products. These are high quality lands that can be, and should be, protected and developed adequately. We must depend on them to produce a major share of the Nation's output of timber, special forest products, water, forage, recreation, and wildlife.

Federal dollars in these programs stimulate non-Federal sectors of the economy to assume a major role in meeting forestry needs.

Again here, the high priority of research in action education programs is needed, to encourage greater attention to outdoor recreation, esthetics and beauty and rural areas development on the privately owned forest lands of America, particularly those in small ownership.

JOB CORPS

I would like to comment, Mr. Chairman, on our part of the Job Corps program. We are quite pleased with the overall progress to date. Our centers are now in full swing, even though the job of getting them established turned out to be larger and to take longer than we expected. Much of the work, such as, landscaping, sidewalks, roadways, and utility buildings was accomplished by the corpsmen.

Administration of the centers is settling down into a more routine operation. Corpsmen incidents are fewer. Community acceptance appears to be on the upswing. About 113 Job Corps graduates have been employed full time by the Forest Service in such positions as engineer aid, fire control aid, resident worker, cook helper, and forest worker. Corpsmen graduates are consistently being placed in better jobs than those they previously held, enlisting in the military or reentering school. In most cases, by the time an enrollee becomes a corpsman he is making significant personal improvement. On January 31, 1967, there were 7,287 corpsmen in centers administered by the Forest Service.

I have asked Mr. Cliff, Chief of the Forest Service, to comment briefly on a few significant accomplishments during the past fiscal year. He and his staff will be glad to answer any questions that you may have.

Thank you for the opportunity to present this statement.

FEDERAL HIGHWAY FUNDS

Chairman HAYDEN. You just said of the forest highway money that the amount was satisfactory. Did you ask for any more than you obtained?

Mr. BAKER. You mean the $120 million as compared to the $170 million?

Chairman HAYDEN. Yes.

Mr. BAKER. The $120 million, Mr. Chairman, was our estimate of what we could afford within the budgetary guidelines given us by the Department, for the total budgetary guidelines given to the Department.

Then we tried to establish our priority rankings, within the overall guidelines that were given us.

Chairman HAYDEN. I ask the question because the States have very bitterly complained about the reduction in Federal highway funds.

Mr. BAKER. In the need for forest roads and trails, Mr. Chairman, the backlog is building up, if that helps answer your question.

PURPOSE STATEMENT

Chairman HAYDEN. Well, I thank you, sir, for your statement. The Forest Service has again furnished with its "Justification" a purpose statement which I will place in the record at this point.

(The statement follows:)

The Forest Service is responsible for promoting the conservation and wise use of the country's forest and related watershed lands, which comprise one-third of the total land area of the United States. To meet its responsibility the Forest Service engages in three main lines of work, as follows:

1. *Management, protection, and development of the National Forests and National Grasslands.*—The National Forests and National Grasslands are managed under multiple use and for sustained yield. Under these principles natural resources of outdoor recreation, range, timber, watershed, and wildlife are utilized in a planned combination that will best meet the needs of the Nation without impairing the productivity of the land. Gross area within unit boundaries encompasses about 226 million acres in 44 States and Puerto Rico, of which some 186 million acres are under Forest Service administration.

In managing the National Forests, technical forestry is applied to the growing and harvesting of timber crops. Grazing use is managed to obtain proper range conservation along with utilization of the annual growth of forage. Watersheds are managed to regulate stream flow, prevent floods, and provide water for power, irrigation, navigation, and municipalities. Management includes the handling of the millions of people who visit the National Forests each year for recreation purposes. Wildlife habitat is managed to provide a suitable land and water environment for both game and non-game wildlife.

Under the multiple use principles most areas are used for, or serve, more than one purpose or objective. For example, about 50% of the area within the National Forests serves five different purposes:

(a) Timber production
(b) Watershed protection
(c) Forage production
(d) Wildlife production
(e) Recreation

An additional 28% serves four purposes in varying combinations. Of the remainder, 21% of the total serves three purposes with only 1% of the total reserved exclusively for a single purpose, mainly campgrounds and special use areas, such as summer homesites, pastures, and corrals. The varied interests which frequently conflict and which must be reconciled, and the vast areas covered, clearly require careful planning and skillful management of the National Forest properties.

The protection of the National Forests includes the control of forest fires, the control of tree disease and insect epidemics, and the prevention of trespass.

The major development activities of the National Forests are reforestation; timber stand improvement; revegetation; construction of roads, recreational facilities, range and other necessary improvements; and land acquisition and exchanges.

The economic importance of the National Forests and National Grasslands is evident when it is considered that:

(a) They produced a cash income in fiscal year 1966 of over $175.6 million. Approximately 65% of this amount is credited to the general fund in the Federal Treasury (miscellaneous receipts). The remainder is distributed in accordance with special acts of Congress, including 25% to the States or counties in which lands are located, and 10% made available for construction and maintenance of the Forest Service system of roads and trails. In addition to these cash receipts, there are the even greater economic values which result from the processing of end products derived from this utilization of National Forest timber, forage, and minerals. There are also the important values of water, recreation, and wildlife which cannot be readily expressed in monetary terms.

(b) The area within National Forests boundaries is equivalent to some 10% of the area of the continental United States. Over 40% of this land is within areas now experiencing economic distress. Proper management, development, and utilization of these lands are important factors in permanent improvement of these local economies. Millions of people who live in and near the National Forests are supported in whole or in part through the economic development arising from the forests and their resources.

(c) The National Forests supplied 12.1 billion board feet of timber in fiscal year 1966 to the Nation's forest products industries. This is expected to increase to 12.5 billion board feet in 1967. Dependence of the forest products industries on National Forest timber continues to increase as the result of depletion of good quality timber on private lands.

(d) About 7 million head of domestic livestock (including calves and lambs) are grazed on the National Forests and Grasslands.

(e) These lands provide protection to municipal water supplies for nearly all western cities and towns and many in the east, to irrigation water used on about 20 million acres of western lands, and to many streams with water power developments. They provide flood protection to thousands of acres of rich valley lands and help to prevent more rapid siltation of reservoirs and stream channels.

(f) They provide a habitat for a large part of the big game animal population, for birds, for millions of small game animals and furbearers, and for fish.

(g) They provide opportunities for healthful outdoor recreation, with a minimum of restrictions.

2. *Forestry research.*—The Forest Service conducts research in the entire field of forestry and the management of forest and related ranges. This includes the growth and harvesting of timber, its protection from fire, insects, and diseases, the protection and management of watersheds, and improved methods for development and management of recreation resources. It conducts studies in forest economics, marketing of forest products, and a survey of the present extent and potential growth and use of the Nation's forest resources. It also conducts research to develop new and improved products from wood, to increase efficiency of utilizing forest products, and to advance the efficiency and mechanization of forestry operations.

The research program has a two-fold objective:

(a) To backstop the National Forest development program by devising more efficient practices for protecting, managing, and utilizing forest resources.

(b) To develop new and improved practices that will lead to sounder uses of forests in other public and private ownerships and more efficient and profitable utilization and marketing of forest products.

The Forest Service also cooperates with the Agricultural Research Service of the Department by reviewing and appraising for technical adequacy forest research projects beneficial to the United States which are conducted abroad.

These projects are carried out with foreign currencies under Section 104(b) (3) of Public Law 480, as amended, and the dollar expenses of the Forest Service in connection with this work are paid from the appropriation "Forest Protection and Utilization."

Results of research are made available to owners of private forest and range lands, to public agencies which administer such lands, to forest product industries, and to consumers.

3. *Cooperation with State and private forest landowners.*—The Forest Service cooperates with State agencies and private forest owners to:

(a) Better protect the 446 million acres of State and privately owned forests and critical watersheds against fires, insects, and diseases.

(b) Encourage better forest practices, both for resource conservation and profit, on the 367 million acres of private forest land.

(c) Aid in the distribution of planting stock for forests, shelterbelts, and wood lots.

(d) Stimulate development and proper management of State, county, and community forests.

(e) Assist the harvesters, processors, and marketers of forest products in doing a better job and thereby bring about greater use of forest products and increased income and employment for rural people.

(f) The Forest Service also provides assistance to States for tree planting under Section 401 of the Agricultural Act of 1956 (16 USC 568e), through the State forester or equivalent State official, including advice, technical assistance, and financial contributions for increased tree planting and reforestation work, in accordance with plans submitted by the State and approved by the Secretary of Agriculture.

Other work related to forestry includes:

4. *Insect and disease control.*—Activities to suppress and control destructive insects and diseases that threaten timber areas include two types of work carried on jointly by Federal, State, and private agencies:

(a) Surveys on forest lands to detect and evaluate infestations of forest insects and infections of tree diseases and determination of protective measures to be taken.

(b) Control operations to suppress or eradicate forest insects and diseases, including white pine blister rust.

5. *Flood prevention and watershed protection.*—The Forest Service cooperates with the Soil Conservation Service, appropriate State agencies and the local organizations sponsoring small watershed protection projects initiated under the Watershed Protection and Flood Prevention Act of 1954, as amended, (PL 83–566) in planning and installing forestry and related land resource measures on the watersheds. The Forest Service also collaborates with the Soil Conservation Service, other Federal and State agencies in the conduct of comprehensive river basin studies relating to the development of water and related land resources under authority of PL 89–80 and section 6, PL 83–566.

On National Forest lands and on non-Federal forest lands within the watersheds authorized for treatment by the Department of Agriculture under the Flood Control Act of December 22, 1944, the Forest Service plans and installs watershed improvement measures, in the form of minor physical structures, cultural measures, and intensified fire control, to retard runoff and reduce flood water and sediment damage. Work on non-Federal land is carried on in cooperation with the Soil Conservation Service and the appropriate State and local agencies.

This work is performed with funds allotted to the Forest Service by the Soil Conservation Service.

6. *Job Corps Conservation Centers.*—The Forest Service operates 47 Job Corps Conservation Centers on National Forests throughout the United States under agreement with the Office of Economic Opportunity. The Forest Service provides the staffing, administration and logistical support to physically operate and maintain the Centers and conduct the basic education, plan and supervise the recreation, and fully implement the vocational training of corpsmen. The funds for this program are transferred from OEO. There are 32 to 64 permanent staff assigned to each Center based upon enrollee capacity of 112 to 256. Total capacity of all Centers is 8,388 corpsmen and Centers operate on a 24-hour, seven-day week basis. Both human and natural resources are being up-

graded through these Conservation Centers, as young men improve their education and job skills in preparation for a more productive life.

7. *Timber stand improvement.*—Funds collected from timber purchasers in connection with timber sales, under authority of the Knutson-Vandenberg Act, make possible some timber stand improvement work on cut-over areas each year looking to the establishment of natural tree growth and protecting it through the critical period of early growth. This work also helps to obtain stocking of tree of desirable species, form and quality. Timber stand improvement in promising young growth not associated with timber sale cuttings is done with funds directly appropriated by Congress.

8. *Brush disposal.*—National Forest timber sale contracts require treatment of debris from cutting operations or deposit of funds to pay for the work. If it is not feasible for the timber purchaser to dispose of the logging slash, which is the case in most sales, it is done by the Forest Service using deposits made by the purchaser. This work is essential because logging slash increases the fire hazard and may contribute to the buildup of insect populations, increase certain disease infestations, and cause damage to stream channels.

9. *Land and Water Conservation Fund.*—This fund, transferred from the appropriation made to the Department of the Interior, finances the acquisition of lands, waters, or interests in lands or waters by the Forest Service as well as certain other Federal agencies. The Act creating the fund from which appropriations are made requires that the lands and waters acquired be primarily of value for outdoor recreation. The fund derives revenues from admission and user fees, sales of surplus real property, and motor boat fuel tax. The first purchase of recreation land made by the Forest Service was on October 19, 1965.

10. *Rural fire defense.*—The Forest Service, as a part of its regular programs, also directs Federal activities and provides technical guidance and training to States concerned with the prevention and control of fires which might be caused by an enemy attack in rural areas of the United States.

11. *Timber development organization loans and technical assistance.*—Under Section 204 of the Appalachian Regional Development Act of 1965, the Forest Service provides technical assistance and loans to timber development organizations to improve development and utilization of timber stands in the Appalachian region.

ORGANIZATIONAL STRUCTURE

The Forest Service maintains its central office in Washington, with program activities decentralized to 9 regional offices, 130 forest supervisors' offices, 817 district rangers' offices, 2 State and private forestry area offices, 8 forest and range experiment stations, the Institute of Tropical Forestry, and the Forest Products Laboratory. Location of headquarters offices:

Regional offices: Missoula, Montana; Denver, Colorado; Albuquerque, New Mexico; Ogden, Utah; San Francisco, California; Portland, Oregon; Atlanta, Georgia; Milwaukee, Wisconsin; Juneau, Alaska.

State and private forestry area offices: Upper Darby, Pennsylvania; Atlanta, Georgia.

Experiment stations: Ogden, Utah; St. Paul, Minnesota; Upper Darby, Pennsylvania; Portland, Oregon; Berkeley, California; Fort Collins, Colorado; Asheville, North Carolina; New Orleans, Louisiana.

Forest Products Laboratory: Madison, Wisconsin.

Institute of Tropical Forestry: Rio Piedras, Puerto Rico.

PROGRAM DATA

Chairman HAYDEN. Then the following data which has been supplied will be printed in the record: A summary of estimated appropriations and receipts for fiscal years 1966 through 1968, the development program for the national forests, the Forest Service activities related to the Office of Economic Opportunity, and the amounts programed for Appalachia.

(The documents follow:)

Summary of estimated appropriations and receipts

Item	Available, 1966	Estimated available, 1967	Budget estimates, 1968	Increase or decrease, 1968 over 1967
APPROPRIATED FUNDS				
Forest protection and utilization:				
Forest land management	$171,652,000	$178,388,000	$186,238,000	+$7,850,000
Forest research	37,372,000	38,459,000	40,032,000	+1,573,000
State and private forestry cooperation	17,558,000	18,151,000	18,251,000	+100,000
Total, forest protection and utilization [1]	[2] 226,582,000	[3] 234,998,000	244,521,000	+9,523,000
Forest roads and trails [2]	102,136,000	101,230,000	110,500,000	+9,270,000
Acquisition of lands for national forests, special Acts	80,000	80,000	80,000	
Acquisition of lands for Uinta National Forest		300,000		−300,000
Cooperative range improvements	700,000	700,000	700,000	
Assistance to States for tree planting [1]	1,000,000	1,000,000	1,000,000	
PERMANENT APPROPRIATIONS				
Expenses, brush disposal [2]	10,195,672	10,200,000	10,300,000	+100,000
Roads and trails for States, national forests fund	14,203,671	16,778,480	17,160,000	+381,520
Forest fire prevention [2]	43,046	45,000	45,000	
Restoration of forest lands and improvements [2]	19,795	25,000	25,000	
Payment to Minnesota (Cook, Lake, and St. Louis Counties) from the national forests fund	140,619	144,815	145,000	+185
Payments to counties, national grasslands	429,041	431,250	431,250	
Payments to school funds, Arizona and New Mexico	112,130	102,931	105,000	+2,069
Payments to States, national forests fund	35,504,367	41,942,319	42,900,000	+957,681
Total	391,146,341	407,977,795	427,912,250	+19,934,455
Deduct permanent appropriations shown above	60,648,341	69,669,795	71,111,250	+1,441,455
Total (excluding permanent appropriations)	330,498,000	338,308,000	356,801,000	+18,493,000
RECEIPTS [4]				
Timber sales	164,936,546	168,700,000	171,500,000	+2,800,000
Grazing and power	3,431,808	3,510,000	3,515,000	+5,000
Recreation	1,917,394	1,925,000	1,950,000	+25,000
Land uses	3,119,609	3,220,000	3,310,000	+90,000
Admission and user fees	495,741	425,000	425,000	
National grasslands and land utiliaztion	1,715,330	1,725,000	1,725,000	
Total receipts	175,616,428	179,505,000	182,425,000	+2,920,000

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[1] Includes following: Fighting forest fires—1966, $7,500,000 provided in Second Supplemental Appropriation Act, 1966, Public Law 89-426; excludes following: Fighting forest fires—1967, $25,000,000; proposed supplemental space transfers to General Services Administration—1966, $303,000; 1967, $427,000.

[2] In addition, prior-year balances are available.

[3] Includes following: Supplemental Appropriation Act, 1967—$2,300,000, forest land management, sales administration, and management; $200,000, State and private forestry cooperation, general forestry assistance; proposed supplemental, 1967—$3,357,000 for increased pay costs, Public Law 89-504.

[4] Amounts include:

	1966	1967	1968
Suspense account, Alaska [a]	$1,091,494	$1,100,000	$1,100,000
Suspense account, Oregon and California lands [b]	5,966,117	6,000,000	6,000,000

[a] Account established pending settlement of Indian rights on Tongass National Forest, Alaska.

[b] Account established for Oregon and California railroad grant lands, for which receipts are transferred to Department of the Interior for distribution under the acts of Aug. 28, 1937, June 24, 1954, and Aug. 3, 1961 (43 USC 1181f-g).

Status of financing development program for the national forests, cumulative fiscal years 1963–67

(The planned levels indicated in this table were developed by the Forest Service and were not specifically indicated in the program submitted by the President on September 21, 1961. This program stated that it would "be carried out as rapidly as possible within overall budgetary requirements and financial resources of the Federal Government.")

[In thousands of dollars]

	1963–67 planned level	1963–67 available			Difference	Percent financed
		Forest Service appropriation	Public works	Total		
FOREST LAND MANAGEMENT						
National forest protection and management:						
Timber resource management:						
(*a*) Sales administration and management	$154,001	$147,994	----------	$147,994	−$6,007	96.1
(*b*) Reforestation and stand improvement	179,037	82,967	$5,294	88,261	−90,776	49.3
Recreation-public use	288,176	137,882	10,611	148,493	−139,683	51.5
Wildlife habitat management	28,736	18,618	1,637	20,255	−8,481	70.5
Range resource management:						
(*a*) Management	29,513	26,007	----------	26,007	−3,506	88.1
(*b*) Revegetation	15,667	13,844	46	13,890	−1,777	88.7
(*c*) Improvements	22,143	16,630	1,986	18,616	−3,527	84.1
Soil and water management	50,646	29,804	1,206	31,010	−19,636	61.2
Mineral claims, leases, and special uses	21,920	19,346	----------	19,346	−2,574	88.3
Land classification, adjustments, and surveys	35,502	21,639	----------	21,639	−13,863	61.0
Forest fire protection	153,518	118,411	1,187	119,598	−33,920	77.9
Structural improvements for fire and general purposes (construction and maintenance)	80,787	56,105	16,715	72,820	−7,967	90.1
Total, national forest protection and management	1,059,646	689,247	38,682	727,929	−331,717	68.7
Insect and disease control:						
White pine blister rust control	21,019	18,032	51	18,083	−2,936	86.0
Other pest control	35,960	41,612	146	41,758	+5,798	116.1
Total, insect and disease control	56,979	59,644	197	59,841	+2,862	105.0
Acquisition of lands, Weeks and special acts	27,425	9,332	----------	9,332	−18,093	34.0
Forest roads and trails (including all related appropriations) (obligating authority)	611,753	429,997	18,719	448,716	−163,037	73.3
Total	1,755,803	1,188,220	57,598	1,245,818	−509,985	71.0

OFFICE OF ECONOMIC OPPORTUNITY (JOB CORPS)

Transfers to Forest Service

	Available, 1966		Estimate, 1967		Estimate, 1968	
	Number of permanent positions	Amount (thousands)	Number of permanent positions	Amount (thousands)	Number of permanent positions	Amount (thousands)
Center construction and equipment	----------	$21,862	----------	$2,075	----------	$2,000
Center operation	1,763	30,191	2,123	42,967	2,123	43,000
Program direction and training	154	1,899	154	2,120	154	2,200
Total	1,917	53,952	2,277	47,162	2,277	47,200

Amounts programed for Appalachia

[In thousands of dollars]

	1966			1967			1968		
	National program total [1] [2]	Normal Appalachian portion	Accelerated Appalachian program (obligations)	National program total [1] [2] [3]	Normal Appalachian portion	Accelerated Appalachian program (appropriation)	National program total [1] [2]	Normal Appalachian portion	Accelerated Appalachian program (estimate)
Forest protection and utilization:									
Forest land management	165, 153	10, 107	1, 915	177, 607	10, 870	1, 800	185, 138	11, 330	1, 800
Forest research	37, 374	2, 792	1, 063	37, 988	2, 840	579	39, 427	2, 945	593
State and private forestry cooperation	17, 558	1, 942	304	17, 829	1, 970	322	17, 929	1, 983	322
Subtotal, forest protection and utilization	220, 085	14, 841	3, 282	233, 424	15, 680	2, 701	242, 494	16, 258	2, 715
Forest roads and trails	95, 536	3, 816	2, 250	104, 731	3, 990	2, 250	134, 969	5, 142	2, 191
Timber, development organization loans, and technical assistance			4			200			746
Total	315, 621	18, 657	5, 536	338, 155	19, 670	5, 151	377, 463	21, 400	5, 652

[1] Includes $700,000 for cooperative range improvements and following transfers to GSA for space:

	1966	1967
Forest land management	$301, 000	$319, 000
Forest research	2, 000	108, 000
Total	303, 000	427, 000

[2] Excludes amounts shown in accelerated Appalachian program column and supplementals for fighting forest fires and Pacific Northwest flood damages.

[3] Includes proposed supplemental of $3,357,000 for pay costs.

SOCIETY OF AMERICAN FORESTERS' SPECIAL CITATION

Chairman HAYDEN. Mr. Cliff, may we hear from you now?

Mr. CLIFF. Mr. Chairman, it is always a pleasure to appear before this committee, and I am glad to have an opportunity to present some of the highlights of our recent accomplishments. First, I would like to say that when Mr. Baker commended you for your outstanding contribution to conservation in its broadest sense, I am sure he was not aware that the Society of American Foresters is going to confer a special citation on you on the 22d day of March for distinguished service to forestry. I want to congratulate you for this special recognition.

PREPARED STATEMENT

Chairman HAYDEN. If you have a prepared statement, you may put it in the record and then summarize it.

Mr. CLIFF. I do have a prepared statement, Mr. Chairman, which I will be glad to submit for the record. I have a couple of additions to this statement that I would like to make.

Chairman HAYDEN. Yes, sir.

(The statement follows:)

It is a pleasure for me to highlight for you some of our recent accomplishments and items of interest but, first, I would like to introduce to you a new member of my staff. He is Mr. E. M. Bacon, who is now in charge of our State and Private Forestry Programs. Mr. Bacon replaced Mr. Boyd Rasmussen, who transferred to the Department of the Interior as Director of the Bureau of Land Management.

The financing you provided enabled us to make some very significant accomplishments during the past fiscal year.

CASH RECEIPTS

Cash receipts from the sale and use of National Forest resources amounted to a record $173.9 million in fiscal year 1966. This is an increase of $26.5 million over the preceding year, a record year also. For fiscal year 1968 receipts are estimated at $180.7 million. During 1966 the second billionth dollar in cash receipts was received by the Forest Service. The first billion dollar point was reached in 1958 and required 53 years to collect. The second billion, attained within the past seven years, indicates rising use and intensified management of the resources. With continued normal growth of our programs, the three billion mark may be reached within five or six years.

TIMBER CUT

National Forest timber cut keeps going up. It was 12.1 billion board feet for the fiscal year ending June 30, 1966, an increase of 900 million board feet over the preceding year and 3.1 billion over the 9 billion board feet cut in 1962. This is an increase of over 34% during the four-year interval.

OUTDOOR RECREATION

Outdoor recreation is still one of our fastest growing activities. In calendar year 1965, 160 million visitor-days were tallied on the National Forest. Camping and picnicking were the most popular and accounted for 49.5 million visitor-days. Fishing and hunting accounted for 30.3 million, and recreation travel was next in popularity with a total of 29.3 million visitor-days. Winter sports, boating, swimming, water skiing and other water sports accounted for the remainder.

FIRE CONTROL

Last year we reported an all time low in acreage burned within National Forest protection areas. I wish I could say the same for the 1966 fire season but, unfortunately, this is not the case. The 1966 season was one of the driest on record and fires took a serious toll of National Forest resources. By the close of the year, 11,230 fires burned 337,566 acres, the largest area since 1960. Of these fires 5,374 were man-caused. One of these fires, in California, took the lives of twelve men who were caught in a brief flare-up. This tragedy has spurred efforts to examine firefighting methods, training and capabilities so as to insure safe, as well as effective, fire suppression action.

Though a serious loss, the 1966 burned acreage is not large in comparison with what might have happened. Time after time, prompt detection and aggressive initial attack stopped fires from making destructive runs. Ninety-three percent (10,436) of the fires were controlled at less than ten acres. The use of infra-red detection devices was made operational on a small scale. This infra-red principle uses heat sensing equipment carried on aircraft for detection and location of fires. As this is expanded we can expect further benefits from its use. From these successes can be seen the savings gained by having flexible, hard-hitting forces available under severe burning conditions.

FORESTRY RESEARCH ACCOMPLISHMENTS

Forestry research has made new discoveries during the year past and contributed important new knowledge which should strengthen the technology used in efficiently managing the public and private forest lands of the Nation. Research breakthroughs provided new tools for predicting and improving water yield, reducing sedimentation, and preventing pollution of our water resources. Advances in forest insect and disease control have been significant. Development of sex attractants means that less spraying of chemicals may be needed in the future as we learn to control forest insects by synthetic compounds that will lure destructive forest insects to their deaths. Fire control should be less costly and more effective as a result of recent payoffs from research on prevention of man-caused fires and aerial fire suppression.

Our research on forest products shows how we can economize in the amount of wood used in construction and otherwise use wood more effectively. At the same time, our scientists have developed new uses and markets for wood, as in the mushrooming program of urban renewal. These new markets should substantially expand the demand for timber products from the regions of relatively low economic activity and provide jobs for those who need a boost in income. The nationwide survey completed timber resource inventories on 49 million acres of forest land in 10 States. Comprehensive appraisals showing the present status of the timber resource, trends, and industrial use were completed for eight States or portions of States.

Land managers are being supplied new economic guides for maximizing returns from forest resource management as a result of our research. These guides cover timber growing, pest control operations, and management of ranges for domestic animals and wildlife. Our recreation research has helped to identify the desires of forest recreationists and has shown ways to meet the pressures they exert upon recreation facilities. It is more helpful in guiding National Forest and other agency recreation programs and thus has a prompt payoff in relation to proposed expenditures for various types of facilities, partly because it does not require substantial laboratory facilities. Unfortunately forest recreation research has not kept pace with other research programs. Our recreation research is well coordinated with programs of other agencies. The composite of our research outputs improves the management of wild lands for their multiple uses and strengthens the economic opportunities in rural communities.

STATE AND PRIVATE FORESTRY ACHIEVEMENTS

We are proud to be partners with the State Foresters—incidentally we now have 50—in the cooperative programs involving protection, tree planting, management, and marketing.

In 1965, organized fire protection was extended about 25 million acres bringing the total protected to 472 million acres.

In 1966, three additional States, making a total of 23, entered into cooperative agreements to share the cost of forest insect and disease control on non-Federal lands. About 575 million seedlings were produced by State foresters, enough to plant about 800 thousand acres. Over 100,000 woodland owners and 10,000 processors—mostly small—were given professional advice in the management of woodland, the techniques of utilization and marketing of forest products.

With the funds available, we have made adjustments in the programs to bring about the most effective assistance possible to all the States. Yet, in many places our protection is not as effective as it should be. With the rapidly increasing use of private forests by both the public and industry, the States reported during the 1961–1965 period an average each year of about 110,000 fires which burned over 4 million acres.

Our losses from insects and diseases are still much too high. We are concerned that our planting, management, and marketing efforts are not keeping pace with increasing needs. Our growth of large high-quality trees is not keeping up with the cutting. The immensity of the overall problem in State and private forestry is indicated by the fact that there are about 4 million woodland owners and 35,000 processors, mostly small. Most large industrial owners are doing a good job of management but progress with the small woodland ownerships is slow.

The States are urging private landowners to adopt the multiple use principle which Congress has recognized as essential to the management of National Forests. Encouragement is given to the development of private capabilities in recreation, wildlife, special forest products, forage and water, as well as timber. These activities are directly related to improving the economic, social, and general well-being of rural people. The supplemental appropriation provided funds to initiate a new hardwood improvement program. The program is well under way on a pilot basis. Deputy Chief Bacon will tell you more about this later.

Thank you for this opportunity to make a few introductory comments. We will be pleased to answer any questions that you may have.

1966 VISITOR DAYS USE ON NATIONAL FORESTS

Mr. CLIFF. One is in the nature of a correction. On the second page of my statement, under the heading "Outdoor Recreation," we gave you the figures for the calendar year 1965, 160 million visitor days of recreation use were tallied on the national forests. Since this statement was prepared, figures have become available on recreation use for calendar year 1966.

On February 27, of this year, the Bureau of Outdoor Recreation provided the House Appropriations Committee with a report on total visitor days use on Federal lands and waters for all of the seven Federal agencies reporting. This report shows that the total visitor days use on all Federal areas in 1966 was slightly over 375 million.

Of this 375 million, almost one-half or 173 million visitor days was on the national forests. This 173 million is 13 million over the 1965 use that my prepared statement shows.

I think those figures are quite significant. When we are talking about recreation on the national forest, we are talking about nearly half of the total recreation on all Federal land areas.

BLISTER RUST CONTROL REPROGRAMING

One additional comment I would like to make is about the change in the blister rust control program. Mr. Baker mentioned this. We are proposing a reprograming action of some of the blister rust funds. This does not involve additional funds. It means a shift between our line items in the forest land management appropriation.

I will describe this in general and the specific changes can be considered along with the total amounts for each one of the line projects involved.

We are proposing a change in our fiscal year 1968 white pine blister rust control program in Idaho, western Montana, and eastern Washington. This is based on a recent hard look at the effectiveness of our program to eradicate currant and gooseberry bushes, which are the alternate hosts to a disease which kills the white pine. The rate of infection on the young white pine stands below 20 years of age is still high, even under the best control methods we have been able to devise.

We have decided that it is not feasible under present economic conditions to continue to eradicate the ribes and gooseberries bushes, and so we are proposing to reduce the amount for blister rust control in white pine stands in northern Idaho, eastern Washington, and western Montana by $1,416,200. Reprograming of this amount is requested for several high priority items, including control of a greatly expanded beetle infestation on the Targhee National Forest in Idaho, on which we did not have data available at the time the estimates were made. Three 25-man forest fire crews, which will replace the labor that would otherwise have been available under the blister rust program, will be funded. Funds will be provided for a grazing fee study which the Budget Bureau is coordinating with all interested agencies. Two high-priority wildlife development projects will be funded and a small amount will be used to help bring recreation facilities development closer to last year's level.

MOUNTAIN PINE BARK BEETLE CONTROL

As a separate consideration, we also desire to reprogram about $700,000 of 1967 blister rust funds planned for this same white pine area, to help meet the bark beetle epidemic emergency on the Targhee National Forest and Teton National Forest in southern Idaho and western Wyoming.

As we reach these functional items, more detail will be added by my staff, who are handling these line projects, and we will be glad to answer questions on them.

We thank you very much, Mr. Chairman.

Chairman HAYDEN. Please place in the record a statement on the fiscal year 1967 reprogramming.

(The information follows:)

We propose to reprogram fiscal year 1967 funds in the amount of $365,000 to the Targhee National Forest bark beetle control project. We also propose reprograming of $339,000 to other bark beetle control projects of which the project on the Teton National Forest is the major one. These funds are needed to control an increasing serious explosion of Mountain Pine bark beetles populations in these areas.

TRANSFERS FROM FOREST SERVICE FUNDS TO INTERGOVERNMENTAL COMMISSIONS, COMMITTEES, AND AGENCIES

Chairman HAYDEN. Before we get into the estimate, will you please place into the record a table indicating transfers to be effected from the Forest Service funds to intergovernmental commissions, committees, and agencies? It would be well to show this information for fiscal years 1966, 1967, and 1968.

Mr. CLIFF. We will be glad to supply that for the record, Mr. Chairman.

(The table follows:)

Forest Service funds, transferred to intergovernmental commissions, committees, and other agencies

	Fiscal year 1966, actual	Fiscal year 1967, estimate	Fiscal year 1968, estimate
National Advisory Commission on Rural Poverty		$12,000	$4,100
National Advisory Commission on Food and Fiber	$12,000		
Citizens' Advisory Committee on Recreation and Natural Beauty		6,000	
President's Committee on Equal Employment Opportunity	4,935	(1)	(1)
Citizens' Advisory Committee on Civil Rights	292	(1)	(1)
President's Commission on the Status of Women	3,800	(1)	(1)
Interdepartmental Committee on Status of Women	394	(1)	(1)
Interagency Committee on Water Resources:			
Subcommittee on Hydrology	250		
Subcommittee on Sedimentation	17,000	15,000	15,000
Total	38,671	33,000	19,100
Forest Service also helps:			
International Hydrological Decade Program of UNESCO (Department of State)	1,875	1,875	
31st Congress of the International Federation for Documentation (National Science Foundation)	2,000		
Interagency Boards of Examiners, Civil Service Commission	26,511	117,800	120,000
Pilot Federal Information Center, Atlanta, Ga. (GSA)		2,000	
Total	30,386	121,675	120,000

(1) No request for funds received as of Mar. 17, 1967.

FOREST PROTECTION AND UTILIZATION

Chairman HAYDEN. There will be printed in the record the justifications supplied in support of your budget estimate of $244,521,000 for "Forest protection and utilization." This is an increase of $12,453,000 over the amount appropriated to you last year. However, it is expected that a supplemental appropriation estimate to meet increased pay costs will be submitted then in the amount of $3,357,000.

(The justifications follow:)

Forest protection and utilization

	Forest land management	Forest research	State and private forestry cooperation	Total
Appropriation Act, 1967 [1]	$176,150,000	$37,821,000	$18,097,000	$232,068,000
Proposed supplemental, 1967, for increased pay costs	+2,557,000	+746,000	+54,000	+3,357,000
Transferred to "Operating expenses, Public Building Service, General Services Administration" for space rental	−319,000	−108,000		−427,000
Base for 1968	178,388,000	38,459,000	18,151,000	234,998,000
Budget estimate, 1968	186,238,000	40,032,000	18,251,000	244,521,000
Increase	+7,850,000	+1,573,000	+100,000	+9,523,000

[1] In addition, $700,000 is available by transfer from cooperative range improvements.

Summary of increases and decreases

	1967 available	1968 estimate	Increase or decrease
FOREST LAND MANAGEMENT			
Prepare and sell 280 million board feet and administer harvest of 210 million board feet of commercial thinnings and salvage material	$34, 463, 000	$35, 900, 000	+$1, 437, 000
Upgrade present waste treatment systems at 25 recreation sites for water pollution control purposes, develop recreation facilities at national recreation areas, and step-up operation, maintenance, and cleanup of existing recreation sites and their facilities	31, 139, 000	34, 638, 000	+3, 499, 000
Develop wetlands in the Chippewa National Forest, Minn., and develop gravel cleaner for salmon spawnbeds	3, 971, 000	4, 301, 000	+330, 000
Finance implementation of grazing fee adjustments	5, 527, 000	5, 682, 000	+155, 000
Accelerate classification surveys of defined subareas in national forests and national grasslands; accelerate examination, appraisal, and evaluation of offered and selected lands in exchange proposals; shorten time required in land lines work and conversion to new status records system; accelerate photogrammetric surveys to provide terrain data, resource inventory data, and general management maps for multiple-use management in problem areas	5, 725, 000	6, 349, 000	+624, 000
Provide better fire protection in line with increasing land and resource values, and more nearly assure standard of protection adequate for successful management of national forest resources	25, 487, 000	26, 172, 000	+685, 000
To control severe bark beetle outbreak on the Targhee National Forest in Idaho	8, 676, 000	9, 292, 200	+616, 200
Additional payments to employees' compensation fund	733, 000	759, 000	+26, 000
Help meet national forest system management and development needs resulting from water development projects proposed and constructed by other agencies	6, 766, 000	8, 660, 000	+1, 894, 000
Reduction in white pine blister rust control program due to limited success of the ribes eradication programs and rising costs	3, 687, 000	2, 270, 800	−1, 416, 200
All other	52, 214, 000	52, 214, 000	------------
Total, forest land mangement	178, 388, 000	186, 238, 000	+7, 850, 000
FOREST RESEARCH			
Accelerate forest genetics research to develop high-quality, pest-resistant types of conifers, preferred species of hardwoods, and southern pine	8, 377, 000	8, 937, 000	+560, 000
To supply a stronger technical basis for management of national forest watersheds and similar water-producing mountain lands	3, 439, 000	3, 650, 000	+211, 000
Strengthen research on ecology, protection, and management of areas and measurement of recreation use and trends	479, 000	811, 000	+332, 000
Intensify research on electronic fire detection system and new fire control technology to reduce forest fire losses	2, 912, 000	3, 112, 000	+200, 000
Strengthen research on bark beetles and defoliators	3, 998, 000	4, 103, 000	+105, 000
Speed up research to develop biological control organisms and genetic host resistance for major diseases of trees and strengthen research to develop more effective preventive and control measures for disease killing and injuring trees	2, 171, 000	2, 358, 000	+187, 000
To hasten solution of critical utilization problems, including expansion and acceleration of wood fiber products and related chemical research	6, 493, 000	6, 863, 000	+370, 000
Expand and accelerate research on aerial logging systems, fully mechanized production line pulpwood harvesting systems to meet increased productivity requirements, and harvesting equipment, machines and tools to meet needs of small timberland operators	583, 000	798, 000	+215, 000
Accelerate timber inventories, provide more local information on industrial development opportunities, and strengthen appraisals of timber supply and demand	2, 100, 000	2, 203, 000	+103, 000
Evaluate costs and benefits of forestry investments, evaluate effectiveness of forestry programs for small forest owners, and develop principles and guides for planning multiple-use management of forest resources	791, 000	1, 088, 000	+297, 000
Reduction for nonrecurring forest research construction projects	3, 285, 000	2, 278, 000	−1, 007, 000
All other	3, 831, 000	3, 831, 000	------------
Total forest research	38, 459, 000	40, 032, 000	+1, 573, 000
STATE AND PRIVATE FORESTRY COOPERATION			
To provide professional services for increasing hardwood lumber output	1, 471, 000	1, 571, 000	+100, 000
All other	16, 680, 000	16, 680, 000	------------
Total State and private forestry cooperation	18, 151, 000	18, 251, 000	100, 000
Total forest protection and utilization	234, 998, 000	244, 521, 000	+9, 523, 000

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
FOREST LAND MANAGEMENT				
National forest protection and management:				
(1) Timber resource management:				
(*a*) Sales administration and management	$31, 211, 100	$34, 463, 000	$35, 900, 000	+$1, 437, 000
(*b*) Reforestation and stand improvement	15, 901, 384	17, 640, 000	17, 640, 000	------------
(2) Recreation-public use	29, 095, 961	31, 139, 000	34, 638, 000	+3, 499, 000
(3) Wildlife habitat management	3, 507, 995	3, 971, 000	4, 301, 000	+330, 000
(4) Range resource management:				
(*a*) Management	6, 199, 565	5, 527, 000	5, 682, 000	+155, 000
(*b*) Revegetation	2, 614, 527	2, 854, 000	2, 854, 000	------------
(*c*) Improvements	3, 201, 209	3, 442, 000	3, 442, 000	------------
(5) Soil and water management	5, 479, 950	6, 361, 000	6, 361, 000	------------
(6) Mineral claims, leases, and special uses	3, 859, 043	4, 097, 000	4, 097, 000	------------
(7) Land classification, adjustments, and surveys [1]	4, 996, 795	5, 725, 000	6, 349, 000	+624, 000
(8) Forest fire protection	22, 826, 391	25, 487, 000	26, 172, 000	+685, 000
(9) Structural improvements for fire and general purposes (construction and maintenance)	12, 406, 700	11, 040, 000	11, 040, 000	------------
(10) Payments to employees' compensation fund	668, 586	733, 000	759, 000	+26, 000
Subtotal	141, 969, 206	152, 479, 000	159, 235, 000	+6, 756, 000
Amount advanced from "Cooperative range improvements"	−700, 000	−700, 000	−700, 000	------------
Subtotal, national forest protection and management	141, 269, 206	151, 779, 000	158, 535, 000	+6, 756, 000
(11) Water resource development related activities	4, 739, 039	6, 766, 000	8, 660, 000	+1, 894, 000
(12) Fighting forest fires	17, 334, 130	[2] 5, 000, 000	5, 000, 000	------------
(13) Insect and disease control:				
(a) White pine blister rust control [3]	3, 236, 704	3, 687, 000	2, 270, 800	−1, 416, 200
(b) Other pest control [4]	7, 794, 887	8, 676, 000	9, 292, 200	+616, 200
Subtotal, insect and disease control	11, 031, 591	12, 363, 000	11, 563, 000	−800, 000
(14) Acqusition of lands, Weeks Act	678, 509	2, 480, 000	2, 480, 000	------------
Total, forest land management [5]	175, 052, 475	178, 388, 000	186, 238, 000	+7, 850, 000
FOREST RESEARCH				
Forest and range management research:				
(15) Timber management research	8, 034, 516	8, 377, 000	8, 937, 000	+560, 000
(16) Watershed management research	3, 320, 578	3, 439, 000	3, 650, 000	+211, 000
(17) Range management research	1, 358, 344	1, 294, 000	1, 294, 000	------------
(18) Wildlife habitat research	800, 773	912, 000	912, 000	------------
(19) Forest recreation research	569, 230	479, 000	811, 000	+332, 000
Subtotal, forest and range management research	14, 083, 541	14, 501, 000	15, 604, 000	+1, 103, 000
Forest protection research:				
(20) Forest fire research	2, 655, 608	2, 912, 000	3, 112, 000	+200, 000
(21) Forest insect research	3, 611, 628	3, 998, 000	4, 103, 000	+105, 000
(22) Forest disease research	2, 215, 467	2, 171, 000	2, 358, 000	+187, 000
Subtotal, forest protection research	8, 482, 703	9, 081, 000	9, 573, 000	+492, 000
Forest products and engineering research:				
(23) Forest products utilization research	5, 907, 629	6, 493, 000	6, 863, 000	+370, 000
(24) Forest engineering research	458, 644	583, 000	798, 000	+215, 000
Subtotal, forest products and engineering research	6, 366, 273	7, 076, 000	7, 661, 000	+585, 000
Forest resource economics research:				
(25) Forest survey	1, 896, 962	2, 100, 000	2, 203, 000	+103, 000
(26) Forest products marketing research	1, 279, 084	1, 625, 000	1, 625, 000	------------
(27) Forest economics research	673, 891	791, 000	1, 088, 000	+297, 000
Subtotal, forest resource economics research	3, 849, 937	4, 516, 000	4, 916, 000	+400, 000
(28) Forest research construction	4, 136, 346	3, 285, 000	2, 278, 000	−1, 007, 000
Total, forest research [5]	36, 918, 800	38, 459, 000	40, 032, 000	+1, 573, 000

See footnotes at end of table, p. 1642.

Project statement—Continued

Project	1966	1967 estimate	1968 estimate	Increase or decrease
STATE AND PRIVATE FORESTRY COOPERATION				
(29) Cooperation in forest fire control	$12,825,070	$12,834,000	$12,834,000	
(30) Cooperation in forest tree planting	277,884	300,000	300,000	
(31) Cooperation in forest management and processing	3,478,986	3,546,000	3,546,000	
(32) General forestry assistance	929,655	1,471,000	1,571,000	+$100,000
Total, State and private forestry cooperation [4]	17,511,595	18,151,000	18,251,000	+100,000
Unobligated balance	899,139			
Total, available or estimate [6]	230,382,009	234,998,000	244,521,000	+9,523,000
Proposed supplemental		−3,357,000		
Transferred to "Operating expenses, Public Building Service, General Services Administration"	302,991	427,000		
Advance from cooperative work, Forest Service (trust fund) for fighting forest fires	−3,800,000			
Total appropriation	226,885,000	232,068,000		

[1] Includes allocation to the Department of the Interior, Geological Survey—1966, $255,000; 1967, $285,000; and 1968, $285,000.

[2] Excludes proposed supplemental for fighting forest fires, $25,000,000.

[3] Includes allocation to the Department of the Interior, Bureau of Land Management—1966, $349,000 1967, $386,000; and 1968, $384,000.

[4] Includes allocation to the Department of the Interior, Bureau of Land Management—1966, $853,700; 1967, $763,000; and 1968, $507,000.

[5] Excludes obligations of $7,048,047 incurred in 1966 against funds provided by Second Supplemental Appropriation Act, 1965 (Public Law 89-16). Summary follows:

	Pacific Northwest flood damages	Appalachian region
Obligations, fiscal year 1965	$353,280	$175,521
Obligations, fiscal year 1966	3,765,689	3,282,358
Unobligated balance lapsing	81,031	117,121
Total appropriated	4,200,000	3,575,000

[6] Represents obligations as follows:

Obligated fiscal year 1966	$230,182,870
Obligations, fiscal year 1966, per footnote 5 above	7,048,047
Total obligations	237,230,917
Applied costs, fiscal year 1966	227,307,436

The difference of $9,923,481 reflects, primarily, contracts made and orders placed in 1966 over contractual services and equipment received in that year.

FOREST LAND MANAGEMENT

Timber resource management: Sales administration and management

1966	$30,809,000
1967	34,463,000
1968	35,900,000
Increase	+1,437,000

An increase of $1,437,000 is needed primarily to cover the cost of preparing and selling 280 million board feet and administering the harvest of 210 million board feet of commercial thinnings and salvage material.

The total program for fiscal 1968, as compared with 1967, follows:

[In thousands]

	1967	1968	Increase or decrease
Regular program:			
Harvest	$23,955	$23,950	−$5
Sale preparation	8,615	8,601	−14
Advance sale preparation	275	305	+30
Thinning and salvage:			
Harvest	----------	676	+676
Sale preparation	----------	748	+748
Timber inventories and management plans	1,618	1,620	+2
Total	34,463	35,900	+1,437

Additional workload and cost information for fiscal 1966 through 1968

	1966	1967	1968
1. Regular program:			
a. Harvest:			
Million board feet	12,138	12,500	12,500
Cost per thousand board feet	$1.69	$1.92	$1.92
Total cost (in thousands)	$20,525	$23,955	$23,950
b. Sale preparation:			
Million board feet	11,244	12,000	12,000
Cost per thousand board feet	$.75	$.72	$.72
Total cost (in thousands)	$8,450	$8,615	$8,601
c. Advance sale preparation:			
Million board feet	1,500	2,200	1,500
Cost per thousand board feet	$.20	$.13	$.20
Total cost (in thousands)	$304	$275	$305
2. Thinning and salvage:			
a. Harvest:			
Million board feet	----------	----------	210
Cost per thousand board feet	----------	----------	$3.22
Total cost (in thousands)	----------	----------	$676
b. Sale preparation:			
Million board feet	----------	----------	280
Cost per thousand board feet	----------	----------	$2.67
Total cost (in thousands)	----------	----------	$748
3. Timber inventories and management plans:			
Thousands of acres	8,530	9,400	9,500
Cost per acre	$.18	$.17	$.17
Total cost (in thousands)	$1,530	$1,618	$1,620

The proposed program is necessary to meet national needs for timber products including both domestic and defense requirements. Alternate sources of timber cannot provide the necessary increase in volume. Such sources are either being overcut or are producing at or close to capacity. To meet national needs in 1968, a program of expanded thinnings and salvage cutting is needed in addition to the regular harvest cutting. This program is to offer 280 million board feet of thinnings from young overstocked stands and other salvage material. The total harvest program includes the cutting of 210 million board feet of the thinnings and salvage material for a total of 12.71 billion board feet and will cost $24,626,000, or $671,000 over fiscal year 1967.

The harvest program requires that 12.28 billion board feet of new sales be offered in 1968. The proposed sale program, including advance sale preparation, will cost $9,654,000, or $764,000 over fiscal year 1967.

Returns to the Treasury from the timber harvest program continue to increase. The following tabulation shows receipts from the sale of National Forest timber:

[In millions]

Fiscal year:	*Receipts*
1962	$106.2
1963	117.4
1964	128.0
1965	138.8
1966	164.9
1967 (estimated)	168.7
1968 (estimated)	171.5

Based on the above tabulation, each dollar of program cost for 1968 will return over $4.75 to the United States Treasury in the form of receipts.

The program for timber inventories and management plans is at about the same level as in fiscal year 1967, or $1,620,000—up to $2,000 over fiscal year 1967. This work is essential in establishing the allowable annual cut and is basic to the timber harvest program. Working circles are inventoried, and new management plans developed on the basis of current inventory data at about decade intervals. Program costs vary somewhat from year to year based on the size of the working circles involved. Improved techniques have made it possible to keep unit costs nearly constant, despite higher costs.

Examples of Recent Accomplishments

Sales administration.—A record high volume was harvested from the National Forests for the fourth consecutive year. During fiscal year 1966, 12.1 billion board feet were harvested—an increase of 900 million board feet over the previous year. Receipts to the Treasury from this record harvest amounted to $164.9 million, up $26.1 million over the preceding year. A total of 11.3 billion board feet of timber was sold on the National Forests in fiscal year 1966. In addition, preliminary award was made in a long term sale of 8.75 billion board feet in Alaska. The contract requires that primary manufacturing of the timber involved will be in Alaska.

Real progress has been made in automating customer accounts in timber sale. It is expected that such accounts on the heavy timber forests in the Western United States will be fully automated during fiscal year 1967.

Progress in meeting the sustained yield allowable cut objectives during the past five years is shown on the following table. A comparison between the volume actually cut and the annual allowable cut is shown below.

[Volumes in billions of board feet]

Fiscal year	Annual allowable cut [1]	Actual volume cut	Percent of allowable cut harvested	Actual volume sold	Percent of allowable cut sold
1962	10.5	9.0	86	10.3	98
1963	11.3	10.0	88	12.2	108
1964	12.0	11.0	92	11.7	98
1965	12.0	11.2	93	11.5	96
1966	12.4	12.1	97	11.3	91

[1] As of Jan. 1 preceding the fiscal year. Annual allowable cut includes only sawtimber for national forests west of the Great Plains and in Alaska, and sawtimber and convertible products for national forests in the eastern half of the United States.

Timber resource management: Reforestation and timber stand improvement

1966	$17,360,000
1967	17,640,000
1968	17,640,000

No program increase is proposed.

The program for fiscal year 1968 is needed to increase timber growth and quality on the National Forests to supply the Nation's requirements for industrial wood. Other values such as water, wildlife, and natural beauty will also benefit from the work. The supply and demand for timber on which the program is based has been estimated on the basis of gross national product and population projections. They show deficits in timber supply and growing stock by the year 2000 and beyond, at current levels of management. Because of the time required for trees to grow to usable size, a major part of the total needed reforestation and stand improvement work must be done in the next decade to be effective when the timber shortages will occur.

Proposed use of 1968 appropriation and comparison with 1967 and 1966

	1966, actual		1967, estimate		1968, estimate	
		Acres		*Acres*		*Acres*
Reforestation	$10,330,000	114,600	$10,700,000	118,000	$11,000,000	125,000
Timber stand improvement	5,308,000	187,927	5,525,000	190,000	5,275,000	180,000
Genetic tree improvement	950,000		910,000		1,010,000	
Nursery development	772,000		505,000		355,000	
Total	17,360,000	302,527	17,640,000	308,000	17,640,000	305,000

The following summary is for the total 1968 reforestation and timber stand improvement program Projections of timber growth and timber values are based on data obtained by economic analysis.

Increase realized from reforestation of 125,000 acres in 1968

	Year 2000	Year 2020	Year 2040
Volume (thousands of board feet)	2,438,070	3,961,935	5,485,731
Value	$47,973,798	$110,936,364	$189,896,730

Increase from 180,000 acres timber stand improvement in 1968

	Year 2000	Year 2020	Year 2040
Volume (thousands of board feet)	1,626,532	2,643,110	
Value	$39,329,552	$80,271,238	

The $355,000 for nursery development is for enlargement and modernization of existing nurseries. Replacement of old buildings is still needed at some of the nurseries that were constructed under the CCC program. The major development work is tapering off and should be completed in the next two or three years. The $150,000 reduction in nursery development below 1967 expenditures will be used for genetic tree improvement and to reforest 600 acres of timber productivity sites 1 and 2 in important commercial timber types.

The genetic tree improvement program is for the purpose of producing improved tree seed in seed orchards for project reforestation work. Results obtained with small quantities of seed already produced in seed orchards and by research projects show marked improvement in disease resistance of white pine, increased gum yields in slash pine and increased growth and quality of other species including the southern pines, Douglas-fir, and ponderosa pine. Orchards are also being established for other important tree species including black walnut and black cherry.

Examples of Recent Accomplishments

Reforestation.—An area of 114,600 acres of National Forest land was reforested with appropriated funds in 1966—95,033 acres by planting and 19,567 acres by seeding.

In addition, 10,979 acres were reforested by cultivating the ground to regenerate from natural seed fall.

Other reforestation accomplishments include:

(1) Procurement of 87,003 pounds of clean tree seed. 41,329 pounds were purchased from commercial seed dealers, and 45,674 pounds were processed in Forest Service seed extractories.

(2) Production of 99 million trees in 14 Forest Service nurseries.

(3) Major modernization and expansion at two Forest Service nurseries and minor improvements at eight others.

(4) Progress on genetic improvement of forest trees consisting of locating superior trees and propogating them in seed orchards and development work to enlarge and improve seed orchards and seed production areas at 160 locations. Production of improved seed for important hardwood timber trees was started with work on black cherry and black walnut.

In addition to reforestation accomplished with appropriated funds, the following work was done with funds collected under authority of the Knutson-Vandenberg Act:

	Acres
Reforested by tree planting	100, 867
Reforested by seeding	19, 652
Reforested by cultivating the ground to regenerate from natural seed fall	40, 112
Total	160, 631

The total area of National Forest land reforested in 1966 with appropriated funds and Knutson-Vandenberg funds by planting, seeding, and natural regeneration on prepared sites in 1966 is 286,210 acres. This exceeds last year's record by 27,396 acres.

An estimated area of 118,000 acres will be reforested by planting and seeding with appropriated funds in fiscal year 1967. Planting and seeding with Knutson-Vandenberg funds in 1967 is expected to be 150,000 acres.

Timber stand improvement.—An area of 187,927 acres of young growth was treated by the following cultural measures with appropriated funds in 1966 to increase timber growth and improve timber quality:

	Acres
Thinning	69, 218
Release	114, 136
Pruning	4, 573

An additional area of 68,812 acres was lightly burned over by controlled fires in the southern pine types to increase timber growth and timber quality by reducing competition of understory brush and destroying host plants for tree diseases.

Timber stand improvement work was also done for the same purposes with Knutson-Vandenberg funds on the following acreages in 1966:

	Acres
Thinning	76, 600
Release	152, 946
Pruning	5, 194

In addition, 82,623 acres in the southern pine types were treated by controlled burning with Knutson-Vandenberg funds.

An estimated area of 190,000 acres will be treated by stand improvement measures (exclusive of controlled burning) with appropriated funds and an estimated area of 260,000 acres with Knutson-Vandenberg funds in fiscal year 1967.

Recreation—Public use

1966	$28, 604, 000
1967	31, 139, 0000
1968	34, 638, 000
Increase	+3, 499, 000

An increase of $3,499,000 is needed as follows:

(1) $1,951,000 for upgrading waste treatment systems at 25 recreation sites for purposes of water pollution abatement in response to Executive Order 11258 dated November 17, 1965.

(2) $1,548,000 for development of recreation facilities in National Recreation Areas and similar sites and for stepping up operation, maintenance, and cleanup of the existing 9,500 recreation sites and their facilities.

The following tabulation shows by major program segments total planned financing for fiscal year 1968 as compared with fiscal years 1966 and 1967 (in thousands of dollars):

	1966	1967	1968	Changes between 1967 and 1968
Operation and maintenance:				
Cleanup of undeveloped sites	------------	$308	$1,250	+$942
Cleanup of developed sites	$8,708	9,580	10,849	+1,269
Maintenance of developed sites	7,861	8,725	10,077	+1,352
Administration of wilderness	------------	604	1,000	+396
Development:				
New construction and quality improvement of existing facilities	12,035	11,922	11,462	−460
Program total	28,604	31,139	34,638	+3,499

As indicated above, a decrease is made in the development item to provide for adequate operation and maintenance of existing facilities. Steadily increasing use of such facilities places serious soil and vegetation impacts at both developed and undeveloped sites. This heavy use requires more intensive cleanup, maintenance, and people-control to assure visitors a valuable recreation experience and protect the sites. Amounts shown for development of facilities include projects of national significance, such as National Recreation Areas, Blanchard Springs Caverns in Arkansas, Boundary Waters Canoe Area in Minnesota, and Sylvania Tract in Michigan.

OPERATION AND MAINTENANCE

Cleanup and administer undeveloped areas, roadsides, and trails.—$1,250,000 will be used to clean up areas of concentrated use on more than 300,000 miles of roads and trails, 90,000 miles of fishing streams, and 30,000 miles of lake and reservoir shores within the National Forests. Concentrated public use at undeveloped areas is a pollution hazard. Shortage of facilities at many developed sites has intensified the problem, especially during holidays and peak weekend periods when overflow crowds are forced to camp and utilize undeveloped areas. Special precautions are essential for public safety and prevention of contamination of water bodies. Measures to provide for public safety by regulation of use at hazardous swimming areas and winter avalanche hazard areas are also a must. More road and trailside cleanup is necessary to maintain acceptable landscapes along travel routes.

Cleanup of developed sites.—$10,849,000 will be used to more adequately finance an acceptable cleanup job. People are demanding higher sanitation and cleanliness standards. Because of increasing use at all developed areas, many even beyond their planned capacity, it was necessary last fiscal year to use recreation funds badly needed elsewhere to accomplish the cleanup job. There are about 9,500 developed sites requiring an expenditure of approximately $1,150 annually to clean up each site. These sites will accommodate 626,500 persons at one time.

Maintenance of developed sites.—$10,077,000 will be used to protect and maintain all types of recreation facilities at developed sites and information centers in a safe and usable condition. Continually increasing use is putting exceptional wear and tear on improvements and the sites on which they are located. Soil, vegetation, and the "hardware" at many sites demand increased maintenence.

Administration of National Forest wilderness and primitive areas.—$1,000,000 will be used to administer the National Forest wilderness and primitive areas in order to meet the most pressing needs resulting from increased public awareness and use. Sanitation and cleanup; providing information, maps, and instruction to users; and marking of wilderness boundaries where necessary to assure conformance with the Wilderness Act will all require a substantial increase in management effort. Estimated annual cost of National Forest wilderness management averages over 12¢ per acre per year for 14.5 million acres, or $1.8 million annually.

DEVELOPMENT

Construction of campgrounds, picnic, swimming, boating, observation sites, and interpretive facilities.—$11,462,000 will be used to develop additional recreation capacity that is desperately needed. The lack of adequate developed site capacity is forcing people to use undeveloped areas and creating major sanitation and public safety problems at such places. The program level indicated will finance development of 298 new sites, with a capacity of 19,588 persons at one time. Including the financing available for water resources related activities, approximately 416 sites will be constructed in fiscal year 1968. If this level is maintained until 1972, there will be 11,155 developed sites with a capacity of 793,120 persons at one time. Based upon needs projected in the National Forest Recreation Survey, by 1972 26,400 sites with a capacity of 2.5 million persons at one time will be needed (Figure 2). At the beginning of fiscal year 1968 there will be 9,500 such sites. Development funds are also used to raise the standard of existing facilities at sites that are not meeting present day demands. An example of such work planned to be done in 1968 is the upgrading of waste treatment systems at 25 recreation sites for purposes of water pollution abatement.

Examples of Recent Accomplishments

Recreation use of the National Forest System reached a new high in calendar year 1965, with an estimated total of 160,336,100 visitor-days being reported. The visitor-day unit is now used by all Federal agencies responsibile for administration of recreation use on public lands. Although there is no predictable relationship between these quantities and past estimates which were based on different concepts, evidence indicates that the rate of increasing demand continues unabated.

Camping and picnicking were the most popular activities in 1965 and accounted for 49.5 million visitor-days. Fishing and hunting use totaled 30.3 million and recreation travel (mechanized) was next in popularity with a total of 29.3 million visitor-days. Winter sports of all kinds amounted to 5.4 million visitor-days of which 4.3 million was skiing use. Boating accounted for 4.5 million; swimming, waterskiing and other water sports 4.0 million for a total of 8.5 million visitor-days of water-oriented recreation use other than fishing.

Activities associated with resorts, organization camps, and recreation residences accounted for a record 18.5 million visitor-days.

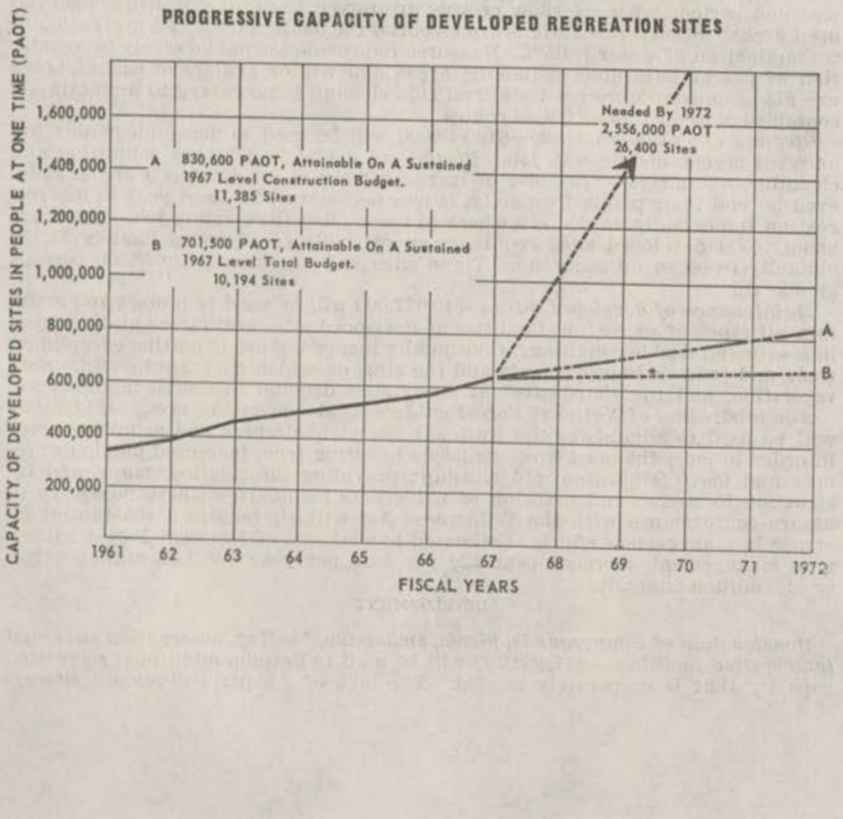
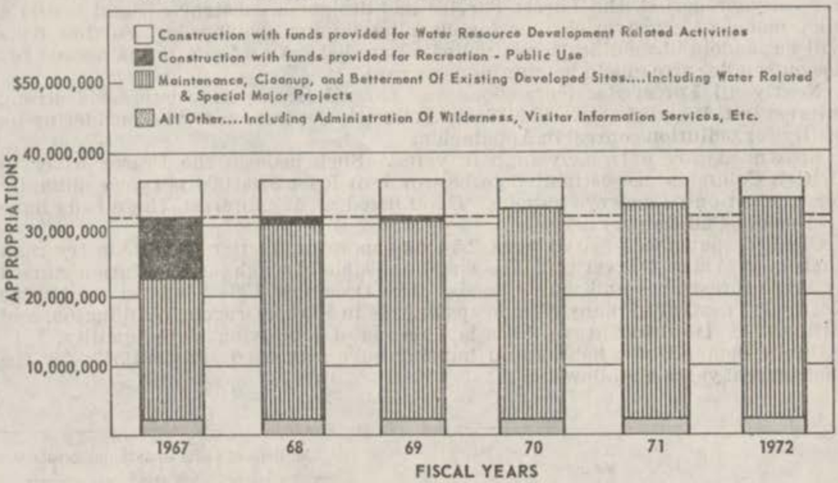


FIGURE 2

IMPACT OF RECURRENT WORK ON POSSIBLE EXPANSION OF RECREATION FACILITIES IF APPROPRIATIONS WERE TO REMAIN AT THE 1967 LEVEL



Wildlife habitat management

1966	$3,872,000
1967	3,971,000
1968	4,301,000
Increase	+330,000

An increase of $330,000 is needed as follows:

(1) *$175,000 for development of wetlands in the Chippewa National Forest, Minnesota.*—A development plan for these wetland resources was recently completed in cooperation with the Bureau of Sport Fisheries and Wildlife and the Minnesota Department of Conservation. The plan indicates substantial benefits for the relatively low per-acre costs, as follows:

(a) Increase annual waterfowl use by 25,000 pairs to produce 75,000 ducklings.

(b) Flood control. Storage of surface water in the 33,000 acres of potholes and impoundments.

(c) Increase wild rice production, valued at $1 per pound.

(d) Provide pike spawning areas.

It is estimated the total project of 50,000 acres will cost $1,340,000 to develop, or $27 per acre.

The Chippewa National Forest occupies an important position in the Mississippi Flyway. It lies immediately adjacent to the prairie pothole region and is characterized by a great variety and abundance of lakes and wetlands. Many of these wetlands are now unattractive to waterfowl. They can be substantially improved through management and development.

The various types of development techniques include:

(a) Construction of low head, low hazard dams to convert sedge meadows and shrub swamps to productive marshes. In many cases abandoned beaver flowages can be economically reclaimed with a simple spillway or a dike.

(b) Blasting potholes with Ammonium nitrate-fuel oil mixture. This is an economical and effective method of producing surface water for waterfowl breeding and brood-rearing purposes.

(c) Constructing economical nesting islands and platforms to provide predator-free nesting sites for waterfowl of various species.

Wetland development improves other resources and activities. Chief among these are recreation, flood control, wild rice production, fisheries, furbearers and the aesthetic value associated with wildlife of all kinds.

(2) *$155,000 for development of a gravel cleaner for salmon spawnbeds.*—Over a three-year period, the Forest Service has designed, constructed, and tested a pilot model of a gravel cleaner for cleaning salmon spawnbeds. Further tests will be made and modifications applied as needed. An adaptation is needed for use on smaller streams in mountainous terrain.

Nearly all Forest Service regions and several States have expressed strong interest in this equipment. The Water Pollution Control agency is considering its utility for pollution control in Appalachia.

Spawnbeds are extremely high in value. Such beds in the Fraser River in British Columbia are estimated to be worth at least $160,000 per acre annually for production of sockeye salmon. Capitalized at 4% interest, these beds have a value of $4 million per acre.

Cleaned spawnbeds are at least 2.5 times more productive of salmon fry than unclean gravels. Gravel beds are made unusable through sedimentation caused by large forest fires and major floods. The December 1964 floods in the Pacific Northwest destroyed many salmon spawnbeds in Idaho, Oregon, Washington, and California. Desilting gravel beds is a means of improving water quality.

Public demands for fishing and hunting have increased substantially for the past several years as follows:

Year	Millions of visits to national forests		
	Fishermen	Hunters	Total
1950	3.2	2.0	5.2
1955	7.6	3.7	11.3
1960	13.3	6.8	20.1
1965	19.4	10.8	30.2

This rate of increase is expected to continue. Fishermen and hunters account for about 25% of the total recreation visits to these public lands. The enjoyment of all kinds of wildlife, including rare and endangered and other nongame forms, is important to many of the additional users. An estimated 50 million man-hours of employment is generated annually in rural areas as a result of hunting and fishing on National Forests.

To accommodate this increasing public need, a progressive wildlife program must be maintained involving the following classes of activity:

(1) Providing qualified technical supervision over wildlife and its habitat to prevent damage from other resource activities.

(2) Participating with the respective States in cooperative management and development programs. States are recognized to have regulatory authority over resident species of fish and game which necessitates a cooperative approach. About 40% of the wildlife development work on National Forests is financed by the respective States under cooperative work agreements.

(3) Improving wildlife habitat through direct project work to increase wildlife production and hunting and fishing opportunities.

Nearly all resource activities on the National Forests have direct effects on wildlife habitat. For example, timber harvesting, livestock grazing, and road building can be very damaging to wildlife unless special precautions are prescribed and followed in implementing management plans for these resources. The coordination of wildlife with other resource uses is one of the major demands on the time of wildlife specialists in the Forest Service organization. Unless this phase of the job is effective damage to wildlife can far exceed the benefits from direct habitat improvement projects.

Habitat for fish, game birds and animals, and nongame species, including rare and endangered forms can be improved to increase productive capacity. The recently completed wetlands development plan for the Chippewa National Forest in Minnesota shows the substantial wildlife benefits which will accrue on one National Forest from a modest investment.

The National Grasslands have great potential for increasing wildlife production for the enjoyment of people. To date, little has been done for wildlife on these lands except in a few localities. Rare and endangered species occurring on National Grasslands include lesser and greater prairie chickens and blackfooted ferrets. Various upland game birds, waterfowl, antelope, and deer are the principal huntable game populations occurring here.

Range resource management

1966	$5,362,000
1967	5,527,000
1968	5,682,000
Increase	+155,000

An increase of $155,000 is needed to finance implementation of grazing fee adjustments in accordance with commitment to the Bureau of the Budget.

Funds will be used to meet added costs for:

(1) Meetings with range users, through livestock associations and advisory boards, to explain and discuss changes in fees.

(2) Special studies on the National Grasslands to determine and incorporate costs incurred by grazing associations for administration and conservation into a revised fee base.

(3) Development and implementation of an automatic data processing program to fully automate annual fee determination and billing for fee collection under a revised fee structure.

Program Objectives

The immediate objective of the range management program is to help meet the current demands of the American public by providing grazing for food and fibre producing animals and for horses and mules used by recreationists. A corollary objective is to improve the rangelands of the National Forest System to economically feasible levels of production and maintain those levels under good management and conservation practices. Along with this is the objective to provide a continued and necessary source of livestock grazing for the 20,000 family-size ranch units which depend in whole or in part on the National Forest System range resource. The Nation is dependent on such free enterprises as these range livestock ranches to meet the expanding demand for food. Ranchers grazing livestock upon National Forest System lands produce fat lambs and stocker and feeder cattle which grow out on these lands and then are moved to grain-producing areas for finishing.

A far reaching objective of this program is to provide a practical demonstration of applied range management science under a wide variety of conditions and thereby favorably influence the management of 600 million acres of privately owned rangeland in the United States.

Even more far reaching is the objective to provide leadership in the management of the world's natural rangelands through practical demonstration and assistance in training of Nationals from countries with range based economies. Our work under this helps meet the Nation's commitments under such international programs as "Food for Freedom" and the "Alliance for Progress." Second perhaps only to staple grains, meat is more in demand than any other item of food in an underfed world.

The goal is to attain optimum productivity of the range resource on National Forest System lands by the year 2000. Interim goals are:

(1) To complete a range analysis and develop a plan of management for each of the 11,600 range allotments in the National Forest System by 1972; the average allotment contains 9,000 acres. Analysis is a project job. After the initial job of range analysis and planning is accomplished, funding needs and effort will settle down to what is required to periodically maintain management information current and to update the allotment management plans.

(2) To have all 11,600 allotments under intensive management by 1973. This jobload and the cost of doing it are cumulative. When an additional 1,000 allotments are placed under intensive management, a new program level is established. To maintain the new program level requires sustained funding commensurate with the new need. If more allotments are placed under intensive man-

agement, additional funding is required. For this reason, intensive systems of management are expected to be initiated on only a nominal number of allotments in 1968 (see below). The effort will be directed at providing adequate management to the 4,000 or so allotments which have been placed under intensive management in previous years. The 7,600 remaining allotments will receive only extensive management.

Examples of Recent and Projected Accomplishments

Management of Ranges—National Forest System Lands

Item	1966	Estimated, 1967	Estimated, 1968
Allotments analyzed (allotment units)	605	607	607
Additional allotments placed under intensive management	1,000	1,000	100
Allotments established in the South	80	100	120
Number of livestock placed under permit in the South [1]	6,260	8,000	10,000

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[1] Also in the South, trespassing livestock have been reduced by 20,000 cattle and horses and 8,500 sheep since 1960.

Program Benefits

(1) The 11.1 million animal unit months of grazing provided by the National Forest and National Grassland program produce food and fibre with a gross estimated value of $75,000,000 annually (Figure 4a, right).

(2) The 20,000 family size ranch units which operate on National Forest System ranges provide 30,000 man-years of direct employment annually. Other rural employment is generated by the demand for services and supplies created by these 20,000 enterprises.

(3) Some 600 rural communities, with livestock raising as their principal, economic base, are dependent in whole or in part upon National Forest System lands for their range resources.

(4) The private land, improvements, equipment, and livestock connected with the 20,000 ranch units which operate on National Forest System lands form a total tax base with an estimated value of over two billion dollars (Figure 4a, left).

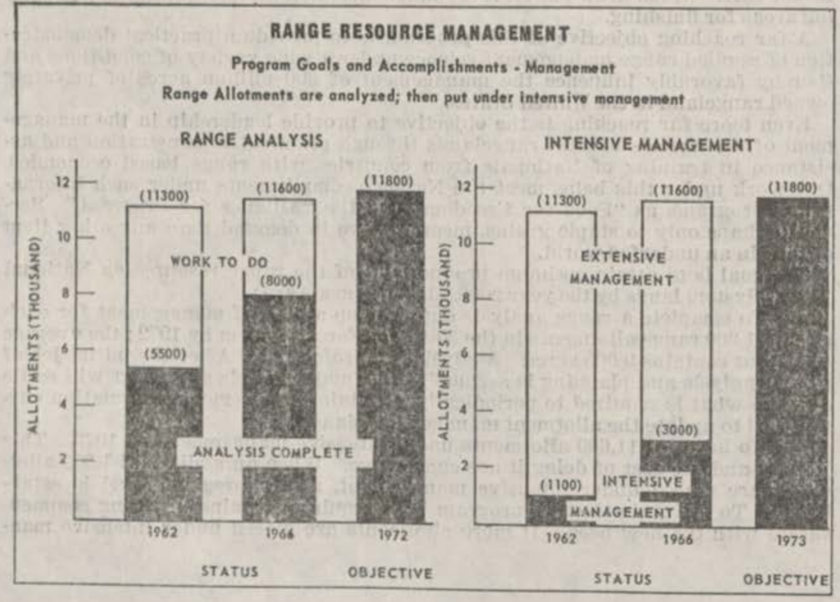
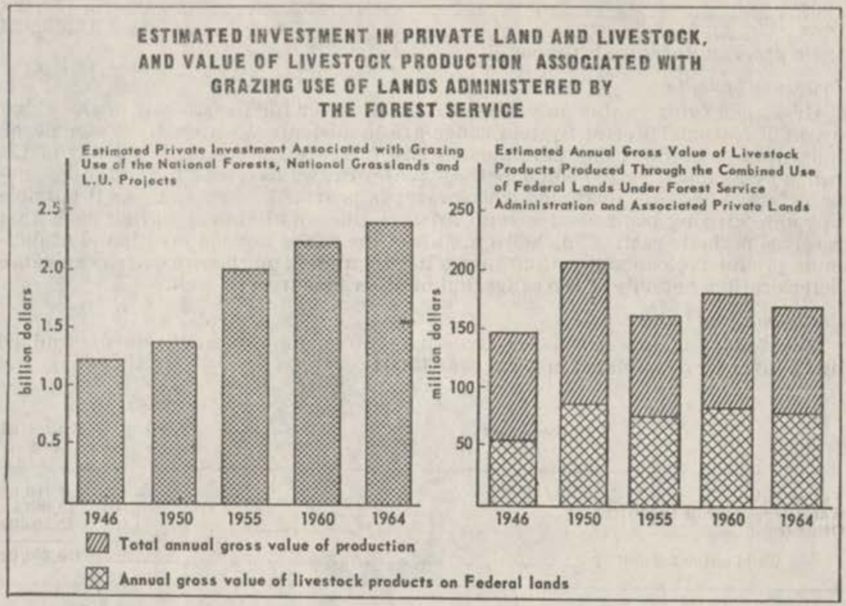


FIGURE 4A



Range revegetation

1966	$2,810,000
1967	2,854,000
1968	2,854,000

No program increase is proposed.

Range revegetation is a vital part of the overall management program for any allotment where the forage cover is severely depleted. Depleted range areas are often key areas which affect the management of the entire allotment. They have been depleted because livestock naturally like to use them and have concentrated there. They are areas where the natural vegetation will not recover within a reasonable time; they must be helped through revegetation treatment, followed by careful management.

Two million acres have been treated. An inventory completed in fiscal year 1966 revealed that previous estimates of the amount of depleted range needing revegetation treatment were much too conservative. The new inventory shows that an additional 7.5 million acres of severely depleted rangeland in the National Forest System needs revegetation treatment.

Revegetation of these ranges may be accomplished by the year 2000 at approximately the current level of financing and the current rate of permittee contribution. Because the soil and vegetation resources continue to deteriorate on these depleted ranges, there is an urgency to getting them rehabilitated.

Examples of Recent and Projected Accomplishments

Revegetation on National Forest System lands

[In acres]

Fund source	1966	1967	1968
Government funds	199,700	199,700	199,700
Permittee contribution	25,000	25,000	25,000
Total	224,700	224,700	224,700

Range improvements

1966	$3,379,000
1967	3,442,000
1968	3,442,000

No program increase is proposed.

Program benefits

Grass has forage value only when drinking water for livestock is near. Many areas of National Forest System range are inadequately watered. Water developments are needed; one development can increase the grazing capacity of the range by as much as 100 cow months. Water draws livestock to the forage; unused forage becomes available when water is provided. Fences make it possible to rotate grazing use among several areas within an allotment so that each area receives periodic rest. This helps maintain the range in good health and at optimum productive capacity. Continuous heavy grazing on the same area can cause deterioration, not only of the range, but of other resources as well.

Program Needs and Goals

The following are needs for structural range improvements as determined by an inventory completed in fiscal year 1966:

Improvement	Number	Estimated cost
Fences (miles)	60,000	$81,500,000
Water developments (each)	37,000	53,300,000
Other (each)	14,000	15,700,000
Total estimated cost	--------	150,500,000

In addition, current maintenance need for existing improvements is $2,600,000 annually. This will increase to $5,200,000 annually when all improvements are in place. Current permittee contribution is about 50% of the maintenance and 20% of the construction. Costs of water developments to be installed in the future will be considerably higher per unit than current costs. At present, most of the water developments being put in are simple and relatively inexpensive. However, opportunities for getting water so cheaply will soon be less common. Costs per unit will increase as management intensifies and needs for deep wells and pipelines materialize.

Recent and projected accomplishments

[Dollar amounts in thousands]

	1966		1967		1968	
	Units	Cost	Units	Cost	Units	Cost
Government funds:						
Construction:						
Fences (miles)	1,077	$1,522	1,077	$1,530	1,077	$1,530
Water developments (each)	1,113	630	1,113	630	1,113	630
Corrals (each)	13	13	13	13	13	13
Stock driveways (miles)	57	13	57	13	57	13
Cattleguards (each)	101	102	101	102	101	102
Maintenance	--------	1,099	--------	1,154	--------	1,154
Total costs	--------	3,379	--------	3,442	--------	3,442
Permittee contributions:						
Construction:						
Fences (miles)	353	337	353	337	353	337
Water developments (each)	414	168	414	168	414	168
Corrals (each)	30	19	30	19	30	19
Stock driveways (miles)	38	7	38	7	38	7
Cattleguards (each)	23	21	23	21	23	21
Maintenance	--------	1,000	--------	1,000	--------	1,000
Total costs	--------	1,552	--------	1,552	--------	1,552

Soil and water management

1966	$5,722,000
1967	6,361,000
1968	6,361,000

No program increase is proposed.

The watershed management program consists of two inseparable main activities. The first deals with prevention or restoration of damage to the soil and water resources. The second consists of action programs for maximizing benefits to be derived from the water resource. Scientific soil and hydrologic surveys and analyses provide the basic information upon which detailed plans and action programs are developed and carried out. The present field activity is limited to that which can be accomplished by about 60 soil scientists and 60 watershed scientists. The end products are measured in terms of maintenance or improvement of water quality, increased water yield, improved timing of water yield, maintenance and improvement of soil productivity, and assurance of the availability of water for National Forest purposes. The detail of the survey and analysis—whether reconnaissance or comprehensive—depends upon the complexity of the individual watershed situation. Positive water yield improvement programs are always based upon the detailed, comprehensive surveys and analyses which relate the composite interrelationship of climate, vegetation, soil, and underlying geology of the watershed to its behavior in terms of water production.

Major watershed action programs will be continued with water quality monitoring receiving some additional emphasis, as follows:

(1) *Water quality.*—Detailed management plans will be developed for 30 municipal supply or other high value watersheds. Return flow monitoring will be initiated at 20 locations where the threat of serious water pollution exists. The monitoring will allow early action to be taken to correct any unsatisfactory water quality condition. The composite result of these actions will provide continued assurance of quality water yields essential to continued economic welfare and public health for many thousands of people.

(2) *Water use requirements.*—Inventories of water available and needed for present and foreseeable National Forest System development and administration will be made for 12 watersheds. The Western States involved will be notified of these needs under the reservation principle. Assurance of an adequate water supply is prerequisite to continued and expanded public use and enjoyment of the National Forest resources.

(3) *Water yield improvement.*—Programs will be underway on six watersheds. The programs, consisting of measures such as snowpack management and/or improve timing of water available to streamflow, will increase usable vegetation manipulation to increase quantities and/or water supplies significantly. This added supply furnished to installed systems serving water-short areas provides a means of continuing or improving the long-term economic stability of the downstream users and at the same time enhances the transitory values such as aesthetics and fisheries.

(4) *Barometer watersheds.*—Three additional watersheds will be equipped for inclusion in the system of barometer watersheds, bringing the total to 17. These barometer watersheds, carefully selected to be representative of their hydrologic province, are instrumented to measure all the factors influencing the production of a sustained water supply, including the effects of management programs within the watershed on water quantity and quality. The measured findings from the barometer system will provide the factual data needed to accurately prescribe treatment programs in the other watersheds within the same hydrologic province.

(5) *Coordination and protection prescription.*—It is estimated that detailed prescriptions will be developed by soil and watershed scientists for over 400 development projects. Time has proven these prevention efforts to be most valuable in minimizing soil erosion, stream sedimentation, and other forms of water pollution—thus preventing a corresponding decline in aesthetic values and in deterioration of water quality with its adverse effect on downstream users. Paralleling these benefits is the reduction in maintenance costs for the development facility. Planned fiscal year 1968 efforts are expected to benefit the water yielding capacity of over one million acres of National Forest System lands.

(6) *Watershed restoration.*—Watershed restoration projects, based upon complete watershed plans, will be completed on 15 watersheds to prevent further site deterioration, water quality impairment, and in some cases downstream flood damage.

Mineral claims, leases, and special uses

1966	$3,976,000
1967	4,097,000
1968	4,097,000

No program increase is proposed.

This program provides for supervision, administration, regulation, and control of mineral disposal and special land uses on National Forest System lands, while ensuring adequate protection of water quality and other surface resources.

The work involves:

(1) Mineral examination of mining claims included in patent applications.
(2) Determination of surface rights.
(3) Mining claim occupancy and occupancy trespass action.
(4) Mineral leasing and permits.
(5) Mineral reservation and outstanding rights administration.
(6) Special uses other than recreation.

Orderly development and disposal of minerals requires careful supervision to protect other forest resources from unnecessary damage during mining operations and to make sure disturbed areas are placed in condition to contribute to sustained beneficial use and production.

Mineral examination of claims under patent application is necessarily on a current basis. Valid mining claims must be recognized and clear-listed for patent when all requirements of the mining laws have been met. Equally important is the detection and elimination of unauthorized use of public land on claims which fail to meet the requirements of the mining laws. This is necessary to release this land for the public uses for which National Forest System lands are managed. It is estimated there are 8,000 occupancy trespass cases on mining claims. Examination under PL 84–167 revealed over 5,300 residential-type structures on mining claims. Actions clearing up less than 1,000 of these cases have been completed. Applications under the Church-Johnson Act will legalize some of these occupancy cases.

Prospecting in wilderness areas can be expected to increase as mining companies attempt to complete their mineral exploration work prior to the 1983 terminal date established in the Wilderness Act. Orderly and supervised exploration, now necessary for coordination with public values of soil, water, and other surface resources, will be even more essential and demanding when assuring harmonization with wilderness concepts.

Mineral leasing activities require similar managerial measures. This includes reviewing applications for mineral permits and leases filed with the Bureau of Land Management to determine whether mineral exploration and development can be carried on in harmony with National Forest objectives to protect soil and water, recreation, and other purposes, and to provide stipulations and guidelines for assuring coordination with surface resource requirements. It includes on-the-ground administration to make sure the stipulations are understood and applied in harmony with other surface use and management, and to make sure that facilities which are a part of mineral permits and leases, such as roads and pipelines, are properly installed and maintained.

Surface mining requires protection and supervision before, during, and after the operation to prevent deleterious effects and provide adequate reclamation. Surface mining of coal has an added hazard of acid pollution of streams. Recent expansion of steam generating capacity using coal will give new impetus to the coal strip mining industry, which has been on the increase each year. Several large surface coal mines have been opened in the West—notable in the Craig-Steamboat Springs area in Colorado and the Four Corners area of Colorado, New Mexico, Arizona, and Utah. Other operations are taking place in Wyoming. Some of these operations will include coal deposits in the National Forests and Grasslands. New methods of processing and upgrading iron ore and taconite have now made it economically feasible to mine low-grade deposits. Demands for both coal and iron have resulted in increased leasing and mining of both public and privately owned minerals on acquired lands as well as public domain National Forest System lands.

Mineral reservations and outstanding rights administration concern the protection of the public's interest in the surface and future interest in mineral rights and resolving questions of present mineral ownership and surface use rights. Because of the increasing interest in mineral activity on acquired lands, knowledge of mineral ownership will ultimately result in significantly increased revenues to the United States while adding to the economic base of local communities and States. Abstracting of mineral titles was not required with purchase of the land. This program needs to be completed at an early date for all acquired lands within the National Forest System.

Special use permits and easements (other than recreation) for the use of National Forest lands have increased materially within the past few years. In addition, there is a turnover of about 10%, or 4,000 permits, a year caused by changes in ownership. The permits and easements presently being administered cover in excess of 5,000,000 acres and over 57,000 miles of rights-of-way.

Failure to properly supervise and administer these uses could result in serious damage to National Forest resources and a direct monetary loss to the Government. The protection of natural beauty, the health and safety of millions of people, and the control of water and air pollution are all serious factors that must be considered.

Examples of Recent Accomplishments

Mining claims.—Determination of surface rights under PL 84–167 begun in 1956 is now about 85% complete. There is remaining, however, on-the-ground examination of nearly 2,300 claims on 22,000,000 acres. As of July 1, 1966, over 114,000,000 acres had been examined. The Government has thus far recognized the validity of 2,033 claims, amounting to 50,000 acres. About 1,000 claims are yet to be examined to complete the complex and difficult task. The following table shows progress for two years and the estimated accomplishments for fiscal years 1967 and 1968:

Year	Acres examined	Claims examined	Asserted rights valid	
			Claims	Acres [1]
1965	6,636,900	1,246	147	2,940
1966	4,795,600	1,169	111	2,220
1967 estimated	6,000,000	1,200	130	2,600
1968 estimated	6,000,000	1,200	130	2,600

[1] Computed using 20 acres per claim.

Petitions filed under PL 87-851 (Church-Johnson) as of January 1, 1966, resulted in the examination to determine the validity of 164 mining claims on 40 forests. Of 154 applications filed, there were 83 qualified applicants and 40 unqualified. The Bureau of Land Management rejected 31 applications. Fee simple title was offered in 15 cases, 30 were offered life estate, and one was limited to a specific number of years. A total of 60 cases have been consummated under the Act.

Mineral permits and leases.—There are over 17,000 mineral leases and permits on 15 million acres within the National Forest System. Mining and prospecting permits issued and administered by the Forest Service directly during fiscal year 1967 covered nearly three-fourths million acres. Included were some 1,040 permits for common varieties of mineral materials and nearly 1,100 permits for borrow pits for highways and construction purposes. Total revenues from mineral leasing and oil and gas exploration and development on National Forest System acquired lands and common variety sales from all National Forest System lands, amounted to $3,752,760 for fiscal year 1966. In addition, an estimated $16 million in revenues were received from rents and royalties for leases on National Forest and National Grasslands reserved from the public domain.

A significant agreement (two leases) was recently negotiated with International Nickel Company to mine copper, nickel, and associated minerals from approximately 5,100 acres in the Superior National Forest, Minnesota. If the initial exploration and development of metallurgical processes proves economically feasible, it will provide an economic boon to the community of Ely and to northern Minnesota, which will suffer with the closing of the Pioneer mine, which is being phased out. Special provisions have been included for the protection of soil, water, and recreation resources, including natural beauty.

In addition to the above, there are 140 active operations on some acquired lands in which the owner retained mineral rights when the land was purchased by the Government.

Special uses.—National Forest land and other land administered by the Forest Service may be used for special purposes when such uses are in the public interest. About 40,000 special use permits covering 51 different purposes such as archaeological research, hay cutting, electronic installations, reservoirs, water supplies, and many other desirable uses are now in effect. Fiscal year 1966 receipts for special land uses were:

Power	$104, 073
Other land uses, not associated with recreation	534, 745
Total	638, 818

This is an increase of $40,363 over the previous year.

Land classification, adjustments, and surveys

1966	$4, 345, 000
1967	5, 725, 000
1968	6, 349, 000
Increase	+624, 000

An increase of $624,000 is needed for the following purposes:

(1) $23,000 for land classification.
(2) $416,000 for land exchange.
(3) $139,000 for land line location and land status records.
(4) $46,000 for photogrammetric surveys.

These increases are further explained under each item below:

Land classification.—An increase of $23,000 is needed to:

(1) Accelerate classification surveys of defined subareas in National Forests and National Grasslands as basis for programing expanding land exchange and land consolidation programs and National Forest boundary adjustments—taking into account land ownership, management situations, land use, and public values.

(2) Accelerate cooperative planning efforts at communities in Alaska to facilitate State applications for National Forest lands—a matter of State and local concern.

The requested increase will bring the total amount available for this activity to $369,000.

The function of land classification is to make analyses and recommended programs concerning the scope, location and composition of the National Forest System.

Current and prospective growths in population, increased leisure, demands of urban people for outdoor space, crises in water supplies relative to expanding needs, and increased national needs for forest products bring mounting pressures on available land. Land area is fixed; demands constantly increase; these factors give urgency and complexity to National Forest System planning.

Changing public interests require reexamination of the boundaries of National Forest units relative to needs of the public for water, recreation, wood, and living space. Areas where more effective and economical administration of the National Forests for conservation purposes might be achieved by consolidations of landownership through exchange procedures must be defined and critically evaluated. This is necessary to provide a firm basis for planning advantageous land consolidation programs, establishing priorities, and scheduling timing. Areas where transfers between public agencies will promote economy in the management of public properties also must be defined, analyzed, and evaluated.

Additions to the National Forest System are based upon adequate analyses of all factors involved to assure that the public advantages are high and justified permanent National Forest programs. The continuing and growing public use of lands at and near large Federal reservoirs require land jurisdiction and management arrangements that promote optimum public use and efficiency of administration. National Forest programs tie in directly with national programs for improved rural economies, increased forest resources, reduced stream pollution, adequate outdoor space for public use, and enhancement of the scenic values of rural lands.

Consolidation problems that affect public programs in National Forests and National Grasslands will require more consideration and accelerated action as use pressures on land intensify. Interdepartmental agreement on management of land at Department of the Army reservoirs and legislation enacted in 1965 to enable transfer of lands at Bureau of Reclamation projects have stepped up action for consolidation of land jurisdictions at Corps and Bureau reservoir projects located within or adjoining National Forests. Joint studies with the Bureau of Land Management or the National Park Service are underway or completed which concern proposals for substantial adjustments in land jurisdiction. Additional consideration is being given to possible enlargement of National Forest programs in Appalachia. The public interest in other rural areas where forestlands predominate but local economies are at a low ebb needs consideration. Now underway is a survey of the potentials for National Forest programs in the Potomac Basin that would provide effective assistance in the attainment of national objectives for that area.

The land classification program for fiscal year 1968 will be concerned with some 5 million acres of forest, watershed, and recreation lands, largely in the eastern United States but including public domain—National Forest and National Park-National Forest areas in the western part of the Nation. This concern will be from the standpoints of National Forest land consolidation; National Forest boundary adjustments to exclude lands where National Forest programs are no longer justified and include lands where such programs will be nationally and locally desirable; national recreation area proposals; and interagency adjustments in land management and jurisdiction.

Examples of Recent Accomplishments

Cooperative studies in Montana by the Forest Service and Bureau of Land Management resulted in an interchange of jurisdictions involving nearly 66,000 acres of public lands. Lands transferred to the Bureau consisted of an isolated block of National Forest lands remote from the forest supervisor's and district ranger's offices and surrounded by lands administered by the Bureau of Land Management. Lands transferred to the National Forest System approximated 38,000 acres in scattered tracts of vacant public domain that were distant from other lands administered by the Bureau but adjacent to comparable lands administered by the Forest Service. A similar effort in Colorado brought about consolidations of National Forest and scattered public domain at Dillon Reservoir. This will permit integrated development of public recreation on such lands in the interest of efficient and economical public land management. An intensive analysis of areas in Colorado National Forests wherein private lands stemming from mineral patents and many small intermingled tracts of National Forest lands give rise to difficult management and use problems is well underway to give direction to exchange and consolidation programs.

Land exchange. An increase of $416,000 will be used to:

(1) Examine an estimated 150,000 acres of offered and selected lands in highly desirable exchange proposals.

(2) Prepare appraisals and valuation reports including supplemental studies as necessary for 100,000 acres of offered and selected lands. These are cases already in process which are in urgent need of early completion.

The proposed increase will bring the total amount available for this activity to $2,908,000.

Overall fiscal year 1968 plans for this program are to implement a 5-year crash program of land exchanges recommended by a Joint Management Review Task Force, comprised of people in the Bureau of the Budget, USDA, and CSC. This effort will enable the Forest Service to update and perfect present land adjustment plans for all areas. It will involve the examination and appraisal of 650,000 acres involving an estimated 475 exchanges. The land the Government gives and receives in exchanges must be examined and appraised.

Properly conceived exchanges can result in obviating the construction of certain road segments, and the locating and marking of property lines. The issuance of certain special use permits and other management costs can also be avoided. Substantial program costs can be avoided as a result of these effects.

For example, the estimated 10-year cost avoidance to be achieved with the $2,908,000 programed for fiscal year 1968 is $16,200,000 (Figure 7a). Selected examples of estimated savings which will result during the next ten years from the fiscal year 1968 exchange program:

Reductions	Units	Amount
(1) Property lines and corners	[1] 4,170	$4,500,000
(2) Road construction and maintenance	[1] 540	7,900,000
(3) Use permits and occupancy trespass	[2] 1,180	700,000
(4) Road rights-of-way needs	[2] 800	3,100,000
Total		16,200,000

[1] Miles.
[2] Cases.

Material revenue increases to the United States Treasury can also result through well planned exchanges. Access road problems can be eliminated and make heretofore inaccessible mature timber stands available for harvest to the mutual benefit of the United States and timber companies in need of log supplies. Significant benefits can be derived for both the United States and private owners engaged in livestock operations through the consolidation of ownerships, thus reducing costs and improving management of the ranges.

An example of a recent exchange approved in the State of Oregon: The United States will grant a heavily timbered 80-acre parcel surrounded by private lands. In return, the United States will acquire six parcels totaling 1,188 acres. 1,111 acres of the land being acquired is good timber-producing land which will increase the allowable cut by approximately 1,000,000 board feet. The exchange will result in a net reduction of 11¾ miles of property line and will reduce road right-of-way needs and road construction.

In fiscal year 1966, 127 land exchanges were consummated. In these exchanges the United States acquired 166,150 acres valued at $16,075,028 and granted 148,631 acres valued at $15,325,763. The net increase in National Forest acreage was 17,519 acres.

Land line location and land status records.—An increase of $139,000 or a total program of $2,140,000, is needed to establish funding levels that will shorten the time required to complete the initial phases of these programs, namely:

(1) Corner search and identification phase in land lines work. At present program levels this phase will require more than 25 years to complete. The increase for 1968 is the first step toward shortening this span to ten years or less.

(2) Conversion to new status records system. Present program levels will only assure having this project one-half completed by 1970. This is much too short a span and the increase for 1968 will be a start toward the objective of getting the entire project completed by the end of 1972.

The Joint Management Review Task Force recommended that these two projects be drastically stepped up and pushed to completion. The total job is the task of getting land ownership lines defined on the ground by proper corners and clearly marked boundary lines and installing a complete, easily understood ownership record of all lands in the National Forest System including the encumbrances and outstanding rights and interests that limit or restrict management.

This money will have to be spent either in a planwise program or to handle trespass and claims cases that are sure to occur. A general description of each of these programs follows:

Land line location.—Lands in the National Forest System are bounded by 281,168 miles of property lines and 1,132,353 property corners. The corners were established by surveyors from 50 to over 150 years ago (average over 100 years ago). A continuing program for finding, marking, and maintaining these corners and lines was started in 1958. Before this, there was no provision for this work. Little was done and many corners have been lost. It is estimated that 10,000 corners disappear yearly. This program needs to be speeded up to meet the demands for development and public use of all National Forest System resources, to prosecute and prevent trespass, and to carry on general administration with full confidence and a minimum of conflicts and ill will.

In fiscal year 1966 $255,000 of the Forest Service appropriation for land line work was transferred to the Bureau of Land Management to finance part of this program. A similar transfer ($285,000) was made in fiscal year 1967. This level will be maintained in fiscal year 1968.

Preliminary reports show that the Bureau established 995 corners by cadastral survey on lands administered by the Forest Service during 1966, the first year of this cooperative program. It is estimated that 80% of the established corners are property corners and 20% are corners off National Forest property lines but needed to control the corners on the property lines. This is an outstanding accomplishment considering that the work must be scattered to meet pressing needs.

Work proposed for 1968 as compared with 1967 and 1966

Job	Fiscal year 1966, accomplished	Fiscal year 1967, planned	Total planned, fiscal year 1968	Fiscal year 1968, planned increase
Corners:				
Search	22,000	26,000	27,000	+1,000
Remonument	10,500	11,000	11,750	+750
Establish	-----	700	750	+50
Maintenance	-----	200	400	+200
Miles:				
Identify, survey and mark:				
To full standard	1,350	1,000	1,050	+50
To partial standard	-----	1,500	1,600	+100
Maintenance	-----	1,500	1,625	+125

Examples of accomplishment since 1958

Corners (1,132,353 in the National Forest System):

1. Search for corners:	
a. Corners searched	128,560
b. Corners found	69,600
c. Corners lost	59,000
2. Establish and perpetuate corners:	
a. Found corners remonumented	57,100
b. Corners established	1,900
c. Mounmented corners maintained	500

Property Lines (281,168 miles in National Forest System):

1. Identify, survey, and mark:	
a. To full standard	7,870
b. To partial standard	23,100
2. Maintain lines previously identified, surveyed, and marked	8,750

Land status records.—This is a job of converting to a new status record system. In the process all records affecting title and restricting use of lands in the National Forest System are reviewed. Many discrepancies and previously unknown interests are being found and corrected. The new system will provide current central posting of records and a complete atlas record for all Forest Service administrative field units (about 1,100).

WORK PROPOSED FOR 1968

Townships completed

1966 Actual	1,500
1967 Planned	1,700
1968 Estimated	1,850
Increase	+150

(Total townships in program—17,000. Completed through 1966—5,900)

Examples of Program Benefits

The systematic research of records and conversion to the new system continues to identify many parcels and general areas which have previously been misunderstood, identified inaccurately or overlooked in administration due to poor identifying ties between records and ground location. This project goes "hand-in-glove" with the land line location program.

Partial completion of the National Grasslands and Land Utilization projects has revealed several parcels of public domain land previously considered to be private. Major acreage discrepancies continue to be found on several National Forests. Trespasses continue to be revealed.

A major accomplishment is the assembly of many complex mineral ownerships, platted as individual mineral surveys, on base maps to show their proper location with respect to lands of the United States. These for the first time give field people sorely needed details of situations to help in preventing trespass and in solving administrative problems.

Photogrammetric surveys.—An increase of $46,000 is requested to bring the total for this project to $932,000. There is an urgent need to accelerate photogrammetric surveys to provide terrain data, resource inventory data, and general management maps for multiple use management in problem areas. The increase is proposed to meet the minimum needs of 200 square miles of terrain data.

At the present time our lack of terrain data on land in the National Forest System seriously hinders and restricts multiple use planning and resource management and protection. Many thousands of man-hours are lost because of nonexistent, inadequate, or incomplete photographic and terrain information for such functions as designing roads, laying out timber sales, developing recreation areas, and general planning. Moreover, lack of these data prevents the preparation of standard multiple use plans, limits the use of modern terrain data techniques in National Forest management activities, and fosters poor judgments and questionable decisions. Plans have to be remade whenever more adequate data become available, thus further aggravating the situation by duplication of effort and added cost.

Multiple use planning requires a particular knowledge of the terrain, the extent and location of the natural resources, such as timber and range and how these resources are related and tied in with existing and planned transportation and recreational facilities. Elevational information is essential in the planning of transportation systems, timber sales and recreational facilities. Aerial photographs and photogrammetric surveys are the most modern tools for use in procuring data needed to determine the extent and location of National Forest resources, for improving and extending the management of them and related facilities, and for recording multiple use plans and activities.

These data are needed on some 617,000 square miles of area within the National Forests for general planning of transportation systems, and planning timber sales. Approximately 44% of this area is adequately covered. The funds programed for fiscal year 1968 would be used to procure aerial photographs, establish horizontal and vertical control and procure elevational terrain information by photogrammetric methods for 0.5% or an equivalent of 3,200 square miles of the areas for which these data are needed.

The scale, format, and accuracy of this material would be such that it can be released to the U.S. Geological Survey and form an integral part of the standard topographic mapping program of the United States. Thus, duplication of effort is avoided, costs are reduced, and the availability of standard topographic maps is speeded up.

In addition, the funds would be used to prepare, from existing terrain data, bases on the scale and format needed for showing the interrelationship of all National Forest resources—timber, water, forage, fish and wildlife, and recreation—affecting the multiple use management of the National Forest System. The scale and format of the prepared material must be compatible with the scale of the aerial photographs used in the execution of resource inventory surveys. These data are transferred to the multiple use management plans by photogrammetric means. The area of coverage of the plans to be prepared with the requested funds is about 0.5% or 4,000 square miles of the total requirement, or a decrease of 11,000 square miles for which funds were available in fiscal year 1966.

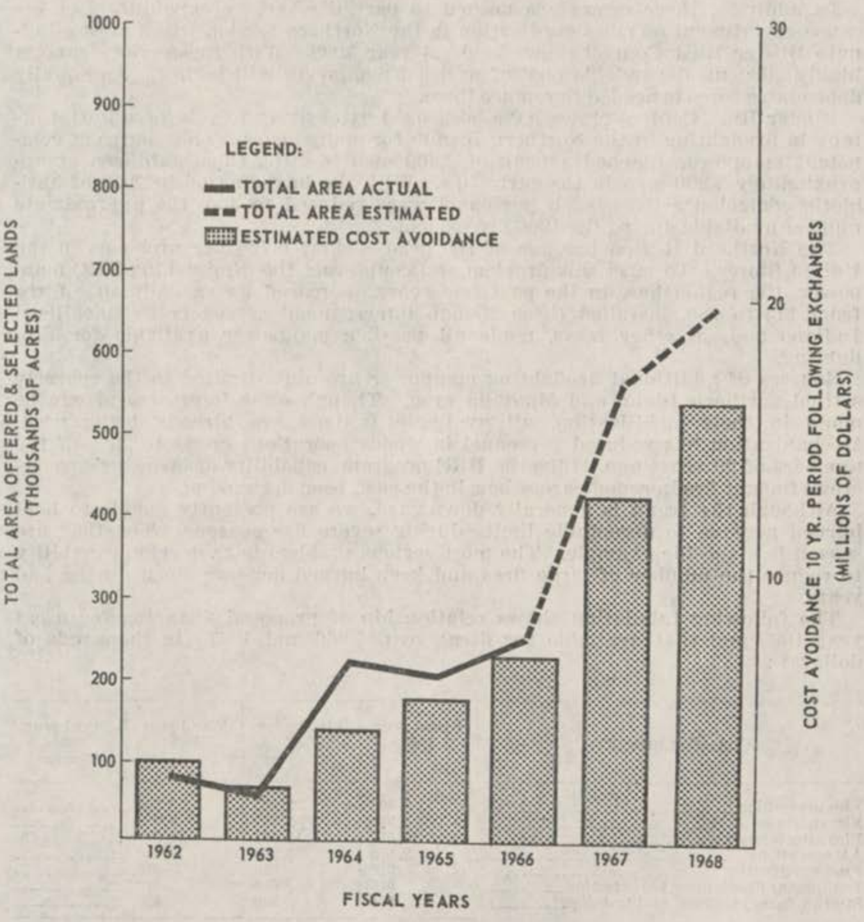
Utilizing the terrain data and resource inventory data procured through photogrammetric procedures, it is proposed to prepare general management bases on an adequate scale and format for approximately 15 National Forests. This represents new bases for approximately 5% of those needed but makes no provision for needed revision to bring others up to date.

The following table shows comparison of the actual or planned accomplishments under approved or requested financing:

	Fiscal year		
	1966	1967	1968
Terrain data (square miles)	3,800	3,000	3,200
Resource inventory data (square miles)	15,000	4,000	4,000
General management base (forests)	15	15	15

FIGURE 7A

TRENDS IN FOREST SERVICE LAND EXCHANGES



Forest fire protection

1966	$24, 454, 000
1967	25, 487, 000
1968	26, 172, 000
Increase	+685, 000

An increase of $685,000 is needed to:

(1) Provide better fire protection in line with increasing land and resource values.

(2) More nearly assure a standard of protection adequate for successful management of National Forest resources.

Although large, damaging fires occur in many rural areas in the United States, historically most of them are in central and southwestern Idaho, northeastern Oregon, northern Utah, southeastern Arizona, and throughout the mountains of California, particularly in the southern part of the state. In an attempt to further reduce the damage from these large fires in fiscal year 1968, local initial attack forces would be strengthened and six additional mobile 25-man crews would be placed in the western regions. These specialized suppression crews would be based to provide coverage for the historically critical fire areas, but would be shifted throughout the west as needed to meet seasonal fire danger conditions. Eight similar crews were used extensively during the 1966 fire season and were instrumental in combating many medium-sized fires before they became large conflagrations.

In addition, three crews are needed to partially replace capability loss because curtailment of ribes eradication in the Northern Region will almost eliminate Blister Rust Control crews in fiscal year 1968. With these crews gone, a highly efficient, dependable pool of well led manpower will be lost. An equally dependable force is needed to replace them.

Blister Rust Control crews have been used extensively to reinforce initial attack in firefighting in the Northern Region for many years. This source of competent manpower reached a peak of 2,400 men in 1946, then stabilized at approximately 1,200 men in the early 50's. With the introduction in 1959 of antibiotic control practices, such personnel were reduced to 450, the approximate number available during the 1966 fire season.

The Northern Region has one of the most serious large fire problems in the United States. To meet this problem and counteract the diminishing BRC manpower, the region has, in the past few years, increased its smokejumper force from 135 to 180, installed three 25-man interregional attack crews, mobilized Indians and, in other ways, made all possible manpower available for firefighting.

Sources of additional firefighting manpower are quite limited in the sparsely settled northern Idaho and Montana area. Though some improvement can be made in their mobilization, all available Indians are already being used. Mechanization has reduced personnel in woods operations crews to 25% of the numbers of 20 years ago. Like the BRC program, capability of operator's woods crews to fight fire in remote areas has, in the past, been decreasing.

Although the trend is generally downward, we are presently unable to hold burned acreage to acceptable limits during severe fire seasons. The 1966 fire season is a specific example. The most serious problem is to develop capability to reduce the number of large fires and keep burned acreage down during bad years.

The following tabulation shows relationship of proposed financing for fiscal year 1968 and that available for fiscal years 1966 and 1967 (in thousands of dollars):

Protection measures	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968	Fiscal year 1968, increase
Fire prevention	3, 490	3, 565	3, 565	----------
Fire detection	3, 310	3, 380	3, 380	----------
Fire attack forces	13, 550	13, 862	14, 547	+685
Air operations	2, 670	3, 240	3, 240	----------
Fuel modification	310	310	310	----------
Equipment development and testing	610	610	610	----------
Studies, surveys, plans, and training	514	520	520	----------
Total	24, 454	25, 487	26, 172	+685

Program Objectives

Forest fires cause serious damage to water, soil, timber, recreation, and forage resources. The overall objectives of fire protection are to achieve, at reasonable cost, an acceptable degree of protection from loss by fire of these valuable resources, as well as to protect property and human lives.

Reduction in area burned has been achieved in most years through:

(1) Increased fire prevention and law enforcement.

(2) Better training of fire control personnel.

(3) Expansion of air operations for rapid delivery of firefighting equipment and men and dropping of fire retardants.

(4) Improved predictions of burning conditions.

(5) Improved fire equipment and better understanding of fire behavior.

Cooperative efforts with other Federal agencies, States, and municipal fire control organizations have been expanded and strengthened. These efforts have resulted in a more effective overall fire control job.

The specific goals for fiscal year 1968 are as follows:

(1) Accelerate the fire prevention program to reduce man-caused fires to the goal of 3,500 annually by 1970.

(2) Cut down the heavy losses occasioned by the few but disastrous "conflagration fires" by strengthening forces for more effective initial attack, particularly in the high risk and high hazard areas where these fires occur.

(3) Continue to improve cooperative efforts with other Federal agencies, States, and municipalities with the objectives of developing more available "total strength" when major fire emergencies develop. An interagency fire center at Boise, Idaho, is being developed jointly with the Department of the Interior. Joint planning is being done in fiscal year 1967 with construction funds included in Bureau of Land Management requests for fiscal year 1968.

(4) Improve fire management through better training of fire control personnel; developing more effective fire equipment; and expanding its operational use.

(5) Accelerate safety and related efforts to reduce the chances of men being burned while fighting fires.

Examples of Recent Accomplishments

Air attack progress.—Night helicopter operations offer great possibilities to get firefighters on the fireline quickly and efficiently when they are most needed. Favorable results from current tests in progress under actual forest fire conditions should provide guidelines for limited night operations in 1967. Many additional heliports and helispots which tie to plans for ground attack have been developed for more efficient and economical firefighting. Additional airplane patrols for detection of forest fires were organized recently.

Fire training and development.—Fire training is doing much to assure competent supervision and efficient work in all fire control activities. Completion of fire control training and development guides established new benchmarks for fire training needed by all Forest Service personnel, and by personnel specializing in fire control. Careers in fire work are given more definite direction by the guides. *The Fireman's Handbook* was revised and reissued. It was written especially for use by non-professional firemen and crew bosses.

The Progressive Referral Method was developed for fire training and first used in 1966. With PRM the trainee is progressively referred to explanatory materials when his knowledge is lacking, or to new subject matter when he finds himself adequate. This new method promises to save much of the cost of linearly programed texts and of retraining when it is unnecessary.

Other fire training in 1966 included pilot testing of Edex, a response-demanding audio-visual device, and training of 70 Forest Service and cooperating agency personnel in fire generalship. A new training film, "Fire vs. Fire," has been produced to help identify training needs and reasons for using backfiring and burning-out in firefighting.

Fire prevention and law enforcement.—Emphasis during the past year has been on preparation for additional public use pressures. This was highlighted by a servicewide staff work conference where a new national action plan was drafted. The plan recognizes both on-the-ground and far-reaching prevention actions taken by home unit fire personnel and resource managers. Emphasis in prevention has been placed on all fire agencies working cooperatively.

Most noteworthy of new day-to-day prevention work has been the use of a helicopter as a prevention tool in a high frequency escape-fire and incendiary area. More attention has been given to spark arrestor and inspections to reduce fires from equipment.

Safety.—An improved Belt-Kit Fire Shelter has been given initial field distribution. This shelter is carried by the fireman and is for last-chance-only use. It is constructed of better fire-resistant materials and is intended as an extra measure of protection for individuals working in critical conditions.

Through September 30, one firefighter was killed as the result of a rolling rock. Then on November 1, a flareup on the Loop Fire, Angeles National Forest, California, burned to death 10 men and severely injured 12 others. Two of the injured men died in the hospital later. A group of fire experts analyzed this tragedy. In early 1967, a task force will prepare a program for carrying out the analysis goup's recommendations to prevent similar disasters.

Air safety has been strengthened by improving upon inspection of contract aircraft. Safety-oriented training materials have been prepared which are directed toward helicopter users.

Fire-weather and fire-danger rating.—Fire-weather reporting and forecasting services have been improved in many areas. Working in close cooperation with the U.S. Weather Bureau, fire managers are supporting field forces with better fire-weather information and forecasts. A new meter for determining fire-danger rating has been developed and is undergoing field tests. Early trials indicate the device will speed up and improve accuracy of fire-danger calculations.

Fuel modification.—This work is modest in extent but highly important in providing results for application on a broad scale when an expanded fuel modification program is possible. The work is being integrated in the overall fire planning process to provide, in addition to hazard reduction in heavy fuel concentrations, a preplanned system of firebreaks and accessways that will enhance overall fire control effectiveness and multiple use values.

Rural fire defense.—The National Fire Coordination Study made the last two years for the Office of Civil Defense showed that fire will be a serious but manageable threat to human lives if a nuclear attack is launched upon the United States. Using the findings of pertinent research and administrative studies, the comprehensive report of this study describes programs to counter the fire threat and presents guidance materials, plans, methods and equipment with which nationwide preparations for defense from nuclear fire can be started. This report is a "State of the Nation" treatment of the nuclear fire problem. Rural fire defense plans and preparations of the Forest Service are being geared to the findings of this report.

Structural improvements for fire and general purposes

1966	$10,865,000
1967	11,040,000
1968	11,040,000

No program increase is proposed.

This program provides for the construction, reconstruction, and maintenance of buildings, utilities, airstrips, communications systems, and other facilities throughout the National Forests and National Grasslands.

Amounts estimated for fiscal year 1968, compared with 1966 and 1967, are as follows:

[Dollar amounts in thousands]

	Fiscal year 1966		Available, fiscal year 1967		Estimated, fiscal year 1968	
	Number of units	Amount available	Number of units	Amount available	Number of units	Amount estimated
Construction:						
Dwellings and barracks	53	$1,150	50	$1,056	45	$1,525
Fire lookouts	12	200	12	155	10	216
Service and storage buildings (including offices)	44	1,792	60	1,843	39	1,082
Airstrips and helispots	166	305	300	294	260	254
Communication facilities (radio and telephone)		1,050		1,012		1,012
Site acquisition		100		174		116
Major structures [1]	3	360	2	318	3	436
Total construction		4,957		4,852		4,641
Betterment:						
Upgrade existing structures, site improvements, landscaping and other miscellaneous construction		615		564		578
Raise standard of existing water and sanitary systems	38	515	23	465	60	662
Total betterment		1,130		1,029		1,240
Maintenance: Maintenance of existing improvements		4,778		5,159		5,159
Total, construction, betterment, and maintenance		10,865		11,040		11,040

[1] The three major structures planned for construction in 1968 are—

(1) Barracks, Angeles National Forest, Calif. $128,000

This is a 2-story barracks (dormitory and dining facilities) to house the Dalton 25-man hot-shot fire crew. This crew had been housed in buildings constructed during the CCC program. Because of their deteriorated condition they were torn down in 1965. The crew is temporarily housed in buildings on the San Dimas Experimental Forest, an arrangement that is not satisfactory due to location and the need of the space by the experimental forest. The fire crew is a key part of the fire organization of the Angeles National Forest and they need to be housed at the Dalton location. Otherwise, it would be impossible to meet fire control standards.

(2) Ranger station for 2 rangers in the Stanley Basin-Sawtooth Valley area, Challis an Sawtooth National Forests, Idaho 184,000

Facilities to be constructed at this site include 2 dwellings with basement and garage, a dual ranger's office, and the necessary site development and utilities. The office will provide space for 2 district rangers and their staff. Since recreation use on the national forests in this area is above ½ million visits per year, adequate space is needed in the office building to serve the public as well as to administer the national forest lands. The present facilities are of substandard log construction and provide inadequate space for current and future needs.

(3) Office for Ketchikan Ranger District, Ketchikan, Alaska 124,000

A combined ranger office and visitor center is planned to be constructed at a location convenient for forest administration and use by forest users and tourists. This combination will result in reduced total building costs and more efficient use of the personnel in administering the district and serving the public. The present office is in rented quarters in downtown Ketchikan where parking for visitors is very difficult.

Construction

Many ranger headquarters and field projects are located in remote areas or small communities where adequate housing is not available. Unless adequate housing is provided, it would not be possible to headquarter needed personnel at these work locations. Program costs would be increased excessively and the job of managing the lands and serving the public would suffer severely. There is also a great need for additional fire control structures, service buildings, and offices in outlying locations, as well as adequate communications facilities for National Forest protection and administration.

Landing fields, helispots, and heliports are essential to the effectiveness of the fire control program and multiple use management of the National Forests to make the best use of aerial operations and air equipment. They greatly facilitate rapid initial attack on forest fires, thereby increasing the chance for early control at small size which would result in a reduction of both suppression costs and resource losses. Construction and reconstruction of airport facilities such as airfields, heliports, and helispots are urgently needed.

Betterment

Existing facilities must be upgraded in order to continue their useful life. Many were constructed back in the 1930's with CCC labor and funds and require modernization. Some of these needs involve critical deficiencies in water and sewage disposal systems and in unsafe building foundations and electric wiring systems. Modern heating units are needed to replace those that are outmoded. In some instances addition of a room to a small dwelling, cabin, or office would accommodate expanding needs for many years. Some mountain airstrips and helispots have been made unsafe and inadequate for the increased use of large modern aircraft. Obsolete telephone systems are being converted to radio networks. Inadequate radio systems are being improved to meet communications needs.

Maintenance

It is essential in the interest of management economy to keep in reasonable repair the physical plant on which all National Forest activities depend. This plant in the main consists of about:

1,800 fire lookout towers and observatories
5,300 dwellings, cabins and barracks at field headquarters
800 field offices
6,300 storage and service buildings
3,100 water and sewage systems
20,000 radio units
1,200 landing fields and helispots
16,000 miles, telephone lines

These improvements are dispersed over the National Forests and National Grasslands. They are an integral and essential part of the management and protection of this large land area, involving forest fire protection, timber harvest, watershed protection, and other land use activities.

Maintenance funds are distributed to field units based on the number of improvements by classes currently justified by program utilization and an analyzed unit costs of maintenance. Priorities of maintenance are established at forest, and sometimes regional, levels so that structural improvements vital to protection of the resources will receive an appropriate degree of maintenance.

Examples of Recent Accomplishments

Emphasis has continued on construction of dwellings and barracks to provide housing and crew quarters at locations where private rentals are not available. Field headquarters offices are being provided and obsolete offices replaced to provide adequate working space. Construction of service buildings such as warehouses, shops and storage buildings at ranger stations has proceeded to fill the most urgent program needs. Following is a list of major structures on which construction started in fiscal year 1966:

Region 1:	West Yellowstone Interagency Fire Control Center, Gallatin National Forest, Mont	$152,000
Region 5:	Arcadia (San Dimas) Equipment Development Center, Calif.	130,000
Region 6:	Redmond Air Center, Deschutes National Forest, Oreg	105,000

The present rate of construction is providing new buildings and facilities to meet the most urgent needs. Maintenance was accomplished for the high priority needs, but the available funds are inadequate to keep the existing physical plant up to our maintenance standards.

Payments to employees' compensation fund

1966	$668,586
1967	733,000
1968	759,000
Increase	+26,000

An increase of $26,000 is required to reimburse the Employees' Compensation Fund, Department of Labor, in accordance with PL 86–767 (5 USC 785), which was enacted September 13, 1960, for benefit payments made from that fund to employees of the Forest Service who are injured while in the performance of duty. The 1968 payment will be $758,847. The payment for 1967 was $733,381.

Water resource development related activities

1966	$4,770,000
1967	6,766,000
1968	8,660,000
Increase	+1,894,000

An increase of $1,894,000 is needed to help meet Forest Service responsibilities resulting from installation of water development projects by other agencies. An increasing number of such developments for power, flood control, reclamation and general water supply purposes are being constructed in and adjacent to National Forests and National Grasslands by Federal, State and local agencies, and private groups.

The construction agencies initiate the projects and schedule the performance. The Forest Service cooperates in the planning, development, and management of the water and related resource developments associated with National Forest System lands.

Each project poses resource problems and opportunities peculiar to the individual site under consideration. This requires a comprehensive impact survey by the Forest Service to determine the effect of each water resource development proposal on all the resources and facilities affected by the project. These surveys prescribe the best pattern of multiple use management of the land and identify the resource management adjustments needed to attain maximum benefits from the water project.

The work performed under this program, in addition to impact surveys includes:

(1) Liaison with the construction agency.

(2) Development of public use and management facilities.

(3) Treatment of lands tributary to or within the project area to provide water flow which will better serve operating requirements of reservoirs and to provide for public safety and enjoyment.

Work and financing planned for fiscal year 1968 is compared with that for fiscal years 1966–1967:

[Dollar amounts in thousands]

	Fiscal year 1966		Fiscal year 1967		Fiscal year 1968	
	Number of units	Cost	Number of units	Cost	Number of units	Cost
Impact surveys and construction liaison	227	$767	175	$955	250	$1,455
Public use, access, and management facilities	7	3,856	23	5,324	30	6,004
Land treatment, soil stabilization, and cover improvement	3	147	6	487	25	1,201
Totals	237	4,770	204	6,766	305	8,660

Impact surveys and construction liaison, $1,455,000

Impact surveys are surveys which delineate the effect, define the mitigating measures and enhancement opportunities of water resource developments upon the protection, administration, and management of the National Forests and National Grasslands. Reports resulting from such surveys document items which are essential to the attainment of multiple use objectives when National Forest System lands are related to the project. To be effective, the surveys and reports must be concurrent with the construction agency's preliminary planning and must precede licensing or authorization.

Liaison with the construction agency is necessary during the construction period to facilitate coordination between the construction agency and the Forest Service. Protection of the land and resources, minimizing interference with regular protection and management activities, and facilitating construction agency operations are direct economic dividends derived from this program.

Fiscal year 1968 plans and justification.—Experience has shown that without adequate analysis and liaison effort such as is provided by this activity, natural resources often suffer from enormous waste and misuse. Natural beauty and high quality water are among those resources most susceptible to loss. The rising value of forest resources and constant increase in demands against the declining resource base requires increased perception, imagination and thoroughness in the preparation of impact surveys. A continuing program of impact surveys and construction liaison would go forward on about 250 projects.

Fiscal year 1966 accomplishment included impact survey preparation or construction liaison work for 227 projects. Among the projects for which the Forest Service prepared impact surveys during fiscal year 1966 are: West Divide, Bostwick Park, Little Dell, Smokey Range, Palisades, Lynn Crandall and Clark Ranch, Loss Valley, Takatz Creek, Johns Creek, Louden Ditch, Sullivan Creek, Warm River, Lake Winnibigoshish, Chewalla Creek, Houlka Creek, Stampede, Wynoochee, Garden Valley, Doniphan, and Blair Creek.

Examples of impact survey recommendations resulting in specific and meaningful contributions to natural resource values are:

a. A water development proponent desired to build an earthfill dam. Borrow material would have to come from adjacent areas of the surrounding forest and, in this case, would have resulted in massive scars and irreparable damage to the natural beauty of the area. On the basis of the impact survey findings the construction agency redesigned the project to use a concrete dam, thus increasing its multipurpose values.

b. A water development proponent desired to restrict natural channel streamflow releases in connection with a complex water diversion system proposal to the extent that downstream fishery, aesthetic and recreation values would be greately reduced. A reconnaissance hydrologic survey of tributary National Forest land, made as a part of the project impact survey, indicated a potential for increased water yield through appropriate land treatment measures. Because such additional yields will be available, agreement to the release of adequate minimum flows in the streams was forthcoming without difficulty.

Public use, access, and management facilities, $6,004,000

Fiscal year 1968 plans and justification.—The Forest Service is responsible for providing camping and picnic sites, swimming beaches, boat ramps, sanitation facilities, and other public use and information facilities on National Forest System lands at and adjacent to project reservoirs. These facilities, to serve their intended purpose should, whenever possible, be installed in time to meet the initial impact of visitor use when a new reservoir fills. Installation during the construction period is generally less expensive than after completion of the project. Failure to provide such facilities not only reduces the opportunity for public recreation enjoyment but, also, results in damage to prime recreation sites, destruction of natural beauty, pollution of streams and reservoirs, and conditions hazardous to the health and safety of the using public.

The fiscal year 1968 level of financing would provide needed public access, use and management facilities at 36 projects. The projects are:

Continuation of previous year's starts.—Libby, Hungry Horse, Fryingpan-Arkansas, Flaming Gorge, Joe's Valley, Mason, Cougar, Sam Rayburn, Chewalla, Toledo Bend, Allegheny, Monroe, and Middle Fork Anderson.

New starts in fiscal year 1968.—Pondere Lake, Boundary, Homesteak, Ashurst, Lyman, Tibble Fork, Lost Valley, Union Valley, Wishon, Courtright, Frenchman, Blue River, Kachees-Cle Elum, Cross Florida Canal, Bayou Boeff, Upper North River, South Branch North Fork, South River, Cave Run, Laurel River, Lewis Smith, Basin Brook, and Silvis Lake.

Fiscal year 1966 accomplishment included construction of facilities at seven projects—Ruedi, Mogollon Rim, Flaming Gorge, Shasta-Trinity, Allegheny, Sam Rayburn, and Monroe.

Land treatment, soil stabilization, and cover improvement, $1,201,000

Fiscal year 1968 plans and justification.—Treatment of lands tributary to water resource development projects to reduce sediment yield or to modify the pattern of runoff lengthens the life and increases the utility of the water control structures. This work is done on National Forest System lands tributary to the project, only where hydrologic analysis determines that such work is needed and the benefits to the project purpose are clearly established. Treatment programs include the following:

(1) Modifying the vegetation to decrease erosion, to reduce flood peaks and to increase the annual quantity of water yielded from the tributary lands.

(2) Clearing reservoir areas, where not done as a part of construction, and keeping the reservoir free of debris to make the area safe for recreation use and to maintain scenic beauty.

(3) Land treatment measures such as contour terracing, gully plugs, headwaters debris and flow retarding structures, and streambank and shoreline stabilization measures.

Fiscal year 1966 accomplishment included land treatment measures at three projects—Shasta Lake, Wickiup, and Detroit.

Fighting forest fires

1966	$12,500,000
1967	5,000,000
1968	5,000,000

No program increase is proposed.

The fighting of forest fires on National Forests and Grasslands is provided by this program. In addition to the regular fire protection organization, emergency forces may be employed when fire weather conditions are critical. Experience shows substantial savings are made by having a strengthened force ready to discover and attack fast-spreading fires. Reduction in damage and suppression costs is realized in relation to what might be expected from normal crew strength and normal procedures.

CALENDAR YEAR 1965 FIRE SEASON

The lowest burned area in the history of the Forest Service was recorded in 1965—75,150 acres. The previous low was in 1962 when 85,457 acres burned. Normal or below normal weather conditions in many places were helpful in attaining this record although several units had periods when fire danger was extreme. Due to dry lightning storms accompanied by strong winds, large fires occurred in late June in Arizona and New Mexico. The critical period of fire weather in mid-September in southern Oregon and northern California produced only a few fires and low burned areas on the National Forests. Fire weather was above normal in Oregon and Washington west of the Cascades. The record low burn area compares well with the five-year average of 208,974 acres. Fast, aggressive action on all fires made this record possible.

Fire occurrence down.—The number of fires as well as burned area was down for 1965. There were 9,365 fires reported for 1965 compared with 9,749 in 1964 and a five-year average of 12,393. Lightning fires were 5,243 in 1965, which is above the 1964 figure of 4,617 but well below the five-year average of 7,125. Man-caused fires dropped significantly again in 1965 to 4,122. This is well below the 1964 figure and the five-year average of 5,132 and 5,268 respectively. The 1970 goal of 3,500 man-caused fires seems within reach.

Major fires.—Large fires were few in number in 1965. Thirty-six fires over 300 acres were reported, which is a modern day low, and compares favorably with 61 such fires in 1964, and a five-year average of 83. One of the largest fires on the National Forests in 1965 was the Plum Fire on the Nebraska National Forest. It started from lightning on May 5, and burned almost 20,000 acres before it was controlled the next day. Burned area included 11,000 acres of tree plantations. The area had no forests until Dr. Charles E. Bessey, a University of Nebraska botanist, encouraged plantings begun about 1902. The burned area is part of the largest man-made forest in the United States.

CALENDAR YEAR 1966 FIRE SEASON

Throughout most National Forests and Grasslands, the 1966 fire season was the worst in many years. In the moisture deficient Eastern forests, where the time lag between rain and drought is short, April and May were critical months. By the end of May, dry weather in the West had pushed burning conditions in many areas to the danger point normally experienced in late July. In May, fires had already begun to escape initial attack, "blowup", and require large numbers of men and equipment to control.

Beginning with snowpack deficiencies, fire hazards in much of the West built up steadily from a dry spring through a virtually rainless summer. For example, in the Intermountain Region's Payette National Forest, fire dangers from mid-June to September ranged consistently higher than any experienced in many years—including the severe 1960 season. Annual rainfall recorded at Boise, Idaho through August 31 was only 3.15 inches, a record low, compared with an expected average of 7.68 inches. By late June, fire danger was extreme in Southern California. July, August and early September saw worse-than-normal-burning conditions throughout California, across the Northern Rockies, and the Pacific Northwest. Only in the Southwestern region did rain dampen an unusually severe May and June fire season. And even here, normal summer rains came late to Arizona and New Mexico, so their fire season was extended to mid-July.

To counter the serious burning conditions, several extraordinary measures were taken on a forest, regional, and national basis. Fire prevention efforts were intensified. In the California region, initial attack crews were manned to increased strength. When not fighting fires, the specially trained suppression crews were held on standby near the most critical areas. Crews of Southwest and Montana Indians were similarly used. Cooperative arrangements were strengthened with the Bureau of Land Management, Park Service, and State and local protective associations. Fires were mapped from the air using infrared techniques and equipment. In line with normal practice, detection and initial attack forces, including air tankers, maintained a high degree of surveillance and readiness.

Despite energetic efforts by available prevention and control forces, fire took a serious toll of National Forest resources in 1966. Fuels became so dry that once ignited, many fires spread immediately and rapidly. In the Southwest, the area burned during May and June reached some 31,000 acres, three times the 1961–65 annual average for the area. An airplane crash in mid-June on the Los Padres Forest caused the Wellman Fire—the season's largest—which spread over 93,000 acres of the San Raphael Wilderness before being controlled. From the first of July until mid-September, when rains finally came to lower fire danger over much of the area, crews battled 79 large (over 100 acres) fires in Forest Service protection areas in the western regions. Extreme fire danger continued into early November in Southern California, where the 1,900 acre Loop fire on the Angeles National Forest took the lives of twelve men who were caught in a brief flare-up. While this incident was the only one where lives were lost on the fire lines during a long and critical season, the tragedy has spurred renewed and even more vigorous efforts to examine firefighting methods, training, and capabilities so as to insure safe, as well as effective, fire suppression action.

In all, by October 31, 10,672 fires burned 331,435 acres, the largest area since 1960. Of these fires, 4,809 were man-caused. Though a serious loss, the 1966 burned acreage is not large in comparison with what might have happened. Time after time, prompt detection and aggressive initial attack stopped fires from making destructive runs, with 9,952 (93%) of the fires controlled at less than 10 acres. From these successes can be seen the savings gained by having flexible, hard-hitting forces available under very severe burning conditions.

Insect and disease control

1966	$12, 175, 000
1967	12, 363, 000
1968	11, 563, 000
Decrease	−800, 000

A net decrease of $800,000 is proposed.

(1) White pine blister rust control, $1,416,200 decrease

Recent evalution of the effectiveness of ribes eradication as a method of control of White Pine blister rust in northern Idaho, western Montana, and eastern Washington showed the rust in this region is infecting stands below 20 years old, at an average rate of 3% per year. This means there is no longer hope economically to carry those young stands through to merchantable size. Accordingly, the limited success of the ribes eradication programs, coupled with rising costs, led to the decision to terminate them.

Curtailment of ribes eradication as a means of controlling the disease in young stands in this region will result in a reduction of program funding by $1,416,200. Other parts of the blister rust control program, however, will be continued in this region at an estimated cost of $502,300.

It is planned to continue the blister rust control program for all other sections of the country at the budgeted level of $1,768,500 for fiscal year 1968.

(2) Other pest control, $616,200 increase

These funds will be used for control of a severe bark beetle outbreak on the Targhee National Forest in Idaho. Recent surveys show a rapid buildup of the number of infested trees in the areas now being treated. Surveys in October 1966 indicated there were 383,000 infested trees in the treatment area and the project was geared for funding at that level. As work progressed through the fall many additional infested trees were found.

January revised estimates show the number of infested trees increased 205,000 in the high priority area and that now 473,500 trees remain to be treated. This greatly increased workload will require acceleration of the project and its extension into fiscal year 1968.

Accelerated, continuing action is needed to successfully control the present bark beetle infestation that literally threatens the loss of nearly all the commercial timber on the Targhee National Forest. Industry and community stability are highly dependent on this timber. Loss of this timber would also have catastrophic effects on the prime recreation areas adjacent to Yellowstone National Park.

Insects and diseases have a greater impact on the Nation's forests than any other destructive agent Examples of the damage they do in an average year are:

(1) They kill 2.4 billion cubic feet of growing stock, including 9.2 billion board feet of commercial sawtimber. This is enough lumber to plank a boardwalk two inches thick and three feet wide from the earth to the moon.

(2) They seriously reduce timber yield by—

  (a) Retarding growth.
  (b) Stunting and deforming trees.
  (c) Delaying stocking.
  (d) Killing seedlings and reproduction.

(3) They can prevent the reestablishment of the most suitable and desirable tree species on certain sites. For example:

  (a) The chestnut blight not only wiped out the American chestnut, it also prevents the reestablishment of this valuable hardwood over the entire Appalachian Range.

  (b) White pines, one of the most desirable softwoods, cannot be grown on some sites because of the white pine blister rust.

  (c) The balsam woolly aphid is threatening to sharply limit areas where some species of fir can be grown.

  (d) Matsucoccus scale and the scleroderris disease pose a like threat to stands of red pine in the Northeast and North Central States.

(4) Insects and diseases seriously damage recreational areas, mar the scenic attractiveness of forest vistas, and kill and weaken trees that become hazards which must be removed at considerable cost to protect users of recreation areas and other public places.

(5) Insect and disease-killed trees increase forest fire hazard, the intensity with which fires burn, and the extent of damage they cause.

(6) When not promptly detected and controlled, insect and disease outbreaks can assume catastrophic dimensions that destroy all forest resources over entire drainages.

The objective of the pest protection program is to reduce by preventive measures and direct control action the huge damage and losses that pests inflict on forest resources. The program goal is to hold pest-caused damage and losses to levels commensurate with the uses and values for which specific forest areas of any ownership are managed, so that future national needs for wood products, recreation, and other forest uses can be met.

The pest control effort for fiscal years 1967 and 1968 must, of necessity, be estimated. This is because the onset, severity, frequency, and scope of pest outbreaks fluctuate widely, and reliable predictions of specific needs cannot be made one and two years in advance. The estimated pest control effort for the 1966–1968 period is:

[In thousands]

Item	1966	1967	1968
(1) For surveying forest lands of all ownerships to detect, delineate, and evaluate pest outbreaks, and to provide experienced leadership in planning and directing control operations	$2,671	$2,773	$2,890
The expansion over the 3-year period indicated for this item, which is made by corresponding reductions in other items, is to strengthen the national program of pest detection and evaluation. Experience has shown that the sooner control action can be taken, once need for control has been determined, the less the ensuing damage and cost.			
(2) For controlling bark beetles by logging or treating infested trees, cull logs, and stumps	$2,045	$2,427	$3,246
Trees to be treated	974	1,156	1,666
(3) To control insects that feed on foliage, shoots, buds, and seeds	$2,614	$2,326	$2,006
Acres to be treated	1,300	1,000	900
Costs of controlling pests for this item, which is largely done by aerially applied pesticides, have risen in recent years due to modifications in spraying methods to provide a wider margin of safety to fish and wildlife. Modifications entail (*a*) greater use of helicopters; (*b*) use of more costly pesticides; and (*c*) a more elaborate monitoring program to check pesticide impacts on the forest environment.			
(4) To control tree diseases such as blister rust, oak wilt, dwarf mistletoe, and root rots	$4,000	$3,992	$2,576
Acres surveyed to locate infected trees	40,000	40,000	40,000
Acres to be treated	500	500	480
(5) For methods improvement and developing and testing new equipment and pesticides	$845	$845	$845
Total	$12,175	$12,363	$11,563

From this input of effort will result an annual output in timber and forests protected estimated to be—

(1) Some 5⅓ billion board feet of timber saved.

(a) In terms of stumpage, this volume of timber would carry a price tag of about $42 million.

(b) In terms of lumber and other wood products, it would carry a price tag of $420 million.

(c) It represents enough lumber saved to build 512,000 average-sized homes.

(d) To harvest this volume of timber and convert the logs into manufactured wood products would require 80,000 man-years of employment.

(2) If but one of the 82 outbreaks usually controlled annually should go unattended and get out of hand, the ensuing epidemic could disrupt the economy of an entire lumbering community.

(3) Timely control also protects recreation areas from the unsightliness and hazards arising from a forest of snags, along with the heavy expense of snag removal around dwellings and campsites to safeguard people and property.

Examples of recent accomplishments

Prompt action in suppressing bark beetles prevents widescale loss of commercial timber.—Bark beetles kill huge volumes of sawtimber throughout the Nation each year. The losses they cause approximate one-sixth of the total timber harvested. During periods of outbreak, losses are greatly increased, occasionally bordering on the catastrophic, at which time they approach a quarter of the average annual cut. An example of the latter was the epidemic of Engelmann spruce beetle which, in the early 1940's, killed an additional four billion board feet of spruce and one-half billion board feet of lodgepole pine on one-half million acres of forest land in Colorado. The outbreak built up in windthrown timber that masked its real potential until it had developed into an epidemic of fantastic proportions, enveloping all trees in its path. The epidemic was finally brought under control by a massive and costly control campaign, plus the help of prolonged subzero temperatures.

Prompt action to suppress incipient infestations prevents intensification and spread and protects the commercial and aesthetic value of the resource. In 1966, 82 outbreaks of bark beetles were detected and suppressed in the early stages of their build-up. The value of timber saved by control action is estimated at $16.4 million.

Non-persistent insecticide found promising for controlling spruce budworm, an important forest defoliator.—DDT, a persistent pesticide, long used for successful and inexpensive control of spruce budworm, may soon be replaced by a newly found non-persistent chemical that in tests to date show little, if any, adverse effects to fish and wildlife. The new insecticide appears to be highly effective against the spruce budworm, a major pest of spruce and fir timber from coast to coast. Testing and analysis of results are continuing.

Monitoring aerial insect spraying projects intensified to determine possible adverse effects to fish and wildlife.—In conjunction with field testing of nonpersistent insecticides to control forest defoliating insects, a greatly increased effort was made to determine their possible adverse effects on fish and wildlife. Biologists in Federal and State governments monitored effects on beneficial insects, fish, fish-food organisms, birds, and small mammals. Results of monitoring information to date indicate little, if any, harmful side effects of the spray.

Federal-State cooperative insect and disease control program expanded.—In 1966 three additional States, making a total of 23, entered into cooperative agreements with the Forest Service to share the cost of forest insect and disease control on non-Federal lands. The intensification of surveys on non-Federal forest lands is expected to result in improved detection and suppression of pest outbreaks.

Little known insect erupts in outbreak numbers at new locations in California and Arizona.—The white fir needle miner, a pest insect heretofore restricted to parts of southern Utah, appeared in outbreak numbers in fir stands of the central Sierra Nevada Mountains in California and in northern Arizona. Surveys are being intensified to delineate areas of infestations and to determine whether or not there is need for control.

Timber values saved by white pine blister rust control.—Uncontrolled white pine blister rust would reduce white pine timber in eastern United States by 50%, in Idaho and Montana by 90%, and in Oregon and California by 70%. This would amount to a yearly loss of 113.5 million cubic feet currently valued at $12.3 million. Accomplishments to prevent such losses in 1966 were:

(a) Maintaining control previously established on 1.8 million acres;

(b) Establishing maintenance control on 94,000 acres;

(c) Establishing control practices on 194,000 acres; and

(d) Testing and streamlining a method for determining on any specific area and cost-benefit ratio involved in controlling blister rust in Eastern States, and work on a similar procedure in Idaho and Montana.

Acquisition of land, Weeks Act

1966	$680,000
1967	2,480,000
1968	2,480,000

No program increase is proposed.

Acquisition of key inholdings within the National Forests and National Forest purchase units becomes increasingly urgent. The Development Program for the National Forests recognized the need to ultimately acquire about 7,000,000 acres of private inholdings in need of land rehabilitation. Included are lands depleted by repeated fires, poor logging practices, clearing and cultivation of steep and erodible mountain lands, and disturbed mineral exploitation areas. Many of the lands in need of rehabilitation are located in economically depressed areas and/or are within a working radius of Job Corps Centers. Their acquisition will provide additional lands which will contribute to a healthful working environment for the Corpsmen.

The objective of the present 10-year program (1963–1972) is to purchase 967,000 acres of key inholdings of land for National Forest purposes. These are lands valuable for watershed and timber production purposes and having only secondary value for recreation. Lands primarily valuable for recreation are not included. Recreation type lands are included under the Land and Water Conservation Fund Act program.

The fiscal year 1968 estimate will permit further progress toward acquiring the 967,000 acres.

Included in the amount shown is $1,800,000 for the acquisition of land in the Redbird Purchase Unit in eastern Kentucky (a part of the Appalachia program). An estimated 51,400 acres will be acquired with these funds. These lands, when acquired, will permit an immediate management program of land rehabilitation, recreation development, fire protection and road construction employing local residents in an economically depressed area. Floods originating from this area have in past years caused multi-million dollar downstream damage.

The remaining $680,000 will be used to continue the regular Weeks Act program at its present level. This will permit the acquisition of an additional 22,520 acres of key inholdings.

See tabulation on page 1677 for more detailed information on actual and planned accomplishments for fiscal years 1966–1968.

Examples of Recent Accomplishments

In 1966 a total of 190 tracts were contracted for purchase under authority of the Weeks Act using regular appropriated Weeks Act funds. These cases involved the acquisition of 23,452 acres at a total cost of $678,509. These transactions involve lands suited to timber production and watershed protection in areas where National Forest ownership needs to be consolidated or extended to facilitate these programs. Many of the smaller parcels, 20–40–80 acres in size, are purchases made at a price equal to or nearly equal to the cost that would otherwise have been incurred to survey, post, and mark the National Forest boundary surrounding the property.

Cost Avoidance Attributable to Weeks Act Purchases (except Redbird)

Through purchase of the 190 tracts contracted in 1966, the Forest Service will avoid constructing some segments of roads and locating and/or posting property lines. In addition, processing costs of land trespass cases and other management costs are also avoided through the regular Weeks Act purchases. Studies made in previous years have shown substantial savings through cost-avoidance as a result of the purchase program. The estimated 10-year cost-avoidance attributable to the tracts purchased in 1966 is $313,500.

The estimated 10-year cost-avoidance with purchase of the tracts proposed in 1968 is $360,000. Involved are an estimated 240 cases totaling 22,520 acres.

Weeks Act purchases 1966–68

State and forest	Fiscal year 1966 actual			Fiscal year 1967 estimated			Fiscal year 1968 estimated		
	Options accepted	Acres	Obligation [1]	Options accepted	Acres	Obligation	Options accepted	Acres	Obligation
Alabama:									
Wm. B. Bankhead				1	100	$5,000			
Talladega	1	80	$3,983						
Arkansas:									
Ouachita	1	168	4,480	2	230	10,530	2	625	$25,000
Ozark	14	2,704	71,708	7	1,541	43,392	15	1,500	50,000
Florida, Ocala	1	10	1,500						
Illinois, Shawnee	24	1,739	79,515	21	2,343	82,000	30	2,000	71,000
Indiana, Hoosier	29	2,006	88,078	20	1,500	58,500	45	2,000	71,000
Georgia, National Forests in Georgia							8	600	35,000
Kentucky:									
Daniel Boone	3	274	3,890	2	1,028	31,850	6	875	35,000
Redbird purchase unit				5	49,098	1,716,000	11	51,400	1,800,000
Michigan:									
Hiawatha	1	1,040	11,200	12	1,000	25,000	10	1,600	40,000
Huron-Manistee	9	2,389	53,875	21	1,940	44,900	20	1,500	20,000
Ottawa	4	395	4,224	6	974	10,100	10	800	10,000
Minnesota, Chippewa	5	480	4,040	3	200	5,000	5	500	5,000
Mississippi, Holly Springs				1	100	5,000			
Missouri:									
Clark	13	1,969	45,543	13	1,300	35,000			
Mark Twain	13	1,465	38,036	10	900	25,000	15	2,000	50,000
New Hampshire, White Mountain	1	¼	25	2	210	5,000	2	250	5,000
North Carolina:									
Pisgah	1	87	5,500						
Uwharrie	1	112	4,492						
Ohio, Wayne	44	3,250	82,288	19	1,830	58,500	40	1,800	63,000
Oklahoma, Ouachita	2	509	13,786	1	160	2,800			
South Carolina, Sumter	2	69	5,790	1	64	5,400			
Tennessee, Cherokee	7	711	25,439	2	650	20,000			
Vermont, Green Mountain				2	400	10,000			
Virginia:									
George Washington	6	2,370	77,409	3	360	15,800	2	1,970	60,000
Jefferson	7	1,573	29,903	5	1,830	49,600			
West Virginia, Monongahela	1	52	1,044				10	2,000	100,000
Wisconsin:									
Chequamegon				2	440	10,000	5	1,000	20,000
Nicolet				4	335	10,000	15	1,500	20,000
Total	190	23,452	655,748	165	68,533	2,284,372	251	73,920	2,480,000
Surveys and related acquisition costs			22,761			195,628			
Total obligations			678,509			2,480,000			2,480,000

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[1] Excludes obligations of $970,784 against accelerated Appalachian funds appropriated in fiscal year 1965.

FOREST RESEARCH

Timber management research

1966	$8,027,000
1967	8,377,000
1968	8,937,000
Increase	+560,000

An increase of $560,000 is needed for research in forest genetics. Forest genetics research will be accelerated to develop high-quality, pest-resistant types of conifers, preferred species of hardwoods, and southern pine. Research will be intensified on techniques for selection of superior types of trees, hybridizing within and between species, testing the offspring, and reproducing the improved types for large-scale use.

Timber management research develops cheaper and more reliable methods of establishing and tending forests to produce timber and timber-related products. It deals with reproducing forests both naturally and artificially, with intensive cultural measures for increasing the yield and improving the quality of forest stands, with methods for evaluating and increasing the productive capacity of forest soils, and with stand treatments to perpetuate valuable species. It includes breeding trees for rapid growth, good form, desirable wood qualities, and pest resistance. It includes research in such timber-related crops as maple sap, naval stores, Christmas trees, and decorative, medicinal, and edible plants. The program develops better techniques of measuring forest trees and stands, more reliable predictions of future growth and quality of forest products, and improved techniques to weigh alternative in management of large public and private timber holdings. It includes modifying timber production practice to accommodate the use of forest land for wildlife, range, water, and recreation. It includes developing more effective methods of planting and tending shelterbelts and other special purpose tree plantings to ameliorate the local climate. These improve the quality and appearance of urban and rural environments. It also includes research to develop fundamental knowledge of tree physiology, mineral nutrition, soil-site relationships, variation and inheritance of trees, and forest ecology.

Examples of Recent Accomplishments

New reference book on important forest trees of the United States.—The first comprehensive summary of information on life histories of the major commercial forest tree species in this country was issued as USDA Handbook 271. This 762-page, illustrated book, "Silvics of Forest Trees of the United States," compiles reports prepared by Forest Service scientists in all parts of the country. Each of the 125 most important native forest trees of the United States is described in terms of its distribution, growth requirements, seed production, natural regeneration, tree size, varieties, and hybrids. Forest managers, students, and scientists consider the book a valuable reference and have nearly exhausted the initial printing of 16,000 copies.

A hybrid pine for Christmas trees.—Christmas tree growers are interested in a hybrid pine developed at Berkeley, California. The tree, a hybrid between two races of lodgepole pine, has desirable Christmas tree traits—good form and color, rapid growth, and early production of persistent cones. Little is known about the growth of this hybrid outside California, but plantings are being made in the East, Pacific Northwest, and other regions to test its suitability.

Straight-grained sweetgums may produce better lumber and veneer.—The most obvious fault of sweetgum for lumber manufacture is the warping thought to be related to "interlocked grain." Studies of 225 sweetgums growing in seven southeastern States indicate this undesirable feature of sweetgum may be genetically controlled. Thus, choosing straight-grained seed parents may eliminate troublesome problems in processing sweetgum lumber and veneer.

Jack pines differ in susceptibility to the needle cast fungus.—After 10 growing seasons, 29 seed sources from northeastern Minnesota had only about 25% infection. Trees from a lower Michigan source showed 95% infection. Since these differences remain constant from year to year and from environment to environment, they are genetically controlled. Selected trees from these seed-source tests provide geneticists with breeding material to develop strains of jack pine resistant to the needle-cast fungus.

Paper mill effluent used to irrigate pines.—Three years of study in Louisiana showed that paper mill effluent may safely be used to irrigate pines. If strong wastes are avoided, as much as 20 to 40 area inches of effluent can be disposed of in this way. Trees benefit, and a major source of pollution is kept out of streams.

Warm nights make better seedlings.—Night temperature in the nursery influences the vigor of ponderosa pine seedling roots. In California, ponderosa pine transplants from a nursery with warm nights produced more and longer roots than transplants from another nursery with cold nights. Nights warmer than 40° F., but 19 to 26 degrees cooler than day temperatures gave the greatest root production. This day-night temperature difference may prove to be important in selecting nursery sites for ponderosa pine.

Size of openings determines hardwood species in next crop.—Different management systems were compared in Appalachian hardwoods in West Virginia. When trees were harvested singly to maintain a continuous forest cover:

(1) The proportion of sugar maple increased.

(2) The proportion of yellow-poplar, red oak, and black cherry decreased.

Thus, species composition can be controlled by varying the size of opening made in harvest cuts. These findings indicate the degree of flexibility possible in managing forests to meet multiple use objectives.

Redwood reseeds itself dependably.—Seed production of redwood was consistently high during 5 years after harvest cutting. Many seedlings became established on favorable seedbeds, and sprouts grew to 15 feet in height, assuring the start of a new forest. Natural regeneration is much cheaper than planting. With the rapid establishment and fast growth of redwood, prospects for profits are very good.

Variation in peatland productivity explained.—Black spruce in Minnesota bogs grew fastest along channels of flowing water. These "water tracks" support a great variety of bog plants. The more distant "muskegs" have fewer species and slower tree growth. Chemical analyses showed that "water tracks" carry nutrients into the bog from mineral soils, but "muskegs" have no source of nutrient replenishment except rain.

Rectangular plantation spacing saves money.—Rectangular spacing was better than square spacing in a slash pine plantation in Georgia. This means that far fewer rows need to be planted. Hand or machine planting costs can be reduced, and access to the plantation is easier.

One cord of pine pulpwood removes 5.46 pounds of minerals.—In the Southeast, one cord (5,000 pounds) of loblolly pine pulpwood contains 0.25 pounds of phosphorus, 1.52 pounds of potassium, 1.69 pounds of calcium, 0.56 pounds of magnesium and 1.44 pounds of nitrogen, or a total of 5.46 pounds of these nutrients. The harvest of several successive crops of trees could result in deficiencies of mineral nutrients in poorer soils.

Acid paste reduces gum production costs.—The naval stores industry could save $5,000,000 each year from the use of sulfuric acid paste. The paste is better than a water solution of acid now used to stimulate the flow of gum. Chipping labor costs can be cut as much as $4 per barrel of gum. Better grades of gum, worth $2 to $4 more per barrel, are recovered because acid contamination is reduced. Prolonged flow of gum requires larger cups, but it lengthens collection intervals to four weeks. The result is an additional cost saving up to $2 per barrel.

Watershed management research

1966	$3, 280, 000
1967	3, 439, 000
1968	3, 650, 000
Increase	+211, 000

An increase of $211,000 is needed to supply a stronger technical basis for management of National Forest watersheds and similar water-producing mountain lands. The proposed increase will strengthen research on—

(1) Water yield improvement from eastern slopes of the Cascade Mountains of Washington and Oregon.

(2) Rehabilitation of gullied forest lands in the south coastal plains.

(3) Increased recharge of groundwater in south by vegetation manipulation.

(4) Reduction of erosion and sedimentation from granitic areas of Idaho and Montana.

(5) Methods of watershed analysis, correlation, and synthesis to provide a more precise method of predicting results of management measures and to extend research results to larger areas.

(6) Improvement of hydrologic and productive characteristics of bog and swamp forests of the Lake States.

The dollar input in watershed management research during the past 7 years has averaged $2,348,371 annually. Research to date indicates that if studies are continued and if improved watershed pratices are suitably applied, high quality usable water can be increased by 14 million acre-feet annually. This additional water has an estimated primary delivered value of $734 million annually. Costs of producing the additional water are expected to be less than $10 per acre-foot, leaving a net annual value of approximately $600 million. In addition, management methods to be developed by research can conceivably prevent up to 80% of the direct flood and sediment damages that would otherwise occur due to overuse or improper use on presently undamaged watersheds. Direct benefits should exceed $275 million annually, plus side benefits of nearly $50 million. Furthermore, it is estimated that about 100 million tons of sediment are coming from deteriorated forest and rangelands. Rehabilitation of the sediment producing lands, based on research-derived techniques, could result in annual savings of approximately $75 million.

Watershed management research consists of both basic and applied studies designed to develop methods and techniques for managing forest and related range watersheds to—

(1) Increase water yields or improve timing of water yield to streamflow.

(2) Give adequate protection to forest soil and water resources while other productive resources of the forest are being used.

(3) Rehabilitate watersheds that yield damaging flood runoff and sediments.

(4) Aid forest soil development and improvement.

One-third of the area of the United States is forested. These forests, with associated range and alpine areas, yield about three-fourths of the Nation's streamflow. Management of our forests, more than any other lands, is important to the quantity and quality of water produced.

Examples of Recent Accomplishments

Breakthrough in snowpack measurement.—A breakthrough in technique for measuring snow for predicting summer water supplies has been made in California. The new system may eliminate or greatly reduce the need for snow survey crews to make dangerous monthly treks into the mountains. A nuclear instrument that measures the depth and density of snow has been adapted to the needs of snow surveys. The measurements do not destroy the sampling site, as other methods do, so it can be sampled again and again. In addition, the motorized gage can be operated by radio from an office miles away, with the measurements transmitted back by radio. The system can be used in glacier research in Alaska and snow research on the Continental Divide. As it can sense high rate of snowmelt from rain-on-snow storms, it will be invaluable in flood forecasting.

Soil erosion in logging areas is directly related to roads.—Studies of logging systems on watersheds with granitic soils show that road building should be avoided wherever possible, or kept to a minimum. Dams on an experimental watershed caught 20 thousand tons of sediment per square mile when logging roads were 300 to 400 feet apart. Most of this sediment was deposited immediately after road building and after a large storm several years later. On a watershed with few logging roads spaced at 1,000- to 1,500-foot intervals, only 43 tons of sediment per square mile were deposited—0.2% of the sediment from the area of closely spaced roads. Where erosion hazards are high, logging systems that require few roads should be utilized.

Squaw carpet has high potential for rehabilitating damaged rangelands.—A little-known ground cover shrub called "squaw carpet" holds considerable promise for rehabilitating damaged watersheds. Many single plants grow to 10′ in diameter and even larger. Every branch of this prostrate shrub is abundantly rooted, giving the plant exceptionally good soil-holding capability. The native range of squaw carpet is limited to the Sierra Nevada and Cascade Mountains of the far West. Outplantings in Idaho and Utah survived better than a control planting in its native range. Furthermore, in Idaho the greatest survival was found on the most severe site—a steep, unstable, infertile road fill of decomposed granite. The extension of the range of this useful plant will be most valuable in rehabilitation work.

Detergents reduce erosion from burned chaparral watersheds.—Treatment of water-repellent soils with a detergent resulted in a 95% reduction in debris movement, a fourfold increase in grass establishment on burned chaparral watersheds in southern California. The water-repellent characteristic means that rain falling on these soils does not soak in but runs off rapidly, eroding the soil as it goes. Detergents tend to counteract the water-repellent nature of these soils, allowing the water to penetrate. Under normal rainfall the wetting agent will remain effective for about one year. Detergent sprays to hold soil in place on steep, newly burned slopes may be useful to prevent excessive damage to densely populated areas below.

Water use determined by the production of vegetation.—Water yield increased as newly established grass cover declined on an experimental watershed at the Coweeta Hydrologic Laboratory in western North Carolina. In the first year after removing the original forest cover, seeding grass, and fertilizing, the grass was tall and deep-rooted. It used as much water as the forest it replaced although the water use occurred earlier in the growing season. Without subsequent fertilization in succeeding years, grass production decreased and water yield increased. After five years water yields were over 5″ greater per year than with the original tree cover. Then fertilizer was again applied. Grass production went up, and water yield decreased to original levels. This showed the direct relationship between herbage production and water use. For maximum water yields through vegetation change, watershed managers should aim for a grass cover having shallow roots, low vigor, and just enough density to hold the soil and prevent erosion.

Forest cutting provides more water during droughts.—Complete clearing of the forest by cutting and use of herbicides prevented any vegetative growth and increased water yield by 6″ during the dry summer of 1965. This period was by far the driest in the 15 years of record on the Fernow Experimental Forest in West Virginia. Six inches more water amounts to 900 gallons per day from each treated acre—enough to meet the daily needs of 15 people during the drought period.

Streamwater showed no residue after spraying with DDT.—No significant amount of DDT was found in streamwater before or after spraying to control the Douglas-fir tussock moth in Oregon. A general increase of DDT in the food chain did appear after spraying. Cooperators from the Oregon State University Department of Fisheries and Wildlife found traces of DDT in animal life even before the spraying was done, and these traces increased after spraying. The highest DDT residue—1.2 parts per million—was found in trout while the lowest was 0.002 parts per million in herbivores. Careful spraying of DDT to avoid watercourses can control insects effectively without hazard to streams.

Range management research

1966	$1,258,000
1967	1,294,000
1968	1,294,000

No program increase is proposed.

The key to continued use of nearly 900 million acres of public and private range and pasture land lies in the development of sound principles of management from firmly established research findings. Grazing on this vast area is the largest single use of land in the United States but new increasing demands from related uses on the resource must be recognized and to which research must be oriented.

Range management research is seeking the best, most practical and most rapid means to manage and improve the productivity of forested and related ranges in full recognition and alignment with other coordinate uses. Toward this end the program will move ahead on the highest priority studies which are underway. New research will be undertaken as opportunity is presented through completion of current studies. On-going research will stress increased emphasis on the fundamental ecology and physiology relations of forest range vegetation in order to provide a basis for improved range management; designing and implementation of new systems of management, conversion, improvement and accompanying management particularly of woodland and chaparral ranges will be given high priority.

Demands on rangelands will increase for additional meat and other livestock products as well as for less tangible products offered by a properly managed resource. For example, projections indicate that beef cattle will increase from approximately 60 million head in 1960 to 105 million in 1980.

During the same period, big-game hunters will probably increase from 6.3 million to 12 million. Pressures to produce forage for more big game will be substantial. Water needs may increase from 345 to 560 billion gallons per day, demands for timber products may increase 45%, and demands for outdoor recreation will intensify rapidly. Therefore, range research must not only provide maximum production and utilization of forage, but also maintain or improve other values of the basic natural resource.

Because of the immense area of rangeland, even small per acre increases in yield or reduction in management costs can have substantial effects. For example, research conducted at Alexandria, Louisiana, is applicable to some 50 million acres of southern pine forest range. Past research has shown that returns from this area can be increased from $1 to $3 per acre through improved management. At Dubois, Idaho, research demonstrated that sagebrush can be effectively eliminated through planned burning. Costs are less than $1 per acre vs. $3 to $5 or higher for chemical or mechanical control. Sagebrush control is currently needed on about half of the sagebrush-grass type, covering about 95 million acres.

Grazing is now and will continue to be the dominant land use on vast areas of public and private lands. Range management research provides the necessary guides for attaining maximum economic returns to ranchers.

Examples of Recent Accomplishments

Burroweed competes strongly with grasses for limited soil moisture.—Grass yields were reduced as much as 50% in southern Arizona by competition from burroweed, a shrub with little or no forage value. Measurements showed that winter accumulation of soil moisture was completely expended to a depth of two feet or more before summer rains began. Since grasses did not start using moisture until spring and summer, from 30 to 100% of the soil moisture was not put to beneficial use. Studies are now underway to determine possibilities of making more efficient use of winter-spring moisture by desirable forage plants.

Simulated grazing damages weeds more than grasses.—Clipping studies on mountain grasslands in Utah showed a wide variation in reaction of range plants to herbage removal. Plants such as tall bluebell, aster, and cinquefoil were severely damaged by top removal, particularly during flowering. Grasses generally benefitted from reduced weed competition and conspicuously increased in yield. Such studies provide guides for manipulation of grazing to allow the most desirable composition of vegetation for maximum livestock production.

Weeds and shrubs supply sufficient protein for minimum requirements of grazing cattle.—Bluestem ranges of the Ozark region are thought to be deficient in several nutrients during most of the season. However, a study in Missouri showed that cattle would acquire enough protein to satisfy minimum requirements throughout the season by selectively grazing forage supplied by weeds and shrubs. This study also showed that minimum phosphorus requirements could not be supplied. This strongly emphasized the need for providing livestock with a phosphorus supplement on these ranges.

Increased profits from improved grazing management.—Beef production was increased by more than $1 per acre per year in Arizona through improved management. Intensity of use was reduced, and yearlong grazing was changed to alternate-year summer deferment. Similar increases could be obtained by applying these practices to 6 million acres of high-potential semi-desert range in Arizona alone. Most of this area has been grazed on a yearlong basis. No provision has been made for the periodic rest needed to restore plant vigor.

Invasion of halogeton can be prevented by proper grazing.—Invasion of the poisonous weed, halogeton, into stands of crested wheatgrass in central Utah was associated with intensity of grazing, season of grazing, precipitation patterns, and soil disturbance. Heavy infestations were particularly correlated with heavy spring and early summer grazing. Maintenance of desirable vegetation by proper grazing management can prevent establishment of this weed.

Requirements for grazing Arizona ranges determined.—Ample green forage is supplied by pinyon-juniper ranges in northern Arizona from April 1 to September 30. Some also is produced during the entire winter. Cool-season grasses reached peak growth in June and remained partly green all year. Warm-season grasses were green only in summer and fall, and they reached peak growth in September. The amount of growth of each grass species was influenced mostly by precipitation prior to and during the period of active growth. Grazing systems should provide for occasional rest during these periods. Warm-season species can be favored most by resting between July 15 and October 15, and cool-season species by resting during April, May, and June.

Helicopter useful for range fertilization.—Additional acreage in California's annual-plant ranges might be fertilized if better methods of application were available. Ground application is impractical on much of the steep, rocky, foothill range. Fertilizing this kind of range with fixed-wing aircraft may also be impractical. At the San Joaquin Experimental Range, a helicopter has been used successfully to make two applications of sulfur on a steep, rocky foothill range. Rate and distribution of fertilizer were good, and the average cost of $2.85 per acre for each application was reasonable. Helicopters may be the answer for practical application of fertilizer on foothill rangelands.

Reduced rates of range seeding prove to be adequate.—Crested wheatgrass stands in New Mexico achieved their maximum development wtihin 5 to 8 years, regardless of rate of seeding or drill-row spacing. Herbage yields were essentially the same for 2-, 4-, and 6-pound per acre seeding rates and for 6-, 12-, and 18-inch row spacings. The results showed that seeding rates could be reduced thereby reducing seed costs. The 4-pound rate would save nearly $1 per acre in seeding costs over the usual 6-pound rate.

Wildlife habitat research

1966	$730, 000
1967	912, 000
1968	912, 000

No program increase in proposed.

Wildlife habitat research develops better management practices to support optimum game and fish populations. Special practices are developed for increasing game food and cover by seeding, planting, burning, spraying, and fertilizing. Competition between wildlife and livestock is determined on various types of forest and rangelands in order to integrate wildlife, livestock, and timber production. Likewise, effects of silviculture and timber harvesting on food and cover plants used by wildlife must be known. Research is conducted to improve fish habitat through regulation of water temperatures, creation of gravel spawning beds, and stabilization of stream channels.

The Nation's forest and related rangelands provide the main habitat for an estimated ten million big-game animals and countless other species of wildlife. These lands also provide important fish habitat. All are a source of interest and beauty. Demands by hunters, fishermen, and nature enthusiasts are ever increasing. National Forests alone contain over 80 thousand miles of fishing streams and nearly two million acres of lakes. Although habitat conditions on some areas are suitable for supporting high wildlife and fish populations, the capacity of most forest and related rangelands can be materially increased through research. Some low-producing areas are ugly pictures of land abuse. They result from poor logging practices, fire, or overuse by livestock or big game.

Information on ways and means to increase habitat productivity is needed by small woodland owners, as well as by managers of large forest properties. Wildlife resources are ever increasing in monetary value to private landowners through sale or lease of hunting and fishing privileges. The wildlife habitat research program involves active cooperation with Federal and State fish and game agencies and educational institutions.

Examples of Recent Accomplishments

Juniper-pinyon range restoration increases forage for deer and livestock.—Closed stands of juniper-pinyon in Utah often produce less than 100 pounds of forage annually per acre. However, eradicating trees and seeding desirable plants increased forage production to over 700 pounds per acre. Deer use in untreated juniper-pinyon stands averaged only 4 deer-days per acre as compared to 83 deer-days per acre on seeded stands—a twenty-fold increase. Such treatment also benefits livestock because 4 acres of treated range will support one cow without interfering with use by deer. Watershed values are also greatly improved by these restoration treatments. Ground cover increases from 25% on untreated areas to 73% on seeded areas. Such restoration treatments can be applied to 13 million acres in Utah alone.

Browse shrubs can be improved by selection and breeding.—Striking variations have been found in populations of several native shrubs. Individual plants of big sagebrush growing side by side differ markedly in palatability to deer. Palatable and unpalatable strains of rubber rabbitbrush have been isolated. Several other shrubs show great promise for improving browse characteritics by selection and hybridization. These offer exciting and profitable possibilities for "tailoring" shrubs to fit various wildlife habitats and uses.

Moist heat speeds germination of legume seeds.—In the Southeast fire may benefit several species of leguminous plants. Laboratory treatments applied to seeds of partridge pea indicated that moist heat is most effective in increasing germination. This helps to explain why legumes vary in occurrence in flatwoods pine stands burned annually. It also suggests how time of burning can be modified to assure maximum yield of legumes important for wildlife food.

Land use influences spawning of anadromous fish.—Cooperative studies in California have shown that—

(1) Shading decreased growth of algae and greatly increased the population of fingerling steelhead and silver salmon.

(2) Water temperatures varied with stream depth and degree of exposure to sunlight—as much as 15° over a distance of 600 feet.

(3) Terrestrial as well as aquatic insects contributed considerably to supply of fish food.

These studies show the importance of streamside vegetation management to spawning and rearing of fish.

Forage yield in southern forests governed by timber density.—Forage is a harvestable product on 58 million acres of loblolly-shortleaf pine-hardwood forests of the South. In east Texas, herbage yields per acre were 800 pounds or more in the open, but they decreased to about 100 pounds per acre with increasing tree cover. Pinehill bluestem, one of the most important cattle forage species, contributed most to herbage where trees were sparse. It gave way to unpalatable grasses as timber stand density increased. Two-eyed berry, a good winter deer forage plant, was scarce in the open but was the most frequent herb beneath dense timber. Consequently, reduction in grazing values as timber density increases may be more critical for cattle but less critical for deer. Data on timber stand density now can be used to predict forage yields and to determine carrying capacity for livestock and game.

Forest recreation research

1966	$516,000
1967	479,000
1968	811,000
Increase	+332,000

An increase of $332,000 is needed to strengthen research on—

(1) Ecology and use of the unique Boundary Waters Canoe Area in the Lake States.

(2) Ecology, protection, and management of western wilderness areas.

(3) Forest recreation in the Pacific Northwest as the basis for understanding visitor requirements, enriching recreation experiences, lessening user-resource conflicts, and aiding resource management.

(4) Approaches and criteria for forest landscape design and fitting landscape management to intensive resource use in California.

(5) Measuring recreation use and trends.

(6) Opportunities for recreation on small and industrial forest properties in the Piedmont and Coastal Plain.

Only a few years ago recreation was a minor use of the forest resource. Conflicts between uses were few and management costs were low. Today recreation and its management is big business. The overall research task is to help insure that recreation planning and management funds are used effectively and efficiently to enhance the use of America's forests and woodlands for increasing millions of recreation visitors.

Examples of Recent Accomplishments

Hazardous trees numerous on heavily used recreation sites.—Many old picturesque lodgepole pines, prominent in western mountain campgrounds, are defective. A study of five Sierra Nevada campsites showed that one-third of all the trees had butt rot, and one-half of these were rated potentially hazardous to recreationists. Furthermore, potential hazard increased as much as three and four times on heavily used sites. Fire scars were the most common abnormality associated with decay and hazard. Lodgepole pines must be carefully inspected in recreation areas where trees are fire scarred, often overmature, and exempt from commercial cutting.

Fertilizers and irrigation help maintain heavily used recreation sites.—A Utah study showed that fertilization increased the vigor of campground vegetation, especially if nutrients that were previously lacking were supplied. Trees were helped when fertilizer was placed in holes drilled in the soil at the root zone.

Broadcast spreading of fertilizer aided ground cover plants more than trees. Timing of watering was very important. Watering just before heavy use softened soils, made vegetation turgid, and increased the possibility of damage. Watering after heavy use, however, aided survival by keeping bruised vegetation moist until it had a chance to heal.

Boundary Waters Canoe Area—a problem of maintaining aesthetic values with heavy use.—Minnesota's Boundary Waters Canoe Area sustained 250,000 visits in 1965, and more are expected each year. The area's soils are thin and fragile. Even lightly used campsites have lost 50 to 99% of their ground cover. Tree reproduction on these sites is absent; erosion, compaction, and root exposure are prevalent. Canoeists do not realize they are unintentionally damaging the camping sites. Educational programs are needed. Outfitters who rent canoes, tents, and supplies also can help by suggesting travel routes that effect better distribution of users.

Visitors helpful in planning visitor information programs.—Most campers on lower Michigan National Forests were family groups staying about five days. This suggested the need for variety in visitor information programs from day to day, but not between weeks. Programs must be directed to the interests of both children and adults. The opportunity and need to inform adults is not met by pointing all information programs at a child's level of understanding, but one answer is to aim daytime presentations at children and night presentations at adults.

Who are the customers for privately owned campgrounds?—Profitable private campground operation depends upon—

(1) How well the entrepreneur anticipates the facilities and services wanted by campers.

(2) How well he estimates his potential market.

(3) How well he understands the kinds of campers he hopes to serve.

Private forest campground users in the Ohio River Valley generally camp as family groups. For many, this was their first year of camping. The majority came from urban areas. Families camping out for just a weekend usually camped with another family. They participated in several other outdoor activities, traveled less than 100 miles to the campground, and used either a travel trailer or tent trailer. Families camping while on a major vacation tended to camp alone. They participated in very few other outdoor activities, often traveled more than 100 miles to the campground, and used a tent more often than any other type of shelter. These vacationers were more interested in conveniences such as showers and laundry facilities than were the weekenders.

Forest fire research

1966	$2, 860, 000
1967	2, 912, 000
1968	3, 112, 000
Increase	+200, 000

An increase of $200,000 is needed to intensify research on—

(1) An electronic fire detection system utilizing an airborne infrared scanner and a telemetering link to provide fast, accurate fire information to forest fire control centers.

(2) New fire control technology to reduce forest fire losses in the eastern United States.

(3) Improved technology for reducing fire hazards in northwestern forests with special attention to methods which reduce air pollution in logging slash disposal operations.

Forest research develops methods and systems for both wildfire control and intentional use of fire in land management. It also develops basic knowledge needed to protect resources adequately from forest fires. The program includes investigations of fire physics and chemistry, atmospheric conditions that affect forest fire combustion rates, fuels and fire behavior, and fire prevention. Those phases of research requiring highly sophisticated equipment and techniques are conducted at three forest fire laboratories: Missoula, Montana; Macon, Georgia; and Riverside, California. Specialized field studies are conducted at seven other locations.

Every five minutes someone is guilty of starting a forest fire somewhere in the United States. Each year Federal, State and private forest protection agencies spend more than $150 million to fight some 100,000 forest fires.

The forest fire problem is becoming increasingly complex as summer homes, suburban developments, and extensive plantations intermingle with wild forest lands. Traditional firefighting methods are no longer adequate to protect the vastly increased values at stake. Much progress has already been made in developing new and improved fire control methods, such as aerially delivered fire retardant chemicals. More research is needed if forest fire control is to take advantage of several technological advances. For example, recent improvements in helicopter performance open up possibilities for radically new initial attack systems. Advances in computer technology make automated fire danger rating and dispatching systems potentially feasible. Cost effectiveness studies show that past investments in forest fire research have paid off at better than 13 to 1 in reduced costs and losses.

Examples of Recent Accomplishments

Fewer lightning strokes come from seeded clouds.—Research aimed at modifying lightning storms showed that storms heavily seeded with silver iodide produced one-third fewer cloud-to-ground lightning strokes than did untreated storms. Success in lightning prevention depends on seeding particular cloud forms with specific amounts of silver iodide at just the right time. Further research to develop operational cloud seeding techniques may prevent 2,000 to 3,000 lightning fires annually.

Fire prevention studies have paid off.—A fire prevention study in northern California identified a small segment of the population that caused a disproportionately large number of fires. They were younger rural residents, both male and female, with part-time jobs. They had very little knowledge about the fire problem and no strong feelings one way or the other about fire prevention. On the basis of these findings the State of California is increasing its expenditures on fire prevention contacts with this high risk group and greatly reducing its expenditures on the other 90% of the population. The result will be a savings of $2 million annually and a potential increase in prevention effectiveness.

Airborne infrared fire detections are technically feasible.—Forest fire research scientists have recently designed an improved high resolution infrared scanner capable of detecting small heat sources from high flying aircraft. This instrument has now been test flown over all of the major forest types in the United States, including Alaska. This was done to determine the possible extent to which different kinds and densities of forest canopies might limit the scanner capabilities for detecting small fires on the ground. Performance was found to be adequate in all instances during both day and night operations. These basic findings now open the way for the more extensive job of developing operational fire detection systems based on optimum combinations of ground-based visual detectors and airborne infrared scanners. The objectives are to—

(1) Extend the needed area of detection coverage beyond that possible with ground detectors.

(2) Replace visual detection in critical areas when visibility is reduced by smoke or haze. Accuracy of fire location as well as speed of detection is an essential criterion.

Choosing the right fire retardant can reduce costs.—The number of available forest firefighting chemicals has multiplied rapidly, and fire control managers and dispatchers are often confused about what type to use. Studies at the fire laboratories have determined the relative effectiveness of fire retardants according to temperature-humidity-wind conditions, the amount of chemical applied to the fuel bed, and the length of time the retardant must remain effective. Using these guidelines, fire dispatchers can specify the type of chemical required for use on a particular fire by either fixed wing aircraft or helicopters. About 16 million gallons of fire retardant chemicals are used every year by forest fire control agencies. Retardant chemicals vary in price from less than 1¢ per gallon to more than 16¢ per gallon, and significant cost savings can be achieved by fitting the proper chemical to each fire need.

Forest insect research

1966	$3,856,000
1967	3,998,000
1968	4,103,000
Increase	+105,000

An increase of $105,000 is needed for strengthening research on bark beetles and defoliators. Bark beetles are the most destructive group of forest insects in the United States and a part of the increase would be used for on-going studies in the South and West to find out how to reduce heavy annual losses which they cause. This would permit greater emphasis on biological and ecological studies. Followup on new leads in biological control, development of trees resistant to bark beetles, sex lures, male sterilization, and more effective chemical control techniques would also be possible.

Some of the increase would be used for high priority research on defoliating insects in the West, Lake States, and Northeast. The spruce budworm, a typical serious defoliator of forest trees, would receive the most attention. Better chemical control of the budworm is the subject of an intensive research program currently underway; however, alternative approaches such as biological control, control through forest management, and new techniques such as male sterilization also need added investigation.

Forest Service insect research is aimed at the prevention and control of insect-caused losses. Control through indirect means offers the best long-run approach. Major emphasis in the research program is being given to the use of insect parasites, predators, and diseases; silvicultural practices designed to prevent insect outbreaks; attractants; and male sterilization techniques. Investigations on direct control methods seek safer and less persistent insecticides, tailored to kill the pest insects and to have a minimum impact on other elements of the environment.

Examples of Recent Accomplishments

Bark beetle sex attractant synthesized.—The sex attractant for the bark beetle, *Ips confusus*, isolated and identified last year, has recently been synthesized in the laboratory. Researchers at the University of California and Stanford Research Institute, working together under Forest Service grants, produced the material and proved its attractiveness. The synthetic attractant is as effective in luring the beetles as is the natural material produced by the male beetles. This is a major step toward attracting destructive bark beetles into places where they may be sterilized, poisoned or otherwise destroyed.

Parasites established to help control Dutch elm disease.—Dutch elm disease, the most serious pest of American elms, is transmitted from infested to healthy trees by bark beetles. The only practical way to control the disease is to control the beetles. Insecticides while effective are expensive, and some have undesirable side effects. A species of parasitic wasp was recently introduced from Europe as a biological control for the beetles that spread the disease. The parasite appears to be well established and, if successful, will effectively augment present chemical controls or actually replace them.

Larch casebearer parasites established in Northwest.—The larch casebearer, an insect accidentally introduced into the eastern United States from Europe, has spread as far west as northeastern Washington. It is a serious pest of larch trees, and its control with chemicals is not practicable. A parasite of the casebearer, introduced from Europe, now appears to be well established. Entomologists believe that it will aid in checking the casebearer's westward spread.

Habits of wood-boring insects revealed.—In the West large volumes of fire-killed and windthrown timber are salvaged. Often logs from such timber are attacked by insects before they are removed from the woods. The offspring of the attacking insects develop in the wood after the trees are manufactured into lumber, and they emerge after the lumber has been used in construction. The insects bore through wallboard, expensive interior paneling, wallpaper or roofing. The result: costly repair bills for the building owner. Work underway in California revealed details of the life histories and habits of many of these wood borers. This information points to control techniques that will limit the activities of these insects and minimize the damage they cause.

Mass produced European pine shoot moth.—Cooperative studies between the Forest Service and Washington State University developed techniques for rearing and sterilizing large numbers of male European pine shoot moths. A novel "dummy tree" was designed to help get moths to mate and produce eggs under laboratory conditions. These eggs are required for a mass rearing program essential to developing a new control technique.

Breeding strains of more potent insect pathogens.—Use of disease organisms is one of the promising new approaches to control of destructive insects. However, microbial control of most pests has not progressed as rapidly as had been hoped for. The causes for some of these difficulties have been identified in the case of certain forest insects. Researchers have discovered that foliage of some kinds of trees contains toxic substances for certain pathogens. For example, a substance in Douglas-fir foliage inhibits the effectiveness of *Bacillus thuringiensis*, a potentially highly effective microbial insecticide. Research shows that we can increase the virulence of the bacillus by developing strains that will resist these anti-bacterial substances. Advances like this may lead to insect control without the use of chemicals.

Forest disease research

1966	$2,081,000
1967	2,171,000
1968	2,358,000
Increase	+187,000

An increase of $187,000 is needed to—

(1) Strengthen research underway to develop more effective preventive and control measures for diseases killing and injuring trees in shelterbelts, outdoor recreation areas, and forest stands.

(2) Speed up research to develop biological control organisms and genetic host resistance for major diseases of forest trees.

The increase would be used to—

(1) Strengthen research on the control of diseases of shelterbelt trees in the Great Plains.

(2) Develop controls for diseases affecting the utility of outdoor recreation areas and roadside trees in the Southwest, Northwest, Rocky Mountains, North Central and Northeastern States.

(3) Accelerate research on the control of pine and aspen cankers reducing the productivity of pulpwood stands in the North Central States.

(4) Support research underway on the diebacks and declines of hardwood trees in the Northeast.

The disease research program will be strengthened in California, Oregon, Idaho, New Mexico, Colorado, Nebraska, Minnesota, Michigan, Ohio, and Connecticut.

Diseases kill and deform trees, discolor foliage, retard growth rate, reduce quality of product, delay regeneration, cause heart rots, and destroy wood in processing and use. They reduce the utility of trees for timber production, for game habitat and food, and for outdoor beauty and social amenities. Annual disease losses to wood production alone are estimated at 20 billion board feet, worth $200 million on the stump and several billion dollars after manufacture. It is the equivalent of enough lumber to build 2 million 5-room houses. Disease losses to other values equal or exceed timber losses.

The objective of disease research is to provide the information needed to maintain and enhance forest land productivity. Research needs increase with intensive management and with environmental changes such as air pollution, droughts, warming climatic trends, and greater public use. Past research has sharply curtailed losses in nursery seedling diseases, heart rots, stem rusts, and dwarf-mistletoes. It has developed measures to prevent stain in green lumber and to lessen decay in wooden structures. These successes indicate that a greater effort can solve today's magnified disease problems.

Examples of Recent Accomplishments

Beneficial fungi on tree roots produce antibiotics.—In the Southeast, a beneficial root fungus produced a compound new to science. It is a potent antibiotic and protects tree roots from infection by soil organisms. At 50 to 70 parts per billion concentration it inhibits a virulent root pathogen, *Phytophthora cinnamomi*, the cause of the littleleaf disease of shortleaf pine. Another beneficial tree-root fungus produced a different antibiotic found to be more potent against human pathogenic bacteria than commercially available antibiotics. High priority is being given to studies of the usefulness of these antibiotics in controlling diseases of plants, animals, and man.

Toxic substance may be secret of rapid kill by oak wilt fungus.—Oak wilt kills mature oaks in a few weeks after infection, possibly through the action of a powerful toxin it produces in minute amounts. This compound has been partially purified and is now under study to determine its nature and mode of action. This research may indicate a new approach to oak wilt control through toxin inactivation.

Cut pines in hot weather to reduce root rot infections.—Infection of freshly-cut slash pine stumps in south Georgia by the annosus root rot fungus is least from March through September. During this period stump top temperatures reach or exceed 104° F. on several consecutive days. To the extent possible, thinning and harvest cuts should be made during these months.

Site factors indicate hazard from annosus root rot.—Southern pine plantations with severe annosus root rot infections have less organic matter, more sand or clay, a higher soil pH, and less grass than stands with no detectable infection. Analysis of these factors may permit classification of plantation sites by hazard classes and selection of low-risk areas for planting—an excellent disease prevention measure. In addition, infection hazard may be reduced on high-hazard areas by prescribed burning before thinning to reduce organic litter on the soil.

Effective controls developed for two Great Plains tree diseases.—Phomopsis blight of eastern redcedar and Dothistroma blight of Austrian and ponderosa pines are two of the most destructive tree diseases in the Great Plains. Phomopsis blight commonly infects seedlings in nursery beds but rarely occurs on older trees in windbreaks and shelterbelts. Nursery infections can be prevented by weekly applications of a fungicide from May to September, thereby providing disease-free seedlings for outplanting. Dothistroma blight causes defoliation and death of older pines in established windbreak, shelterbelt, and Christmas tree plantings. Two applications per year of a fungicide prevent infection and subsequent losses.

Soil fumigation controls diseases in California forest nurseries.—Sugar pine seedling losses in California nurseries averaged 50% in recent years. Soil fumigation prior to sowing has cut these losses to less than 10%, and at the same time it has increased seed germination and seedling vigor. Also fumigation has reduced nursery weeding costs, improved survival of seedlings after outplanting, and lessened the chances of introducing new diseases into outplanting sites.

Dwarfmistletoe infection directly related to tree size and age.—Understory red firs in dwarfmistletoe-infested stands in California are essentially free of infection up to a height of 3′ and an age of 20 years. By the time they are 10′ tall and up to 50 years of age, over 50% are infected and worthless as potential crop trees. Thinning or harvest cuts in dwarfmistletoe-infested stands should be scheduled before advance regeneration is more than 3′ tall. In all such operations infected overstory trees should be removed to prevent subsequent infestation of the young stand.

Forest products utilization research

1966	$6,077,000
1967	6,493,000
1968	6,863,000
Increase	+370,000

An increase of $370,000 is needed primarily at Madison, Wisconsin, to hasten solution of critical utilization problems. Included is expansion and acceleration of wood fiber products and related chemical research. Emphasis will be given to new pulping processes aimed at higher yields and broader utilization of low-quality timber. The increase also will accelerate research on the efficiency of existing methods for nondestructive evaluation of wood and wood-base materials. It will expand research to seek new and more effective inter-property relations and to develop basic data needed for more efficient industrial and structural utilization of wood, including broadened and accelerated studies of wood conversion systems and the development of models for evaluating alternative processes.

Forest products utilization research is aimed at providing a sound basis for—

(1) Maximum possible contribution of the forest products industries to the Nation's economy.

(2) Maintenance of industrial stability and healthy development within the industry.

(3) Improved resource conservation through wise use.

The timber-using industries of the United States employ about 3.3 million people and annually contribute about $25 billion to the gross national product. With an adequate forest products utilization research effort, it is estimated that an annual growth rate of about 7.5% is attainable in the forest products industries. Thus, with the aid of research the industry's contribution to the gross national product can be increased by as much as $2 billion next year. Despite its large size and impressive economic contributions, a major characteristic of the forest products industry is its fragmentation into many thousands of small manufacturing units, many in rural and depressed areas. The vast majority of these are not able to conduct private research that can improve their competitive position with more advanced industries.

Past Forest Service research on wood and related products area has played a major part in strengthening the industry's position. For example, about $50,000 worth of research specific to the use of southern yellow pine for manufacture of plywood had a major bearing on the current explosion in southern pine plywood industry. In 1964 the first three plants built represented an annual product value of $6 million. In 1966 the plants totaled 30, with product value of $90 million, and they had created 5,200 jobs. Similarly, about $600,000 expended on research involved in the development of the neutral sulfite semichemical pulping process made possible greatly broadened use of hardwood timber for pulp and paper. The market value of the 3 million tons of pulp now produced annually by this process is estimated at over $1 billion.

Examples of Recent Accomplishments

Determining multiproduct potential in standing timber.—There is a need to estimate potential value of timber for products other than lumber; e.g., poles, pulpwood, or veneer. A promising inventory technique has been developed for determining suitability and potential yields for multiproducts. Subjective estimates by field men are eliminated. Data on basic tree characteristics can be reanalyzed to meet any one of several inventory needs. Resource management agencies will save money and manpower by—

(1) Making maximum use of a single set of data.

(2) Eliminating need for reinventories.

Wood-stringer bridges.—Laboratory and field studies of forest-road bridges led to a recommendation for change in design criteria to the American Association of State Highway Officials. For maximum efficiency and economy interior stringer sizes may be reduced without changing existing design criteria for outside stringers. A saving of 25% in the volume of bridge timbers is possible where shear is the limiting factor.

Pulpwood chip storage.—Production of pulp chips from sawmill and veneer mill residues has increased rapidly in recent years. In 1963 it amounted to about

11 million cords, or 24% of all pulpwood consumed at United States mills in that year. Economic advantages in the transport, storage, and handling of chips in comparison to roundwood are attractive if pulp yields and quality are not sacrificed during chip storage. In kraft pulping, pile storage of pine chips presents no problem except for some loss in yield of tall oil and turpentine. However, hardwood chips show different reactions. In maple, birch, and beech chip piles the common wood rotting fungi find satisfactory growth conditions in the cooler portions of the pile. They cause loss in wood substance, loss of wood extractives, and discoloration of the chips. Hence, a definite decrease was found in sulfite pulp yield and in pulp brightness. Now, with the problem identified further research to control the fungi or to minimize their harmful effects will be feasible.

Ceiling tile with unique acoustical properties.—Wood chips can now be made into attractive ceiling tile with unique acoustical properties. The random alignment of the ⅝″ chips creates a rough surface. Sound is absorbed regardless of the frequency of the sound waves. In this respect the material differs from many conventional sound-insulating materials which absorb the higher frequencies most effectively. The board-type ceiling tile is easily made in a typical press. Designed to span supports 2′ apart, the 2- by 4-foot panels are ¾″ thick. One surface is sanded and painted with a flat, interior paint. Panels retain their rigidity in damp and humid areas.

Flashover of combustible gases.—New insight into how fire progresses in buildings may have a strong bearing on the acceptability of wood and other combustible materials. Heretofore, the sudden leaping of flames, called "flashover", was thought to be spontaneous ignition of combustibles with rising temperatures. Current evidence is that fire progresses by flashovers as hot combustible gases reach new sources of oxygen, regardless of the combustibility of wall and floor covering materials.

Yield of clear-cuttings from hardwood lumber grades.—A new computerized system eliminates the guesswork in maple lumber procurement by the wood fabricating industry. For each order, some combination of grades leads to the most efficient and profitable utilization of lumber. The computer calculates the lumber grades to purchase for a given set of cuttings, and instructs whether to rip or crosscut first.

Lignin formation.—Laboratory experiments were successful in duplicating nature's process by which the living tree uses simple chemical compounds derived from the soil and air to produce lignin, the complex compound that binds wood cells together. These experiments contributed greatly to further understanding the nature and behavior of lignin as it exists in the living tree. They added another stepping stone to improve pulping techniques, better solutions to the waste problem, and new uses of this abundant product of nature.

Heat conduction values of wood-base panel products.—As new wood-base building materials are developed, a key property important to their acceptance is thermal conductivity, or insulating value. Research to establish basic values for typical panel products has been completed, and the results will be included in industry's engineering guides, now being revised.

Paneling and flooring from low-grade hardwood logs.—Wood cut from small, low-grade red oak logs can now be press-dried in a few hours by a process that greatly enhances color and appearance. This new drying system uses the concept of going directly from logs to products instead of first sawing lumber that must later be remanufactured. Low-quality wood with knots and other defects can be used for paneling and flooring. No installation allowance for shrinkage is necessary, and side- and end-matched panels and flooring can be installed with only a few carpenter's tools. This product can be made in the Northeast, North Central, and Appalachian regions where vast quantities of little-used hardwood timber are available. The processing technique eliminates costly steps in production, reduces waste, utilizes local machines and labor, and provides an attractive product from low-quality logs. An increase in product value at the mill of from $5 to $15 per MBF of logs over present conventional products can be expected.

Forest engineering research

1966	$416,000
1967	583,000
1968	798,000
Increase	+215,000

An increase of $215,000 is needed to expand and accelerate research on—

(1) Aerial logging systems using balloon and skylines for timber areas having difficult access or operational conflicts with recreation, water, and other multiple use values.

(2) Fully mechanized production line pulpwood harvesting systems to meet vastly increased productivity requirements.

(3) Harvesting equipment, machines, and tools to meet the specialized needs of small timberland operators.

Forestry operations have not kept pace with other basic industries in improving labor output, in mechanization and automation for improved efficiency, and in reducing the physical drudgery involved. The production process is faced with increasing restrictions due to competing forest interests such as recreation, water, wildlife, and livestock which tend to increase already high costs. Because forest industries are decentralized, only small studies have been made leading to piecemeal improvements. Relatively little systematic research has been conducted of the kind required to reach essential major goals—giant steps in cost reduction and improvement of forestry operations, working conditions, and safety. Radical breakthroughs in mechanization of harvesting systems are urgently needed to raise productivity and to maintain and increase raw material supplies at competitive prices.

The engineering research program is prepared to make rapid advances toward solution of harvesting and production problems. Foreseeable benefits include:

(1) At least a 20% reduction in costs of harvesting the Nation's timber crop at an annual saving of $320 million.

(2) Capture of 500 million board feet of annual allowable cut now lost on timberlands not loggable in the Douglas-fir region of the West.

(3) Capture of an additional 440 million board feet of annual allowable cut in Alaska on National Forest areas that cannot be logged by conventional methods.

(4) A $16.5 million saving annually from reduction in mileage of timber-haul roads by use of aerial logging systems in National Forests of the Douglas-fir subregion of the West.

(5) A 10% reduction in costs of regenerating intensively managed forests in the South.

(6) A 10% reduction in the costs of harvesting gum naval stores.

(7) A significant reduction in the logging accident frequency rate—one of the highest in industry.

Examples of Recent Accomplishments

Cutting characteristics of chain saw teeth.—Detailed study of a chain saw tooth cutting through green timber has resulted in a research breakthrough. The forces and energy consumed during cutting were measured. Improved design of chain saw teeth and other cutting devices are now possible. Potential annual savings to the logging industry through a 10% improvement in chain saw parts replacement and cost of maintenance is estimated at $1,850,000.

Design system for aerial cableways.—Analyses of aerial logging cableway operations indicated a need for an easily applied method of designing and operating single and multispan skylines. Such a method has been devised and results presented in a "Skyline Logging Handbook on Wire Rope Tensions and Deflections." Availability of the Handbook should result in more efficient and safer skylines. More use of aerial systems so urgently needed to gain difficult access and to protect watershed and aesthetic values is anticipated. It represents an important step in realizing the multimillion dollar annual benefits to be realized from reduced road mileages and added timber suppies.

Forest survey

1966	$1, 939, 000
1967	2, 100, 000
1968	2, 203, 000
Increase	+103, 000

An increase of $103,000 is needed to—

(1) Accelerate timber inventories.

(2) Provide more local information on industrial development opportunities.

(3) Strengthen appraisals of timber supply and demand.

The proposed increase would permit reinventories of each State on an average cycle of ten years. Periodic local and national appraisals provide a basis for judging the costs, benefits, and justifications of both public and private forestry programs. The survey would be strengthened in all regions, particularly in the South and the North. Forestry conditions are changing rapidly in these regions. Rapid industrial expansion is underway, and there are major questions as to size of present and future programs.

The forest survey provides continuing appraisals of the timber supply and demand situation and outlook in each State and the Nation. Periodic inventories furnish basic statistics on—

(1) Area and condition of forest lands.
(2) Volume and quality of standing timber.
(3) Rates of timber growth and mortality.
(4) Cut of timber for industrial use.
(5) Trends in ownership.

Knowledge of present and future timber supplies is of critical importance in judging the adequacy of existing forest policies and programs. Specifically, survey information is needed to evaluate and justify public appropriations and private investments to meet expanding demands for timber products. Federal and State forestry agencies rely on the survey to guide program planning and budgeting. Forest industries rely on the survey for resource information essential for business decisions relating to wood procurement, land management, and industrial expansion.

Examples of Recent Accomplishments

Continuing progress on State surveys.—During the past year field inventories of timber resources and industrial use of timber were completed on approximately 49 million acres of forest land in ten States—Alaska, Oregon, California, Montana, Michigan, Kentucky, Pennsylvania, Virginia, Mississippi, and Texas. Reports appraising the timber situation were issued for eight States or portions of States.

New comprehensive appraisal of the timber situation completed for the Pacific Northwest.—Forest lands of Washington, Oregon, Idaho, and western Montana contain 1,123 billion board feet of sawtimber—about 44% of the United States supply. Timber industries produce about 51% of the Nation's lumber, 87% of the softwood plywood, and 25% of the wood pulp. Projections of prospective timber supplies indicate that timber consumption will increase 22% by 1985. However, despite greater log production total timber-based employment is expected to decline because of continuing improvements in productivity. The prospective decline in employment is especially marked in the sawmill industry. Some increases are anticipated in other timber-based industries.

Softwood timber resources increasing in Louisiana.—During the past decade growth of softwood sawtimber in Louisiana was about double the cut. The resulting buildup in softwood sawtimber volumes provided the base for a substantial expansion of timber industries. The supply of hardwoods, in contrast, is relatively unfavorable. Heavy cutting and land clearing have reduced the total volume of hardwood sawtimber by 23% during the past decade.

First comprehensive survey of Utah completed.—The first survey of Utah's forests reveals a volume of 19.5 billion board feet of sawtimber, including a considerable amount of overmature timber. Current harvesting of this timber resource is considerably below the allowable cut. Management of the forest in this area for timber must take into account the fragility of soils, low values for timber, and the major importance of water, recreation, and forage uses.

Forest products marketing research

1966	$1,491,000
1967	1,625,000
1968	1,625,000

No program increase is proposed.

Marketing research includes studies of problems relating to consumption of wood products in construction, manufacturing, and shipping. Of particular importance is the evaluation of factors that influence use of wood products and competing materials in various markets. Methods to expand use of wood products also have major importance. These studies provide guidelines for adjustments of production and marketing practices within forest industries. They also provide a basis for appraising the Nation's timber supply and demand situation and outlook. Such evaluations of timber market prospects are essential for program planning and budgeting. Improvements in markets for wood products will increase returns to millions of forest landowners, operators of wood-using plants, and their employees. These increases in turn will benefit economies of rural areas that have timber resources.

Examples of Recent Accomplishments

Operations research shows way to higher sawmill profits.—Linear programing studies at a modern southern pine sawmill showed managers how to saw each class of logs for maximum net returns. Decisions must be based on—

(1) Amount, quality, and cost of logs.
(2) Possible sawing patterns and their yields.
(3) Time available on each piece of mill equipment.
(4) Structure of market prices.

Sawing each class of logs by its optimum sawing pattern yielded $1,647 per hour in total revenue above the cost of raw material. This revenue was derived from lumber, timbers, and chips. The analysis further showed how changes in operating procedures changed optimum sawing patterns for various classes of logs.

Reduction of logging costs possible through better management.—An analysis of costs and returns on logging operations in southeast Kentucky showed a cost distribution of 29% for stumpage, 31% for labor, and 40% for equipment. Total costs per thousand board feet amounted to $35.82. Profits amounted to 10.5% of receipts. Better planning and supervision of the logging could have resulted in a 25% increase in production and a doubling of the margin for profit and risk.

Standard hardwood log grades benefit buyers and sellers.—Local log grading systems at five Appalachian hardwood sawmills misclassified the quality of 42% of the volume in 1,164 sample logs. As a result operators underpaid suppliers for some of the logs purchased and overpaid others. Average net returns at the five sample mills could have been increased nearly $4 per thousand board feet by using the more accurate standard Forest Service log grades. Data taken at 13 sample mills indicate that the Forest Service log-grading system can be readily applied by the log scaler at an average cost of less than 30¢ per thousand board feet of logs.

Tomorrow's crosstie—wood or concrete.—Consumption of crossties dropped from over 48 million ties annually during the 1940's to 14.5 million ties in 1961, but consumption has risen sharply to a current level of about 20 million ties. Current demands cannot be met at conventional prices because many sawmills that formerly produced crossties have ceased operation or have shifted to other products. The shortage of wood crossties has encouraged testing of concrete ties in a number of tracks. Concrete ties probably will penerate this market. Therefore, we are determining possibilities for more efficient and profitable production of crossties. The practicability of using new designs of solid wood or laminated ties is also being investigated.

Log exports and the Pacific Northwest economy.—The average value of logs loaded aboard ship and ready for export to Japan was $99.70. The average value of the products that could have been obtained through domestic processing of the same logs was estimated at $95.24. Domestic processing of these logs into kiln-dried lumber would have generated approximately nine man-hours of employment per thousand board feet. This compares with about three man-hours of domestic employment in log exporting. More than 90% of recent log exports consisted of No. 2 and 3 sawlogs, and less than 4% were peeler and select grade logs. Over 80% of the logs exported were under 22″ in diameter, and more than 75% were low-value hemlock and white fir.

Promising opportunities for pulp and paper production in Illinois.—A substantial potential exists for new pulp and paper plants in southern Illinois. Available timber supplies could sustain additions to pulping capacity of up to 2,500 tons per day. Water supplies are adequate for most pulping processes; transportation facilities are favorable; and labor, power, and other factors are available at reasonable cost.

United States hardwood imports grow.—During the past 15 years imports of hardwood plywood increased forty-fold to 60% of total United States consumption. Imports of hardwood lumber from tropical countries and Canada also increased to about 5% of the United States market. Analysis of domestic markets and timber supplies indicates that the major reason for increasing imports has been a growing shortage of high-quality hardwoods. A rapid expansion in production of fine hardwoods in tropical areas of the world has been another contributing factor. These trends appear likely to continue, and increase in imports of hardwood plywood and lumber are to be expected in coming decades.

Forest economics

1966	$658,000
1967	791,000
1968	1,088,000
Increase	+297,000

An increase of $297,000 is needed to—

(1) Evaluate the costs and benefits of a variety of forestry investments.

(2) Evaluate effectiveness of forestry programs for owners of small forest properties.

(3) Develop principles and guides for planning multiple use management of forest resources.

Particular attention would be given to cost/benefit analyses of tree planting, thinning, pest control, timber salvage, and road development under different geographic conditions. Related studies would determine how forestry programs for the 4.5 million owners of private forest land could improve productivity. Special emphasis would be placed on computer oriented planning systems to increase efficiency of land management for all products and services.

Forest economics research provides guides for the investment of both public and private funds in all forestry activities. Outlays for forestry purposes have increased to several hundred million dollars annually. Efficient budgeting of these funds requires information on costs and benefits from alternative forestry programs on public and private lands. Timber growing opportunities vary widely through the Nation by site, forest type, ownership, market conditions, and land-use alternatives. Forest owners differ greatly in their response to forest investment opportunities and to assistance programs. Increasing pressures on forest resources and increasing competition among forest uses have intensified the need for economic evaluations to guide prudent allocation of funds to alternative forestry activities.

Examples of Recent Accomplishments

Economic guides for managing red pine stands.—Under most conditions investment returns are highest if red pine stands in the Lake States are thinned regularly to 90 square feet of basal area per acre. Financial rotations also are affected by stand conditions, investment alternatives, costs, and prices. Application of these findings on the several million acres of red pine in the East would add substantially to long-run sawtimber supplies. Possible increases in timber output from improved thinning practices would also reduce costs of growing red pine by $1 to $2 per thousand board feet. Related studies describe how to estimate present values of incomes and costs in growing red pine trees for sale as pulpwood or sawtimber. They also illustrate how to—

(1) Compare investment opportunities in growing red pine.

(2) Determine the amount one can afford to buy land, establish and maintain a stand, or pay annual taxes or other expenses.

(3) Estimate the cost of producing stumpage under specified conditions.

Economic guides for dwarfmistletoe control in the Pacific Northwest.—New economic guides for dwarfmistletoe control in ponderosa pine stands provide procedures for estimating costs and rates of return from control measures. These guides were based on time and cost studies of actual control operations. They provide practicing foresters with information needed to allocate available funds among management opportunities.

Gauging the potential output of forest resources in Appalachia.—An economic model has been developed for comparing returns from alternative investments in wood-growing on several classes of forest land. This model was applied to a part of Tennessee. Most of the forest land in this area was capable of returning 3% or more on the capital invested in forest restoration. Investments in forest restoration would increase timber production and provide employment and additional secondary benefits.

Computer-oriented systems help in allocating wildland resources.—A parametric linear programing system was developed to evaluate alternate policy decisions and land-improvement programs in the Southwest. A sequence of "Management Plans" affords the decision maker the opportunity to assess effects of decisions on a predetermined economic objective. This linear program and a map information assembly and display system program previously developed can be integrated to deal with large-scale, long-term wildland management problems.

Research construction

1966	$4,183,000
1967	3,285,000
1968	2,278,000
Decrease	−1,007,000

A decrease of $1,007,000 is proposed. The $2,278,000 estimated for 1968 would be used for construction of facilities where plans are available and for planning other needed facilities. New construction is urgently needed to provide facilities for scientists now employed at a number of locations.

A. Locations where plans are available and funds for construction are requested	$2,000,000
(1) Madison, Wis	1,300,000
(2) Albuquerque, N. Mex	700,000

(1) Madison, Wis., $1,300,000

Plans and specifications are available for a new Wood Chemistry Building to expand facilities at the Forest Products Laboratory. Due to high costs, this building could not be constructed with funds appropriated by the Congress in fiscal year 1965. This building is urgently needed to provide modern specialized facilities for wood chemistry and wood fiber products research. These activities must be moved from the old laboratory during its remodeling and renovation now being planned with funds appropriated in fiscal year 1967. The Senate Appropriation Committee urged "the Forest Service to consider carefully the inclusion of funds for construction of this building in the fiscal year 1968 budget." As noted by the Senate: "This facility is essential to progress in the control of air and water pollution from pulp and paper manufacture."

(2) Albuquerque, N. Mex., $700,000

In fiscal year 1965 Congress provided funds for design and plans which will be available, so construction can proceed in fiscal year 1968. The Forestry Sciences Laboratory will provide modern equipment for research on the management and rehabilitation of eroded forests and range watersheds and on the ecology, biology and control of forest insects and diseases in the Southwest. The University of New Mexico has provided a site on the campus.

B. Locations where funds for architectural and engineering planning are requested	$278,000
(1) Moscow, Idaho	45,000
(2) Research Triangle, North Carolina	95,000
(3) Franklin, North Carolina	57,000
(4) Rhinelander, Wisconsin	31,000
(5) Gulfport, Mississippi	50,000

(1) Moscow, Idaho, $45,000

To plan second-stage construction of the Forestry Sciences Laboratory. The existing laboratory at Moscow was the first of a three-stage facility. A second-stage, estimated to cost $600,000, is now urgently needed to provide facilities for research in the biology, ecology, and control of forest insects in the Northern Rocky Mountains, for research in the silviculture of western white pine, and associated species, and for development of blister-rust resistant strains of pines. Some of the existing research now located in inadequate quarters at scattered locations will be moved to the new facilities. The addition will also provide for urgently needed program expansion in connection with the pesticide problems. Greenhouse-headhouse facilities, for which plans are available, would be part of the construction at an additional estimated cost of $200,000. Sufficient land is leased from the University of Idaho for all structures.

(2) *Research Triangle, N.C., $95,000*

To plan a second-stage of construction for the Forestry Sciences Laboratory. The scientific effort here in the Research Triangle Park, adjacent to Raleigh, Durham, and Chapel Hill, concentrates on basic research leading to the control of important pests of southern pines. Some of these are bark beetles, defoliating insects, root rots, and forest weed species. Expanded pesticide research at this location requires additional laboratory space. The tract of land donated to the Government by the Research Triangle can accommodate this construction. The estimated cost is $1,200,000.

(3) *Franklin, N.C., $57,000*

To plan a Forest Hydrology Laboratory to facilitate the Coweeta watershed research program. Research at this laboratory has as its mission the improvement of quantity, quality, and timing of water yields in the southern Appalachians. Scientists investigate forest climatology, water relations of plants and soils, streamflow and ground water. Modern facilities are required for the expanding basic and applied research programs. The laboratory and auxiliary facilities are estimated to cost $650,000.

(4) *Rhinelander, Wis., $31,000*

To plan an expansion of existing Laboratory and greenhouse facilities at the Institute of Forest Genetics. The second-stage structure will cost an estimated $400,000. It will relieve current over-crowding and will enable more research in the genetics of northern tree species in relation to pest resistance. The Forest Genetics Institute here is one of the three main genetics centers of the Forest Service.

(5) *Gulfport, Miss., $50,000*

To plan additional laboratory facilities for insect and disease research. The first stage of construction at Gulfport was built in fiscal year 1959. Since that time resident research programs in forest genetics, entomology, and pathology have more than doubled in size. The new laboratory would provide adequate space for scientists searching for controls for insects and diseases destructive to forest trees and wood products. The laboratory addition would release space urgently needed for genetics research in the present building. The estimated cost of second-stage construction is $650,000. Space is available for the addition next to the present laboratory on Government-owned land.

Nonrecurring construction

The 1967 appropriation provided for the following non-recurring items:

Construction:	
Athens, Ga.	$1, 000, 000
Oxford, Miss.	450, 000
Olympia, Wash.	450, 000
Carbondale, Ill.	690, 000
Design and specifications:	
Delaware, Ohio	72, 000
Corvallis, Oreg.	170, 000
La Grande, Oreg.	28, 000
Provo, Utah	37, 000
Madison, Wis.	180, 000
Nacogdoches, Tex.	25, 000
Berea, Ky.	40, 000
Lincoln, Nebr.	28, 000
Burlington, Vt.	40, 000
Durham, N.H.	75, 000
Total	3, 285, 000

Examples of Recent Accomplishments

Construction is completed at Olustee, Florida and Sewanee, Tennessee and is underway for all other buildings provided in the 1966 appropriation. The 1967 appropriation provided for construction of laboratories at Athens, Georgia; Olympia, Washington; Carbondale, Illinois; and Oxford, Mississippi. Construction contracts will be let before the close of the fiscal year.

Plans are complete for the Wood Chemistry addition to the Forest Products Laboratory at Madison, Wisconsin and for laboratories at Albuquerque, New Mexico; Fort Myers, Florida; and State College, Mississippi. Planning of laboratories included in the 1967 appropriation is on schedule. Except for the large laboratory at Corvallis, Oregon and the remodeling at Madison, Wisconsin, detailed design and cost estimates will be available by March 1, 1967, and construction could proceed as soon as funds are available.

STATE AND PRIVATE FORESTRY COOPERATION

Cooperation in forest fire control

1966	$12,803,000
1967	12,834,000
1968	12,834,000

No program increase is proposed.

An effective, well-equipped fire organization is needed to protect the important natural resources on State and privately owned forest lands. In fiscal year 1966, States spent $85.1 million which included $12.8 million of Federal funds. During the 1961–1965 period, States reported an average of 110,820 fires which burned 3,992,590 acres each year.

Emphasis on fire prevention will be continued and expanded. Fire statistics show that over 96% of all fires occurring on non-Federal lands are man-caused. State fire prevention efforts at the local level will be intensified. Included will be the employment of additional technical specialists to cope with this man-caused fire problem. Federal funds will provide the stimulus to insure effective programs.

Adequate forest fire control is especially important to the economically distressed areas as their economy is closely tied to timber, recreation, water, and wildlife resources. The greatly increased use of forested areas by loggers, homeowners, campers, hunters, hikers, and others has caused an upward trend in the number of fires.

Fire prevention and suppression strength is not now sufficient to fully utilize the newer, more expensive technical equipment and techniques. During the period 1957 to 1965 the estimated cost of protection rose from $83 million to $123 million. State expenditures during this same period increased from $4 million to $64 million while the Federal appropriation rose from $10 million to $12.7 million.

Similarly, timberland values have increased rapidly during the last 25 years. A conservative estimate of the value per acre of protected, commercial forest land has risen from $5 in 1940 to $50 in 1965. During this same period, the cost to protect these lands had experienced only a modest increase from 3.99¢ per acre to 16.12¢.

In view of the high values at stake it is essential that we be prepared to effectively meet the threats that occur during drought periods or resulting from a high incidence of fires during a short period of time. These newer, more expensive, fire control techniques are necessary to provide the insurance needed to handle catastrophic fire situations as values being protected continue to increase. Fires, if allowed to burn, not only cause an economic loss of natural resources and the enjoyment they give, but also threaten destruction of valuable watershed, road, recreation, public utility, home and other improvements valued at many hundreds of millions of dollars. In addition, the natural beauty is destroyed for generations to come.

Examples of Recent Accomplishments

All 50 States are now cooperating in the forest fire control program. Arizona became a cooperating partner on July 1, 1966.

State foresters reported extending fire protection to 25 million previously unprotected acres. At the end of calendar year 1965 there were 472 million acres protected under the Clarke-McNary Program.

The allotment and expenditure table which follows shows State fiscal year 1966 expenditures and Federal fiscal years 1966 and 1967 allotments to States. The Federal distribution to each State is based on a formula which recognizes the program need and expenditure level in each State.

Cooperative forest fire control, C–M 2

State	State and private funds expended, fiscal year 1966	Federal allotments, fiscal year 1966	Federal allotments,[1] fiscal year 1967
Alabama	$1,177,983	$383,890	$370,454
Alaska	189,508	47,000	88,523
Arizona	----------	----------	21,050
Arkansas	1,381,151	394,080	377,392
California	25,458,114	1,073,080	1,035,522
Colorado	228,286	50,000	78,565
Connecticut	430,463	88,120	100,080
Delaware	14,326	14,000	15,500
Florida	4,850,341	560,968	540,912
Georgia	4,086,221	558,940	539,377
Hawaii	43,090	35,000	35,000
Idaho	532,091	213,630	207,258
Illinois	239,427	73,390	72,887
Indiana	195,072	55,950	68,408
Iowa	85,948	47,000	47,000
Kansas	266,000	47,000	92,622
Kentucky	861,987	246,090	243,128
Louisiana	2,092,477	460,400	446,286
Maine	1,089,141	323,240	307,584
Maryland	637,730	145,130	143,472
Massachusetts	865,978	148,310	153,454
Michigan	2,098,828	490,460	473,295
Minnesota	672,009	300,210	289,703
Mississippi	1,952,589	466,330	450,008
Missouri	1,020,101	318,860	304,805
Montana	354,414	154,140	149,661
Nebraska	156,512	47,000	84,502
Nevada	172,057	81,130	123,488
New Hampshire	294,349	89,740	86,599
New Jersey	610,185	144,424	159,584
New Mexico	193,027	49,500	57,342
New York	1,556,414	298,880	317,437
North Carolina	2,142,335	452,650	436,807
North Dakota	15,549	22,250	15,957
Ohio	362,328	127,870	123,395
Oklahoma	251,642	162,900	157,198
Oregon	2,907,090	526,650	506,770
Pennsylvania	1,276,478	305,700	295,000
Rhode Island	130,356	47,000	47,000
South Carolina	1,633,615	420,680	405,956
South Dakota	49,196	47,000	52,929
Tennessee	1,728,966	373,250	360,186
Texas	976,249	334,170	322,474
Utah	137,035	52,740	74,730
Vermont	102,825	47,000	47,000
Virginia	1,461,904	368,920	356,008
Washington	2,815,549	539,840	520,946
West Virginia	450,631	164,664	155,703
Wisconsin	1,948,455	412,520	398,082
Wyoming	53,405	47,000	69,461
Administration, inspection, prevention, and special services to States	----------	944,304	1,007,500
Grand total	72,249,427	12,803,000	12,834,000

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[1] While the amount available to a State may, if the allotment is small, exceed previously computed expenditures by that State, the actual payment to a State never exceeds State and private funds expended by or under the control of the State.

Cooperation in forest tree planting

1966	$300,000
1967	300,000
1968	300,000

No program increase is proposed.

The Forest Service cooperates with 48 States and Puerto Rico through financial and technical assistance and other services in the production, acquisition, and distribution of tree planting stock for forest and windbarrier plantings on non-Federal land. To meet our timber goals, about 10 million acres of such land will require some form of Federal aid during the 10-year period beginning with fiscal year 1968. This program (authorized under Section 4 of Clarke-McNary Act of 1924) helps materially by providing planting stock for the Nation's needs for a wide variety of uses including:

Timber production
Wildlife habitat
Watershed protection
Recreation
Rural beautification
Special forest products

This program also assists the States in meeting increased costs for new equipment for extracting seeds, nursery operations, needed nursery maintenance and other related costs that continue to arise.

The War on Poverty needs trees for planting in impoverished rural counties to provide employment and develop timber resources in these areas. The 1968 objective is to assist the States in production of 600 million high quality seedlings for distribution to private landowners for reforestation of almost a million acres and shelterbelt planting on about 40,000 acres. This planting stock will, in many ways, aid in programs for:

Beautification
Cropland adjustment
Agricultural conservation
Watershed protection
Appalachian forestry
Rural areas development
Forestry-based recreation

These programs compliment private forestation programs that depend upon planting stock for reforestation and shelterbelt plantings.

The 1966 Federal-State cooperation in the production and distribution of forest and shelterbelt planting stock, for use on non-Federal land, continues at about the 1965 level. The 48 cooperating States operate 98 nurseries that produced over 500 million trees for forestation and shelterbelt planting last year.

Examples of Recent Accomplishments

Special technical and financial help was provided two States in designing and constructing modern forest tree seed extractories and storage facilities. These new plants provide cold storage facilities for seed and planting stock that are necessary for efficient nursery operations.

The usual technical and financial assistance was continued. Emphasis was on helping with such technical problems as:

Seeding
Soil management
Chemical weed control
Insect and disease control
Grading and packaging the planting stock
Handling stock while enroute to the planting site

Improvement in nursery techniques, along with better field planting practices, are resulting in better survival, more rapid growth, and reduced costs for establishing a stand of forest trees or shelterbelts.

Some States continue to provide private landowners with seed for direct seeding where research has developed such practical reforestation methods.

A special study of seed orchards and production areas was made during the past year. There are now 153 seed orchards with over 3,000 acres growing improved seed from hybrids and selected strains for reforestation purposes. Also 294 seed production areas with over 8,500 acres are managed for seed selected stands.

The number of trees shipped to landowners during each of the past five fiscal years in comparison with all forest and shelterbelt trees produced by public and private nurseries is as follows:

Year	Federal-State cooperative program	Other State distribution	Total output all nurseries
1962	670,000,000	28,000,000	1,100,000,000
1963	587,647,000	30,607,000	1,008,000,000
1964	535,429,000	43,174,000	948,312,000
1965	508,651,000	37,805,000	893,564,000
1966	521,000,000	50,530,000	864,705,000

Shipments for fiscal years 1967 and 1968 are expected to be about the same as those shown for 1966.

Cooperation in forest management and processing

1966	$3,535,000
1967	3,546,000
1968	3,546,000

No program increase is proposed.

This program is carried out in 49 participating States and Puerto Rico. It is aimed at rural areas and communities where forest resources provide an important part of the economic base on which the local people must rely for employment and income and on which industry must rely for needed present and future supplies of timber. The work is done in the woodlands owned by farmers and in other woodlands owned by miscellaneous, generally non-industry, private owners. Also, it is done at the small plants processing primary forest products. In addition to assistance on-the-ground, technical assistance is provided local community and area development groups.

Assistance is provided woodland owners in improving the management and utilization of their forest resources for timber, water, forage, recreation, fish, game, special products, and natural beauty. It includes such activities as—

(1) Making forest resource inventories.
(2) Planning for multiple use forest management.
(3) Tree planting and seeding.
(4) Improving timber stands.
(5) Protecting forests from fire, pests and animals.
(6) Harvesting and marketing forest products.

Assistance is also provided loggers and operators of small plants processing primary forest products. It includes harvesting equipment and methods, plant layout and operations, and marketing. Success in making full and effective use of existing forest resources depends largely on these activities. They are initial critical factors in obtaining the highest use and maximum value from forest products raw materials. They are especially important to areas supporting large volumes of low quality timber. They are of critical importance in supplying industry with sustained volumes of well manufactured lumber and other secondary products.

Assistance to community and rural area development groups includes such activities as—

(1) Helping them to assemble data and interpret it in terms of opportunities for development and utilization of their forest resources.
(2) Helping them to give appropriate attention to forest resources in preparing area development plans.
(3) Bringing them in contact with specialists when needed.
(4) Providing detailed information for feasibility studies.
(5) Providing technical assistance in connection with planned forestry measures and practices.

In addition, supporting forestry service and assistance is provided such programs and activities as—

(1) Agricultural conservation program
(2) Appalachian Regional Program
(3) Agricultural extension
(4) Cropland adjustment program
(5) Cropland conversion program
(6) Farmers Home Administration forestry loans
(7) National survey of recreational facilities
(8) Resource conservation and development projects
(9) Rural renewal projects
(10) Soil and water conservation needs inventory

To accomplish the work that needs to be done, on-the-ground technical assistance is provided by professional foresters employed by the States in cooperation with the Federal government.

The following table shows major benefits that have been, or will be, obtained from Federal appropriations when matched with State appropriations.

Major benefit	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968
Woodland owners given woodland management assistance ... number	113,000	117,000	117,000
Forest products operators given assistance ... do	10,500	10,900	10,900
Area of woodland involved ... acres	7,028,000	7,275,000	7,275,000
Volume of timber products sold or harvested ... MBF	817,000	846,000	846,000
Value of timber products sold or harvested ... dollars	19,884,000	20,582,000	20,582,000
Owners referred to consulting and industrial foresters for additional assistance ... number	2,900	3,000	3,000
Volume increase in Nation's production and supply of quality timber ... cu. ft	457,548,000	472,836,000	472,836,000
Area of natural resource conservation improvements ... acres	4,022,000	4,157,000	4,157,000
Area of revegetation and improved range management ... do	77,000	80,000	80,000
Area of improved watershed conservation ... do	193,000	199,000	199,000
Area of improved wildlife habitat ... do	18,000	19,000	19,000
Area of forestry practices contributing to natural beauty ... do	2,500	2,600	2,600
Direct contributions to increased forest recreation availability and user capacity ... number	19,300	19,900	19,900
Employment resulting in rural areas ... man-day	3,268,000	3,377,000	3,377,000
Appropriation level:			
Federal	$3,535,000	$3,546,000	$3,546,000
State	4,600,000	4,900,000	4,900,000
Total	8,135,000	8,446,000	8,446,000

General forestry assistance

1966	$920,000
1967	1,471,000
1968	1,571,000
Increase	+100,000

An increase of $100,000 is needed to provide professional services for increasing hardwood lumber output.

A program to improve the hardwood situation is essential. Forecasts indicate that housing starts will make an upturn in 1967. This should stimulate demand for flooring, paneling, kitchen cabinets and other house components made largely from hardwood. Furniture, pallet and crosstie markets are strong. The long-term trend indicates an increasing demand for hardwood lumber.

The three Hardwood Improvement Projects undertaken as a result of the fiscal year 1967 supplemental appropriation will be continued. Through the State forester's organizations services will be offered to forest landowners in the multiple use management, marking, sale and harvest of their hardwood timber. Assistance will be provided to loggers upon request, in improving the efficiency of their operations and bucking for grade. Assistance will be offered to sawmill owners in improving their manufacturing and seasoning processes and in cost reduction.

Dissemination of research findings in the field of forest products and feedback industry problems to forest products researchers will be facilitated.

Hardwood workshops will be arranged to provide the latest information on hardwood management; harvesting and processing for quality to foresters, landowners, loggers and sawmill owners.

Appalachian Regional Program.—The objective in the Appalachian Regional Program through use of these funds is to improve social, economic and resource conditions in the region through providing:

(1) Professional management services to woodland owners.

(2) Professional assistance to loggers and processors of forest products in harvesting, manufacturing and marketing.

(3) Assistance in the establishment of timber development organizations.

(4) Program guidance and training.

These services are provided by the Forest Service and cooperating States and will directly and indirectly benefit the forest products industries, other related businesses and individuals throughout the Appalachian area. The cooperating States are reimbursed for part or all of the agreed upon costs which they incur in carrying out the stepped-up program of technical forestry assistance.

Regular Program.—The objective of the regular General Forestry Assistance Program is to develop, maintain and improve the continuous and efficient production and use of the Nation's forests through:

(1) Providing professional services in forest inventory, forest management, harvesting, processing and marketing to States, counties, other Federal agencies, forestry associations, economic development groups, forest products industries and operators and private owners of large forest properties who do not have professional people available to interpret and apply research findings.

(2) Providing training, assistance and advice for State forestry personnel, industrial foresters and consultants.

(3) Providing leadership and coordination to Forest Service efforts in national programs of social, economic and resource development.

Services provided through these funds lead to improvement of economic conditions and employment in rural communities.

The following table shows comparison of actual and estimated benefits from this program:

	Unit	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968
Volume increase in Nation's supply of quality timber.	Million cubic feet	871	871	1,000
Area of natural resource conservation improvements.	Thousand acres	6,560	6,560	7,580
Employment resulting in rural areas	Thousand man-days	5,660	5,660	6,340
Assistance to marketing firms (cooperatives).	Number	20	20	20
	Thousand dollars	2,100	2,100	2,100
Forest products utilization assists	Number	525	550	600
New industry and business established or expanded.	do	92	92	100
	Dollar value added to employment.	6,760,000	6,900,000	8,000,000
	Million board feet	550,000	600,000	690,000

Examples of Recent Accomplishments

General forestry assistance work was increased in all States in fiscal year 1966. Assistance was provided to Rural Areas Development and other local and regional economic development groups in planning and carrying out programs to more fully utilize their forest resources for improving employment opportunities and income. Forest management and utilization work in Puerto Rico and the Virgin Islands was continued to help the people there make the fullest use of their forest resources.

The following tabulation shows accomplishments in fiscal year 1966:

	Unit	Estimated accomplishment
Program workshops	Number	394
Program publications	do	137
Program studies	do	95
Forest management assists to large forest ownerships	do	83
	Acre	38,725,000
Forest products utilization assists	Number	1,813
Inventories and surveys	do	43
	Acre	39,318,000
Economic and marketing investigations	Number	245
Rural areas development assists	do	459
Appalachian regional program:		
Woodland owners given management assistance	do	4,650
Area of woodland involved	Acre	300,000
Forest products operators and processors assists	Number	350

UNIFORM TIMBER SALE APPRAISAL PROCEDURE FOR FOREST SERVICE AND BUREAU OF LAND MANAGEMENT

Chairman HAYDEN. Last December, the Comptroller General of the United States prepared a report on a need for the Forest Service and the Bureau of Land Management to resolve their differences in procedures for appraising timber sale offerings. What comment do you have on this report?

Mr. CLIFF. I will ask Deputy Chief Nelson to comment on that, Mr. Chairman.

Mr. NELSON. Mr. Chairman, the two agencies, the Bureau of Land Management and the Forest Service, have been working out a uniform appraisal procedure, as was recommended by the GAO report. We have been working with the Bureau of the Budget. The procedures to do this are being developed with a goal of having the procedures all worked out by July 1, 1967, of this year.

And then the uniform procedure is proposed to be put in operation by July 1, 1968. This will provide 1 year for us to amend our instructions, train our people, and have meetings with the operators that will be affected and familiarize them with any new procedure in the program.

TIMBER SALES ADMINISTRATION AND MANAGEMENT

Chairman HAYDEN. Would you explain to the committee how you propose to use your increase of $1,437,000 for sales administration and management of your timber resources program?

Mr. NELSON. Yes, Mr. Chairman. We propose this year to put that entire increase into a program of increased sales of thinnings and salvage material. We propose to prepare and sell about 280 million board feet, and harvest about 210 million board feet of commercial thinnings and salvage work.

Most of this will be in the Pacific Northwest area. The cost per thousand is going to be a little heavier than our regular business because of the scattered nature and the smaller volumes that will be affected. All of this low value material is over and above the allowable cut of the regular timber sale program.

Chairman HAYDEN. I know that the timber resources program which you proposed is necessary to meet the national needs.

Do you define these "needs" as commercial demands or national security requirements, or both?

Mr. NELSON. Well, our timber production and allowable cut is based upon both the commercial needs and what is involved for national security. It involves both.

A great deal of material, of course, has been furnished for the Vietnam effort, and a good share of that comes from the national forests, because we supply a large part of the total cut for the United States.

About 20 percent of the total log supply in 1966 came from the national forests.

REFORESTATION VALUE BASIS

Chairman HAYDEN. With respect to the table on page 24 of your justifications, under "Reforestation and Timber Stand Improvement" are the values which you show for reforestation of 125,000 acres in 1968 based on 1967 prices or are they projected to the year of cutting?

Mr. NELSON. They were projected based upon the 1965 stumpage rates, which were then adjusted for the size of the material that we expected to be available when this material is available for cutting, and also adjusted for manufacturing capacity that we would expect to be involved in the years 2000 and 2020. They did not contain a factor for inflation adjustment, or anything of that sort.

TREE NURSEY DEVELOPMENT

Chairman HAYDEN. You are asking for $355,000 for enlargement and modernization of existing nurseries. Where do you plan to expend money?

Mr. NELSON. That, in the first place, I think, Senator, we did not make it clear in the notes that $110,000 of that amount is used for seed collections, and $75,000 of it will be used for a land purchase project for a seed orchard to be established in Wisconsin.

The remaining $170,000 will be used in eight different locations in seven different States for improvement of nurseries; Coeur d'Alene in Idaho, Mount Sopris in Colorado, Humboldt Nursery in northern California, Wind River Nursery in the State of Washington, the Ash Nursery in Mississippi, two nurseries in Michigan, the Chittenden and the Toumey, and the Eveleth Nursery in Minnesota.

It will be a relatively small amount spent on each one of them, no major projects, but we will carry on improvements needed for better nursery practices.

RECREATION SITES

WASTE TREATMENT SYSTEMS

Chairman HAYDEN. At which recreation sites and in what amounts do you propose to expend the $1,951,000 on waste treatment systems?

Mr. NELSON. I can supply that for the record, if you would rather, Senator. It is a rather extensive list. There are 25 areas.

Chairman HAYDEN. You will place it in the record?

Mr. NELSON. I would be glad to do that.

(The information follows:)

Proposed locations and expenditures for sewage treatment facilities needed at existing national forest recreation developments for fiscal year 1968

Facility and location	Forest	State	Estimated cost
Lake Tahoe area	Eldorado	California	$700,000
Nevada beach campground and picnic area	Toiyabe	Nevada	10,000
Garden's Bluff recreation area	Cherokee	Tennessee	33,000
Chilhowie recreation area	do	do	29,000
Parksville campground	do	do	35,000
Juniper Springs recreation area	Ocala	Florida	95,000
Fore Lake recreation area	do	do	35,000
Clearwater Lake recreation area	do	do	60,000
Mill Dam recreation area	do	do	15,000
Lake Dorr recreation area	do	do	36,000
Big Scrub hunt camp	do	do	30,000
Wright Lake recreation area	Appalachicola	do	15,000
Lake Russell recreation area	Chattahoochee	Georgia	12,500
Lake Winfield-Scott recreation area	do	do	12,500
Choctaw Lake recreation area	Tombigbee	Mississippi	93,700
Glen Ellis recreation area	White Mountain	New Hampshire	20,000
Dolly-Copp recreation area	do	do	60,000
Russell Pond	do	do	30,000
South Pond picnic and swimming area	do	do	35,000
Campton Pond	do	do	40,000
Hopgood Pond recreation area	Green Mountain	Vermont	30,000
Heather-Meadows project	Mount Baker	Washington	90,000
Diamond Lake	Umpqua	Oregon	270,000
Gull Lake campground, tract and station	Inyo	California	144,700
Shook Branch recreation area	Cherokee	Tennessee	19,900
Total			1,951,300

CONSTRUCTION AND IMPROVEMENT

Chairman HAYDEN. It is indicated that in the fiscal year 1968, you will expend $11,352,000 on new construction and improvement of existing facilities for public recreation use purposes.

Would you please explain in such detail as you can what will be accomplished by these funds?

Mr. NELSON. That is our major construction item in relation to the important recreation job that we have to do. Chief Cliff earlier explained that the Forest Service serves more recreation visitors than any other Federal agency—nearly half of the total.

A sum of $3,900,000 will be used for improving the quality of facilities on existing areas of special importance. These will involve some 348 different sites. A sum of $4,874,000 is scheduled for new sites building facilities at campgrounds, vista points, swimming areas, boat launching ramps, and so forth. This will be 177 different sites and will be new construction. It will provide a capacity of about 13,300 people at one time.

We expect to use about $578,000 at some 88 different areas for visitor information service, and this will include one new VIS building to serve Sylvania at Watersmeet, Mich.

Other visitor information services involve such items as guided nature trails, exhibits, interpretative signs, vista points, and such as that.

Then we propose to use $2 million in connection with areas of national significance, including Flaming Gorge, Sawtooth Mountain area, Timberline on Mount Hood, the Mount Rogers National Recreation Area, the Spruce Knob-Seneca Rocks National Recreation Area, the Shasta-Trinity National Recreation Area, the Sylvania tract, Cradle of Forestry, Trout Pond in West Virginia, Blanchard Springs in Arkansas, and the Lake Michigan development on the Lower Peninsula of Michigan.

The $2 million will be divided between those areas of national significance, and which we designate from here where we want those funds spent. The other funds for construction are designated for expenditure by the regional foresters, who are more in touch with the need to the particular region.

CLEANUP AND MAINTENANCE

Chairman HAYDEN. What is involved in cleanup of developed sites as distinguished from maintenance of the sites?

Mr. NELSON. I guess, Senator, the easiest way to explain, that is to say, the cleanup is somewhat like the janitorial service. It is what has to be done every day. It is emptying the garbage, the cleaning of the tables, the refurbishing of the recreation improvements, and the sanitation facilities. Maintenance is more like what is done by the plumber, the painter, and the carpenter on the bathhouses, boat ramps, water systems, barriers, signs, tables, vending ticket machines, and that type of thing.

GRAZING STUDY

Chairman HAYDEN. How does the Forest Service stand on the grazing study which is being coordinated by the Bureau of the Budget?

Mr. NELSON. I will ask Mr. Payne to answer that question.

Mr. PAYNE. The interdepartmental grazing fee committee has completed its report and recommendations for a uniform approach. The Forest Service and the BLM have gone on from there with additional analysis. The Statistical Reporting Service of the Department of Agriculture is doing contract work for the two agencies. We expect the contract work to be completed by July 1967, and this will give basic data needed to complete the study. We anticipate that this will let the Forest Service meet its previously announced target date of 1968 to start implementing the fee adjustments justified as a result of the completed study.

Mr. NELSON. Mr. Cliff has talked about the 1968 budget adjustment presented for your consideration. That would include the $155,000 to implement this study.

WILDERNESS SYSTEM

Chairman HAYDEN. Will you tell the committee of progress and problems in your expanding recreation business in relation to the Wilderness Act, to administration of the national recreation areas, and to providing regular camping, picnicking, and sanitation facilities?

Mr. NELSON. Yes, the Wilderness Act, gave the Forest Service a tremendously big job, because it required that all of the primitive areas be studied to determine whether or not they should be placed within the Wilderness Preservation System under the Wilderness Act.

The law requires that we study and report on one-third of them in the first 3 years. We have moved forward on those studies.

We have had nine public hearings. We have three more hearings that will be held in the next month or two.

We have completed a study and report on one area, the San Rafael Primitive Area. The report and recommendations have been sent to the President, and the President has transmitted that case to the Congress with a proposed bill for action by the Congress. These projects require an extensive study, not only by us, but also by the Geological Survey. The act requires us to hold public hearings, then we go through the process of studying what material comes up in the public hearings. Information gained in such hearings is used in making our final recommendation to the President. We expect that we will have all nine reported on schedule, and be submitted to the President by September 1967.

Mr. CLIFF. All 12?

Mr. NELSON. Twelve. I beg your pardon.

Mr. CLIFF. We have to have 12 submitted by September 3. Mr. Chairman, we will make that schedule, but it is really going to push us to get it all done.

Mr. NELSON. I might say in relationship to the wilderness, that the Wilderness Act has created more interest in wilderness and the use of wilderness has increased, and we will have to use more of our recreation funds for the supervision and management of wilderness areas in 1968 than we used in the years before.

NATIONAL RECREATION AREAS

Now I think you also asked about national recreation areas, too?

Mr. CLIFF. Yes.

Mr. NELSON. We are responsible for three national recreation areas that have been established by the Congress. One in West Virginia, one in Virginia, and one in California, where we have the responsibility for the two major lakes, and the Park Service has the smaller lake. We have been working and developing plans for these national recreation areas. We think they are vitally important, and we do a particularly good job of planning in relation to these national recreation areas. We are planning to take into account all of the various types of recreation that might be available within those areas, including scenery, because lots of people will come to these areas just to look and enjoy the scenery. We will give wildlife particular attention in the planning for these recreation areas, and also the maintenance of waterflow and the purity of the water.

We expect that the recreation visits on the national recreation areas will increase tremendously, and consequently, we feel it is necessary to put up a quality type recreation facility.

The cost per unit might be a little higher, because of the type of recreation facility that we will have, but they will be taking care of more visitors, and I think the cost per visitor will be in line with the rest of our recreation.

SOIL AND WATER MANAGEMENT ACCOMPLISHMENTS

Chairman HAYDEN. I observe that you are not proposing an increase in the amount requested for soil and water management. However, will you touch on what you have accomplished in the past year under this activity and indicate your expectations for the coming year?

Mr. NELSON. We consider this item a particularly important one in our budget especially as it affects the yield of water, giving more attention to the possibilities of increasing the yield of water. As you know, Senator, from the projects down in Arizona, this water yield business is very important in many areas of the West.

We had about 460 projects of various types, which were analyzed by either our soil scientists or our watershed scientists and prescriptions were prepared toward prevention of erosion, water pollution, or water yield.

We expect to install about 20 water quality monitoring stations, mostly in municipal water supply watersheds this year. Last year, we had two of these monitoring stations. This work is in line with the increased emphasis on water quality throughout all Federal management.

NATIONAL FOREST PROGRAMS IN APPALACHIA

Chairman HAYDEN. I note the statement on page 44 of your notes that additional consideration is being given to possible enlargement of national forest programs in Appalachia. Would you please explain this to the committee?

Mr. NELSON. Yes, part of our job in relation to our overall Forest Service responsibility deals not only with national forests, but with all forest lands in the United States. The Appalachia area is heavily forested, that is, a high percentage of the acreage in the Appalachia area is forested—about 80 percent.

The quality of timber is relatively poor. Some of the land is not too good, and we have been making some studies in relation to the overall forest land problem in the Appalachia area. Especially, as you will recall the President asked for a plan for the Potomac River Basin, to help make the Potomac River a better and cleaner stream, and we have been involved in one study of the forest lands in the Appalachia programs. This is somewhat similar to the study that we made in Kentucky, that resulted in the establishment of the Red Bird unit as part of the Daniel Boone National Forest, the study made with the State of Kentucky.

We are not saying that we are looking at areas necessarily for additions to the National Forest, but we do feel that all the facts on how the land is being managed, and what could be done in relation to better watershed condition and better timber producing condition should be studied, and consequently, we do carry out this type of study.

ALASKA STATE APPLICATIONS FOR NATIONAL FOREST LANDS

Chairman HAYDEN. What do you propose to do to accelerate cooperative efforts in Alaska with regard to State applications for national forest lands?

Mr. NELSON. The regional forester for Alaska is working with the Alaskan people, and he is establishing or initiating a program of preplanning, with the communities, for probable expansion of communities.

One of our difficulties in the past is that a community will just come in and say, "We want 5,000 acres," without very much planning having gone into the need for the property. Consequently, by initiation of this new program, we are working with the communities in advance of their applications, before possible transfer of Federal Forest Service lands to these communities.

We think that it will give them a chance to work out their problems in advance. We will furnish some help and the expertise to the communities and boroughs for their planning for the future, and we will also enlist the assistance of other public and private agencies.

We have had about 11 applications for additions to the communities or transfer of land to the States under the Statehood Act. Seven of these have been approved in whole or in part. Two or three were for new communities, where there was not any supporting evidence that there would be a community established.

One was for a private club that can better be handled under a different method than the transfer of land. We are working closely with the State of Alaska toward implementation of our part of the Statehood Act.

Mr. CLIFF. Mr. Chairman, I think the committee would be interested in that this Statehood Act for Alaska authorized the Secretary of Agriculture to transfer up to 400,000 acres of land to the State for community developments, and for community purposes, including recreation.

This is what we are talking about. The most of the communities in southeastern Alaska, where the national forests are, are located inside the national forests. In the past, we have made little exclusions of national forest land for community growth.

Now the Statehood Act provides for adding to these community areas, as the need arises, and this is what we are working on.

Chairman HAYDEN. Yes.

Mr. NELSON. We have also had a little trouble on the Chugach National Forest, which is north of the Tongass Forest, because of the Indian claims and assertion of aboriginal titles. Such Indian claims are having an effect upon the transfer of lands to the States, because of those Indian claims. In southeastern Alaska we do not have the same problem, because of the Tongass Timber Act.

LAND LINE LOCATION AND LAND STATUS RECORDS

Chairman HAYDEN. Can you break down the $2,140,000 for landline location and land status records into the amounts for each of these activities?

Mr. CLIFF. Mr. Nelson will handle that, too.

Mr. NELSON. Mr. Droege will handle that. He has the figures.

Mr. DROEGE. For the status work, it will be $528,000, and for landline locations, $1,612,000.

PHOTOGRAMMETRIC SURVEYS

Chairman HAYDEN. Do you accomplish your photogrammetric surveys for which you are proposing a total of $932,000 by use of private contractors or with your own air photographic equipment?

Mr. DROEGE. The photography is not a big part of the total job. We would do about 93 percent of the flying that is involved with contracts, and the balance with our own aircraft, when they are not used on something else.

FOREST FIRE PROTECTION

Chairman HAYDEN. You are proposing almost $26 million for forest fire protection. Would you please describe what you plan along this line in the coming year?

Mr. NELSON. With that amount of money, we will carry on our fire prevention program, about 401 man-years goes into that. That will require $3,565,000. We will also carry our fire detection program at the same level as the year before, and that will use $3,380,000. We intend to increase our fire attack crews, and will use the increase that is involved here for additions to our fire attack forces. That will supply 1,360 man-years, and will cost $14,342,000, which is the major part of our fire fund.

Also, in the 1968 budget adjustment, in the reprograming, it was proposed to increase this fire item by $205,000, to offset the crews that were used on blister rust. There will be some 400 less people hired on blister rust this summer, and we propose to add three 25-man fire attack crews to be stationed in Idaho where the blister rust crews will be eliminated.

There will be about $3,240,000 used in air activities, and $310,000 for fuel modification, some $610,000 for equipment development and testing, in our fire program activities, and about $520,000 will be used for studies, surveys, plans, and our training programs in fire control.

INTERAGENCY FIRE CENTER, BOISE, IDAHO

Chairman HAYDEN. The Interagency Fire Center at Boise will be constructed during the coming year. How is it planned that this facility will operate?

Mr. NELSON. Well, Senator, we consider that this is an excellent example of cooperation between two Government agencies. This Center is planned with the Bureau of Land Management. The Bureau of Land Management has in their budget the construction item needed for starting the Center. The Bureau of Land Management will have certain facilities there for their air business and it will be their fire center for Western States. The Forest Service will have an air attack facilities and support facilities for the adjoining national forests in southern Idaho, and will also have the backup support and the tool cache and that type of thing that will be available for all of the western national forests.

We also have a plan worked out with the Bureau of Land Management, so that when we get in a real tough fire situation, there will be one coordination area, and this will be at Boise for that part of the West. It will not be activated at all times, but it will be activated at the time that both we and the BLM have a lot of serious fires. We will both need equipment and firefighters; we will both need aircraft, and by this coordination, we will get the best results at the time and place where it is needed without duplication of efforts.

There was some of this coordination work done last year on the big fire situation in the West. We also have a joint fire center, on a smaller scale, at West Yellowstone working with the Park Service and the Bureau of Land Management.

INFRARED SENSING TECHNIQUE FOR DETECTION OF FOREST FIRES

Chairman HAYDEN. We have seen news articles on the use of infrared heat sensing techniques for detection of forest fires. Will you briefly explain this to the committee?

Mr. NELSON. Mr. Jemison is involved with the research in that, and I think he would like to explain that.

Mr. JEMISON. Mr. Chairman, the infrared sensing technique is one with which fires can be mapped or detected from instruments in high-flying aircraft. In the first respect, we have now developed the technique to a point where we are operational in mapping fires, either at night or through dense smoke, by using this technique. During the past summer, the method was used successfully in mapping about 25 major forest fires.

We aren't quite as far along with the development of the methods for detecting fires by this method, but we have enough good leads to suggest that this may be quite a revolutionary way of detecting fires. We need to develop, with the better sensing equipment we now have, a telemetering system to transfer the information from plane to ground, and readout systems for the firefighters in the central headquarters.

An airplane flying with this kind of equipment can cover about 4,000 square miles per hour, and we think this has great promise in the fire detection field.

Chairman HAYDEN. You will detect the small fire that way?

Mr. JEMISON. Yes, very small fires. You can even detect the heat of a small lantern from a high elevation.

Mr. NELSON. That would give us a chance to be ready in the morning following a lightning storm. Fires set by lightning during the night could be detected during the night. We would know where we were; at daylight, we could drop smokejumpers to the fires.

As an example of cost savings, on 1 of the 25 fires mentioned by Mr. Jemison we made a calculation of what the action to suppress the fire would have been without this surveillance and infrared map, and because of the changes that they made after having the infrared intelligence, we estimated that it saved us $212,000 on that 1 fire over what would have been spent without having this particular type of information. On another fire it was estimated that we saved about 9 million feet of timber because infrared intelligence helped plan better actions to control the fire.

We have one airplane equipped with that infrared equipment now in operational use.

AIR EQUIPMENT

Chairman HAYDEN. With respect to your fire control activities, how much air equipment does the Forest Service own, and how much of its work is done through private contract?

Mr. NELSON. Senator, by far, most of our work is done with private contractors. We actually own 57 airplanes. These vary from small lead planes used with the air tanker planes that are dropping chemicals on fires, to small planes used for transport, and also used for intelligence work on fires and in relation to bug epidemics and that type of work. On an average year, we use about 1,000 privately owned airplanes. This includes about 80 air tankers used for dropping fire retardants; about 700 small planes for fire detection and reconnaissance; about 175 small and 5 medium-sized helicopters; and about 100 lightweight twin engine and medium transport airplanes were used. All of those I have listed were private aircraft used under contact.

AIR TANKER FIRE CONTROL SERVICE CONTRACTS

Chairman HAYDEN. This committee included funds for the past 2 years for stabilizing the amounts paid to contractors of aerial fire retardant dropping operations. Will you tell the committee how this is working out and if there are any other equipment problems which need similar treatment to obtain better management?

Mr. CLIFF. Mr. Hendee will comment on that, Mr. Chairman.

Mr. HENDEE. Mr. Chairman, this help that the committee gave on aerial tankers was of great help to us in our fire control program. There is one other problem that we have in equipment. We have to have fire equipment in place; that is, certain specialized fire equipment in a location readily available. In the use of this specialized equipment the costs of maintaining it in place, what we speak of as the fixed cost, the way we handle the budgeting at the present time, we don't get the maximum use out of this equipment.

Specifically, what we would like to do is budget firefighting funds in advance, for the depreciation or fixed costs for this specialized fire equipment, so that we could get fuller use of the entire fleet. We think if we do this, then in the off seasons the equipment would be used in other programs that would pay only the cost per hour or per mile for operation and maintenance, and in this way, there would be a total overall savings in the use of this equipment, in the long run. It would result in a shift of obligations between appropriations to a more equitable and efficient arrangement.

FOREST FIRE FIGHTING SUPPLEMENTAL BUDGET REQUEST

Chairman HAYDEN. How much of a supplemental appropriation do you have to request in order to meet your forest firefighting costs?

Mr. NELSON. This year, it will be $25 million. It is an increase, of course, this year, because of the heavy fire season we have had in 1966.

WATER RESOURCE DEVELOPMENT

Chairman HAYDEN. For water resource development related activities, you are proposing an appropriation of $8,660,000; $1,894,000 more than was provided in last year's appropriation bill. Would you please, again, break down the projects on which you expect to expend your fiscal year 1968 funds? A table such as you submitted last year will do very well.

Mr. NELSON. We would be glad to do that, Senator.

(The information follows:)

TABLE I.—*Planned construction of public use, access, and management facilities—Fiscal year 1968 water resource development related activities*

Region	Continuation of projects underway in fiscal year 1967			Estimated cost
	State	Forest	Project	
1	Montana	Kootenai	Libby	$100,000
	do	Flathead	Hungry Horse	140,000
2	Colorado	San Isabel and White River.	Fryingpan-Arkansas	106,000
4	Utah	Ashley	Flaming Gorge	450,000
	do	Manti-LaSal	Joes Valley	20,000
5	California	Shasta-Trinity	Shasta Lake	164,000
	do	do	Clare Engle Lake	197,000
6	Oregon	Wallowa-Whitman	Mason	247,000
	do	Willamette	Cougar	65,000
8	Texas	Texas	Sam Rayburn	67,000
	Mississippi	Mississippi	Chewalla	53,000
	Texas	Texas	Toledo Bend	140,000
9	Pennsylvania	Allegheny	Allegheny	913,000
	Indiana	Wayne-Hoosier	Monroe	468,000
	do	do	Middle Fork Anderson	387,000
	Total, 15 projects			3,517,000

TABLE II.—*New project starts in fiscal year 1968*

Region	State	Forest	Project	Estimated cost
1	Washington	Colville	Boundary Reservoir	$61,000
	Idaho	Kaniksu	Pondere Lake	79,000
2	Colorado	White River—Pike-San Isabel.	Homestake	18,000
3	Arizona	Coconino	Ashurst Lake	100,000
	Do	Sitgreaves	Willow Canyon	40,000
4	Idaho	Payette	Lost Valley	11,000
	Utah	Uinta	Tibble Fork	25,000
	Do	Wasatch	Lyman	102,000
5	California	Eldorado	Union Valley	389,000
	Do	Sierra	Courtright	48,000
	Do	do	Wishon	44,000
	Do	Plumas	Frenchman	135,000
6	Washington	Wenatchee	Kachees-Cle Elum	379,000
	Oregon	Willamette	Blue River	100,000
8	Alabama	Alabama	Lewis Smith Lake	78,000
	Kentucky	Daniel Boone	Cave Run	172,000
	Do	do	Laurel River	72,000
	Florida	Florida	Cross-Florida Canal	139,000
	Virginia	George Washington	South Branch North Fork (Potomac).	15,000
	West Virginia	do	South River (Potomac)	11,000
	Virginia	do	Upper North River (Potomac).	58,000
	Louisiana	Kisatchie	Bayou Boeuf	83,000
9	New Hampshire	White Mountain	Basin Brook	66,000
10	Alaska	South Tongass	Silvis Lake	12,000
	Total, 24 projects			2,237,000

NOTE.—In addition to the above projects where facility construction is planned (tables I and II), preconstruction site planning is scheduled at 18 projects as follows: Alaska, 1; Arkansas, 2; Colorado, 1; Georgia, 1; Illinois, 1; Kentucky, 1; Oregon, 5; Texas, 1; Utah, 1; Washington, 2; West Virginia, 1; Wisconsin, 1. Scheduled expenditures for public use and access construction, including preconstruction site planning, total $6,004,000 for fiscal year 1968.

INSECT AND DISEASE CONTROL

KOREAN (FORMOSAN) TERMITE

Chairman HAYDEN. You are requesting exactly the same amount next year as last year for insect and disease control, explaining that within the amount greater emphasis is being given to determining outbreaks of pests and to controlling bark beetles. I have heard that a new invader is the Korean termite. How big a start has this insect gotten and what are the chances of keeping it under full control?

Mr. CLIFF. Mr. Chairman, Dr. Jemison will talk about that.

Mr. JEMISON. Mr. Chairman, the Korean termite, which is probably more commonly called the Formosan termite, in less than 2 years has established a very firm foothold in this country. It probably came into the country in the vicinity of Galveston, Tex. It is now well established there, in the vicinity of Houston and also in the neighborhood of New Orleans and Lake Charles, La.

This is a very aggressive insect. We have found, for example, that not only does it infest buildings, but even in living trees. We know that it is well established in several hundred dead cypress trees in the vicinity of Lake Charles, La. We have also found that it can successfully penetrate and establish itself through chemically treated soil in 3 months' time, which will serve as a barrier to our native termites for at least 3 years.

The facts are just that we don't know yet how to control it. We don't know its life habits, and it could pose a very serious threat to wood products and their use in this country.

BLISTER RUST CONTROL REPROGRAMING

1968 FUNDS

Chairman HAYDEN. We understand there are some changes in your white pine blister rust program for 1968. Will you comment on these changes, Mr. Cliff?

Mr. CLIFF. Yes, Mr. Chairman. I outlined briefly for you at the beginning the reason for the changes. We propose to reprogram $1,416,200, because we have concluded that we should relax on the method we have been following of grubbing out the ribes and the gooseberry. We are not getting the kind of protection needed to protect the young stands of western white pine. We are going to reemphasize and step up our work on trying to develop blight-resistant strains of white pine, through our genetics research program. For fiscal year 1968 we propose to reprogram $616,200 for bark beetle control on the Targhee National Forest in Idaho, $205,000 for establishing three 25-man forest fire crews to replace the men which will be taken off blister rust. We need to do this in order to make sure we will have trained fire crews available for initial attack. We will devote $155,000 for the grazing fee study which Mr. Nelson mentioned. Some $330,000 will be used for two high priority wildlife development projects, one of which is in the wetland of the Chippewa National Forest in Minnesota, and the other a development of a machine to desilt salmon and steelhead and trout spawning beds which have been silted up because of floods, and $110,000 to step up our recreation development work.

Chairman HAYDEN. Now, this proposed change is only for the program for Idaho and Montana. Why should not the same decision be made for white pine blister rust work for the rest of the country?

Mr. CLIFF. For the rest of the country, we feel that the program is more successful. In Idaho, Washington, and Montana, because of peculiar climatic conditions, we are getting reinfestation and reinvasion of the host plants; the gooseberries and currants. Even when they are carefully eradicated, they are coming back and reinfesting the young pine stands. We have taken a very hard and critical look at what we are accomplishing and have decided that we should terminate that particular phase of the work in these three States. We plan on carrying on the work in the other States, where the climatic conditions are different, and where we are getting much better results.

1967 FUNDS

Chairman HAYDEN. In view of the proposed program decreases for blister rust control work for fiscal year 1968, what effect will this have on the appropriation for this work in fiscal year 1967?

Mr. CLIFF. In fiscal year 1967, we propose to transfer $700,000 for the balance of this fiscal year. We will not spend it on the currant and gooseberry eradication, but propose to transfer that money to the very fast-running bark beetle epidemic in the Targhee and the Teton National Forests. This epidemic is larger and more virulent than we had anticipated. It is attacking the forests in the vicinity of Yellowstone and Grand Teton National Parks. In fact, it is in the Grand Teton now, and we want to step that program up, the rest of this fiscal year and next fiscal year, by transferring some of the blister rust money to it.

RED BIRD PURCHASE UNIT, KENTUCKY

Chairman HAYDEN. Your request for the acquisition of land under the Weeks Act is the same as last year; and as last year you plan to use $1,800,000 of the $2,480,000 to acquire land on the Red Bird purchase unit in eastern Kentucky. This purchase was begun with an appropriation in the Supplemental Act of fiscal year 1965, which means that you have had appropriations in 3 separate years and are requesting one in the fourth year. How far along are you toward completion of this purchase?

Mr. CLIFF. Mr. Nelson will give you a progress report on that work.

Mr. NELSON. We are moving right along. The total area within the Red Bird purchase unit as established is 591,000 acres. We would plan to purchase around 300,000 acres within this unit. We have purchased 57,754 acres to date. We have negotiations complete on an additional 10,863 acres. We are doing the timber cruising and field examination on two other properties of 17,000 and 16,000 acres, respectively. And, in addition, we have about 34,500 acres where we have received offers to sell. These are now pending investigation, inventory work and negotiation. By the end of this fiscal year, we will have purchased about 70,000 acres, which is about 20 percent of the total we planned to purchase within this purchase unit.

SYLVANIA TRACT, MICHIGAN

Chairman HAYDEN. Last year saw the culmination of several years of effort on the part of the Congress and the Forest Service to get the Sylvania tract in northern Michigan into public ownership. What are your plans for the area, and how are you moving to implement them?

Mr. NELSON. Last July, Senator, as you indicated, we culminated this effort by the Congress and the Forest Service by the actual transfer of the land to the Forest Service. Sylvania is that beautiful 18,000-acre tract of land, with some 37 lakes. It is one of the outstanding recreation opportunities in the country, and especially in the lake States. We have been doing a great deal of planning work on this property, and this coming fiscal year, we expect to start construction. We will construct three camp and picnic areas, including work on a water and sewer system, with a capacity of about 200 people at one time. We plan to spend about $300,000 for this work, which will include expenditures for additional planning work on the entire tract.

In addition, we will start the first road into the Sylvania area, with a planned expenditure of about $500,000. Earlier, I mentioned a visitor information center that is related to this. It is located just outside of the Sylvania property, and will serve as an entranceway to this fine property.

1967 LAND AND WATER CONSERVATION FUNDS DEFERMENT

Chairman HAYDEN. The Bureau of the Budget advises that $5 million of the funds provided for land acquisition under the land and water conservation fund are deferred in fiscal year 1967 insofar as expenditures are concerned. What has this done to your planned purchase program?

Mr. NELSON. Senator, I don't think that we would say that will have any particular adverse effect on the purchase program, because there is always a period of time that it takes even after the time that we actually finish negotiations for an acquisition before payment is made. There is often a lag of several months for the clearance of titles by the Justice Department, and many times we have to go back and get additional title work. So, we don't believe, really, that the deferral will have any particular effect on accomplishment of our program. These funds do carry over, too, as you know.

Mr. CLIFF. That is the point I wanted to make. The funds do carry over, and if we don't get them spent this year, they will be available to complete the purchases which are started, and we will complete them next fiscal year.

NATIONAL FOREST RESERVATION COMMISSION LAND PURCHASE APPROVALS

Chairman HAYDEN. Does the National Forest Reservation Commission approve and recommend purchases under the Land and Water Conservation Act?

Mr. NELSON. Yes, sir. The National Forest Reservation Commission approves all purchases that are made under the authority of the Weeks law, and about 95 percent of all cases that are purchased with funds of the land and water conservation fund use the purchase authority of the Weeks Act.

The areas where we can't purchase under the Weeks law is a place like Arizona, for example, where the Weeks law isn't implemented by State land, or lands within the Great Basin, where they are not on headwaters of a navigable stream.

LAND PURCHASE PROGRAM UPDATING

Chairman HAYDEN. Have you given any consideration to updating your prior programs, particularly those presented to Congress and approved in fiscal year 1965, in order to utilize 1968 funds more nearly to cover the costs of these earlier programs which are in so many instances extremely undervalued as is indicated by the number of reprograming actions requested because of costs so much greater than those presented to the Congress?

Mr. NELSON. Yes, sir; this was covered with this committee when Mr. Crafts was here on the land and water conservation fund, and in the material that I presented in my testimony and in my prepared statement. We indicated that we think it is very desirable to have a relook at some of those lands that were approved in an earlier program. I think the subject is pretty well covered in those hearings.

FLOOD DAMAGE REPAIRS

Chairman HAYDEN. What progress was made in repairing damages on the national forests from floods a year or so ago, and what was the extent of the flood damage on the west coast from floods in December and January this year, and how are you handling it?

Mr. NELSON. First, on the floods of 1964 and 1965, as you recall, that was a tremendously bad and disastrous flood condition, and we have been working on repairs constantly since that time. The Congress made available an additional $38 million worth of authorization, and this committee has funded that authorization. Progress has gone very well, and the last contracts will be let this fiscal year. There will be some cash needed in fiscal year 1968 to pay for the contract work that will be performed after July 1, 1967.

On the latest flood situation we had in California—it was really two, one in December and one last January—the total estimated damage was about $5.4 million. That is our preliminary estimate. About $4.6 million of this is in roads and trails. We have reprogramed some of our funds for this work. We have made $1 million available to the California region to get started on the road repair work, and smaller amounts of other funds for some of the other damages such as campgrounds, buildings, fences, water system and other improvements.

So we are moving forward on this latest flood. We don't plan to come to the Congress with request for a supplemental for this particular flood. We would plan to handle it within our existing budget for 1968.

10-YEAR DEVELOPMENT PROGRAM PROGRESS

Chairman HAYDEN. How is your progress in relation to the 10-year development program furnished the Congress?

Mr. CLIFF. Mr. Chairman, you have reference to the 10-year program for the development of the national forests which President Kennedy sent up to Congress in September of 1961. By the end of this current fiscal year, fiscal year 1967, we will have funded 71 percent of the proposed program. We haven't made uniform progress in all activities. Some have gone ahead faster than others.

The budget that we are discussing today for fiscal year 1968, while it provides some increases, will cause us to fall further behind our projected goals. The fiscal year 1968 budget if approved as submitted will fund our program at the rate of about 63.9 percent of the goals that we established and recommended for accomplishment.

Now, again, the progress is not uniform. For example, timber resource management will be funded at the rate of about 92.5 percent of the goal, whereas recreation will be 39.1 percent. Soil and water management will be 45.4 percent. The mineral claims and other land uses will be 83.7 percent. So you see, we are not proceeding on a uniform basis on all activities, but if we get the money that we are recommending in this fiscal year, in fiscal year 1968 budget, we will be at the level of 63.9 on the average of the program, as we expected, or as we had hoped that it would be at this period.

AGRICULTURE AND FORESTRY LONG-RANGE RESEARCH STUDY

Chairman HAYDEN. Last year you reported to us that a long-range study of agriculture and forestry research was underway. We have received copies of the general report. To what degree does this budget conform to the findings of that study?

Mr. CLIFF. I am going to ask Dr. Jemison to comment on that.

Mr. JEMISON. Mr. Chairman, the long-range study was sent to the Congress last October by the Secretary of Agriculture. It identified 91 problem areas, of which 31 relate to forestry. The long-range program projects ahead for 5 and 10 years the scientific manpower needed for each of these problem areas. The budget that we are discussing today falls well within the projections of this long-range study, which overall contemplates about doubling in 10 years the forestry research effort, and roughly trebling the outlay for forestry research 10 years from now.

FOREST GENETICS RESEARCH

Chairman HAYDEN. You are requesting $560,000 more in fiscal year 1968 than was appropriated in fiscal year 1967 for timber management research, indicating that the increase is to be used in forest genetics. What is the total of your forest genetics program?

Mr. JEMISON. The current total, Mr. Chairman, is approximately $1.4 million. We believe that research in forest genetics or tree improvement offers some of the greatest opportunities for meeting the future timber demand requirements of the country.

WATERSHED MANAGEMENT RESEARCH

Chairman HAYDEN. For watershed management research, you are asking $211,000 more than was appropriated to you last year. How do you propose to use this additional money?

Mr. JEMISON. Well, Mr. Chairman, we would propose to put about one-fourth of the increase in central Idaho, and adjacent areas, where we have a very critical erosion problem on granitic soils. Here roadbuilding, logging activities, and other land management practices are at the present time hazardous until we learn more about how to stabilize these soils.

We intend to increase research in the northeastern area on problems of increasing water yield on forested municipal watersheds. As you recall, the severe droughts in the Northeast of the last 5, 6, or 7 years have created very serious problems here. We have good leads to show that substantial increases in yields of water can be achieved if we learn how to manipulate the forest cover on these municipal watersheds. We also would use part of the increase to strengthen research on soil erosion problems in the southern Coastal Plain and would accelerate slightly the research in the eastern Cascades of the Northwest, where water yield and soil erosion problems in that area are also quite critical.

ARIZONA WATERSHED RESEARCH AND FOREST PROGRAM

Chairman HAYDEN. Please give the committee a brief report on the status of the Arizona watershed program—for both research and national forest administration.

Mr. CLIFF. Dr. Jemison will respond to that for research, and maybe also for administration, because he is familiar with both phases.

Mr. JEMISON. Mr. Chairman, we have made good progress in both the operational program on the national forests and in the research activities that provide the technical basis for this operational program.

The national forest program has been concentrated primarily in the chaparral type on the Tonto National Forest, and in the Beaver Creek drainage in Arizona, too. Eleven watersheds have undergone some phase of treatment.

The 1968 budget provides for about the same level of operational program for the coming year as in the past. There have been a number of high-priority projects elsewhere that have been identified but these cannot be included in the program at this time. In research, we are making good progress in finding the effects on water yield of various treatments of timber stands, such as thinning of removal of of chaparral by prescribed fire, and of converting pinyon-juniper type to grass followed by determining the effect of grazing on water yield. We also are getting good information on the costs associated with these various practices, so that we can put together a good, sound multiple-use analysis of the costs and benefits of various kinds of water yield improvement programs.

BALLOON LOGGING

Senator MUNDT. Mr. Chairman, may I ask a few questions on thinning while we have this on the budget?

Chairman HAYDEN. Certainly.

Senator MUNDT. You are aware, over on that side of the table, I think, all of you, of the efforts that the chairman of the committee and I made in a couple of Congresses in connection with the harvesting of timber to secure some additional funds to attempt a balloon logging research program. We have had money approved in the Senate a couple of times, and the House was not quite convinced at that time that this was practical or workable. I still think it has a lot of merit, and I wonder who should discuss that.

Mr. CLIFF. Well, this is still in the research stage, and it is being conducted by our division of engineering research, out in the Pacific Northwest. I think Mr. Jemison is in the best position to respond to your questions.

Senator MUNDT. I thought that would be right, but I did not want to ask you the questions, if it should be addressed to someone else.

Will you tell us, has anything happened in this field in the past few years to bring in any additional information?

I recall at one time, you brought in charts and we had some very interesting and informative testimony.

Mr. JEMISON. Well, Senator Mundt, the progress we have made shows very specifically that aerial logging—and you are referring, I believe, specifically to balloon logging——

Senator MUNDT. Right.

TECHNICAL WEAKNESSES

Mr. JEMISON (continuing). Is sound and practical from an engineering systems point of view. The problem we have now is making it economically sound. It is in this direction that our current efforts are headed. Now, we have made pilot tests of balloon logging on a practical scale that show there are still some weakness in the type of balloon that we are using. We need to make more studies of the balloon configuration, of how to harness the balloon and suspend loads under it, how to handle it from the standpoint of the ground equipment needed. We need a better, cheaper gas. We need deicing equipment. These are all technical refinements that would lead toward lower unit cost of logging that we think would make this a very practical system.

ESTIMATED SAVINGS AND INCREASED PRODUCTION

The payoff is likely to be large. We calculate, for example, that when we get an economical system of balloon logging, we will increase the allowable cut, on the west coast, by 500 million board feet per year, that will come off of what are now inaccessible areas, or areas that are so highly erodable that we would not dare put roads in and use conventional practices. We think that this system, when fully developed, may reduce our needed road mileage by about 11,000 miles, with a saving of about $335 million.

In Alaska, there is also something of the order of 400 million board feet that we could safely log per year that otherwise we might not be able to harvest.

INACCESSIBLE TIMBER

Senator MUNDT. Doctor, I have read somewhere, and I believe it was in the Forest Service literature, that there are about 29 million acres of inaccessible timber, or timber which cannot be handled with economic soundness at this time with conventional methods of logging. Would that figure, 29 million acres, be reasonably correct?

Mr. JEMISON. I could verify that for the record. I know it is a substantial figure, but I don't recall exactly whether it is 29 million.

Senator MUNDT. This is presumably in Alaska and in the Western United States.

Mr. JEMISON. Yes.

Senator MUNDT. And if you will verify it for the record, that will be fine.

Mr. JEMISON. Yes, we will do that.

(The information follows:)

The current estimate of timbered area in Western United States, including coastal Alaska that can be logged by aerial methods but not by conventional methods is 26 to 27 million acres.

AERIAL LOGGING RESEARCH

Senator MUNDT. How much do you have for aerial logging systems, using balloons and skylines, this past year; and how much do you propose to utilize in fiscal year 1968?

Mr. JEMISON. Senator Mundt, we have this current fiscal year, that is, fiscal year 1967, about $65,000 going into aerial logging research. The proposed budget contains an increase of $90,000 for this work which would then give us about $155,000.

Senator MUNDT. Is that the amount that you asked for from the Department? Did you get all you requested?

Mr. JEMISON. Well, the $90,000, as the budget notes show, is a portion of a larger amount which is $215,000 for our entire, countrywide engineering research program. Under the long-range study that was referred to a few moments ago, there was a larger amount proposed but in the structure of the budget, we were unable to include the total.

Senator MUNDT. Would you be free to tell us the amount that was requested for this purpose at that time?

Mr. JEMISON. The increase we requested was $500,000 for all engineering research, $200,000 of which was to increase aerial logging studies.

Senator MUNDT. It seems to me we are relating this to a tremendous asset. If I understood your figure correctly we can save $335 million, if this thing proves to be feasible. It is worth moving toward a decision on this question with as much diligence as possible. We should try to find an optimum, economically feasible method of balloon logging. Is that the figure that you gave us—a potential $335 million saving?

Mr. JEMISON. $335 million saving on roads, plus the other advantages from a higher usable timber yield, and savings through elimination of erosion and so on.

Senator MUNDT. Thank you very much, Mr. Chairman. I thought we might just put that in the record at this point.

WILDERNESS RECREATION RESEARCH PROGRAM

Chairman HAYDEN. Last year, the Senate committee asked the Forest Service to define a wilderness recreation research program, and to indicate its content, objectives, and proposed levels of funding. A report has been made to the committee, and I would ask you to furnish a copy of the report for the record, exclusive of the photographs, of course.

Mr. JEMISON. We will do that, sir.

(The information follows:)

Each year more and more Americans "discover" the American outdoors. Recreation has become a major forest use. Minor technical and managerial problems have become major. New problems continue to appear.

In 1956, the Forest Service with congressional approval launched a pioneer program of forest recreation research. Today, as emphasized in the Department of Agriculture's Long-Range Study of research needs in the natural resources field, the job is to make this forest-land recreation research program meet the needs of the times—to guide and strengthen the management of America's private and public forest lands for fullest possible use and enjoyment. Specific objectives of the research are—

1. To devise methods for projecting demand for forest-land recreation;
2. To measure and evaluate the impact of people on recreation environments; to devise practical methods for selecting and maintaining recreation sites and restoring those depleted by heavy use;
3. To gain a better understanding of the people seeking various forms of outdoor recreation so as to fit developments and management to the needs of users—and to the requirements of the resource; and
4. To determine the requirements for esthetic landscapes and means for producing and maintaining them.

To date the Forest Service, with about 17 scientific man-years assigned to forest recreation research, is the principal Federal agency with such a program. The research is done in cooperation with agencies having related interests such as the National Park Service and with private forest landowners. We cooperate with several colleges and universities which collectively have a modest effort going into forest recreation studies. The Bureau of Outdoor Recreation, which does no field research at present, is kept in touch with Forest Service recreation research.

The principal user of forest recreation research results in the Forest Service itself. This year, more than $31 million will be used on the National Forests and Grasslands for recreation administration and management. Research results aid in short- and long-term planning; in guiding location and design of facilities and improvements; in establishing policy for recreational use of the forest resources; and in fitting recreational development into multiple-use programs. One of our most important controversial resources is wilderness. The unique needs and uses of wilderness call for special and critical study.

A GREAT HERITAGE OF THIS COUNTRY IS ITS WILDERNESS

When Lewis and Clark and Jim Bridger challenged the West, "wilderness" had a different connotation than it has today. Wilderness then was a formidable unknown.

Over the past several centuries the wilderness has been challenged and conquered at an accelerating rate. Almost all of the 2 billion acres of this country has been conquered in the sense of being put to use and changed from its native state. Roads have been built, timber has been cut, fields plowed, vegetation grazed by livestock, streams dammed, mines dug, and the land modified otherwise as our Nation developed.

Today wilderness relates to a few priceless remnants, and the challenge is not to conquer but to maintain. With this in mind Congress in 1964 passed the Wilderness Act, Public Law 88–577, which states that wilderness areas—

> "* * * shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness * * *."

Wilderness varies dramatically in topography, vegetation, wildlife, and climate—from lowland brush to alpine gentian in Eagle Cap to golden trout and a thousand lakes in the Bridger. Each provides something different for the wilderness seeker, yet all provide "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." There are 88 National Forest Wilderness and Primitive Areas totaling over 14½ million acres.

MANAGEMENT OF WILDERNESS POSES DIFFICULTY CHALLENGES

"If wilderness preservation includes maintenance of land conditions in as near a natural state as possible, then those activities of man, both inside and outside the boundaries of wilderness areas, which influence this natural state become wilderness preservation problems * * *."—Outdoor recreation Resources Review Commission.

Wilderness is never static. Seeds sprout. Trees die. There is constant change, and man continues to contribute to this change. The wilderness visitor himself has changed the wilderness. His horses have overgrazed mountain meadows. His use of hay has introduced non-native plants.

In the pursuit of solitude, physical and mental challenge, scientific study, inspiration, and primitive recreation, man has become a serious deteriorating force on the fragile soils, steep topography, and high elevations typical of wilderness areas.

How can visitor use be made less damaging?

How can already wornout trails and campsites be rehabilitated?

What must be done to maintain sanitary conditions, as use increases?

How can use by people be distributed more effectively to protect the wilderness resource and to enrich the visitor's wilderness experience?

No wilderness is an island. By controlling fire within and near wilderness area, man has drastically altered natural forces. Fire control has, of course, saved vast timbered landscapes. In some areas, however, fire control has resulated in vegetation unfavorable to big game. In others, it has resulted in a buildup of fuel that increases the danger of conflagrations.

What levels of fire control and what fire control procedures can be developed that are compatible with wilderness values?

Can fire, as a tool, be used in wilderness to create conditions favorable to maintaining natural sequences of development?

Insect and disease epidemics can change the wilderness landscape as drastically as fire. Some insects and diseases are native; others, such as white pine blister rust, were introduced by man. This disease continues to wipe out large and small stands of western white pine, limber pine, and whitebark pine. Man has also introduced the larch casebearer, a defoliating insect that has invaded vast stands of western larch.

What levels and procedures of insect and disease control can be developed to maintain wilderness values?

The dynamic nature of plant and animal life is a continuing challenge to the manager of wilderness. He must understand these communities and their interactions if he is to develop ways to meet the needs of the land and the visitor.

How do such forces as fire, insects, and diseases affect the natural development of plant and animal communities?

How may these forces be altered to achieve plant and animal development in harmony with the principles of wilderness management?

Wildlife populations are a major wilderness asset, but often a serious management problem. By his hunting and fishing regulations, by predator control, and by his land use in areas nearby, man has markedly affected wilderness wildlife populations. In several Wilderness and Primitive Areas, overpopulations of elk have overgrazed winter range with consequent serious erosion of soil.

What are the effects of natural changes in vegetation on the habitat for wildlife?

Conversely, what are the effects of wildlife on wilderness plant communities?

What steps are required to achieve and maintain a balance of wildlife with wilderness environment?

What management measures are needed outside of designated Wildernesses to maintain wilderness values inside?

Wilderness managers face many diverse and complex problems. They must decide priorities and the kind of action necessary to meet the responsibility placed on them by Congress, as well as the needs of the wilderness and of those who use and enjoy these scenic gems of our American landscape.

Very little research has been done in this field. The proposed program which follows fits logically and practically into the overall research activities of the Forest Service. Results will have widespread application.

Expanded Forestry Research Specifically Related to Wilderness Is Urgently Needed

The Wilderness Act broadens the responsibilities of the wild-land manager. To meet these added responsibilities the Forest Service and other land-managing agencies urgently need additional knowledge.

Proposed wilderness research program

Growing problems of use, protection, and management of wilderness call for research in four broad but closely interrelated subjects.

1. *The wilderness visitor.*—

Studies to learn how to—

Accommodate increased numbers of visitors without destroying the wilderness environment;

Enhance their enjoyment of wilderness; and

Develop trail, sanitary, and other needed facilities compatible with wilderness.

2. *Plant and animal ecology in the wilderness.*—

Studies designed to—

Determine plant and animal requirements;

Determine their interrelationships with each other and with fire, insects, and disease.

3. *Wildlife species in the wilderness.*—

Studies to determine how to achieve an acceptable balance between wildlife numbers and the wilderness environment.

4. *Protection of the wilderness.*—

Studies designed to determine the place of insect, fire, and disease control.

The research team would initially concentrate on the first three subjects. Protection research, which is dependent on a fuller understanding of plants and animals in the wilderness environment, would be accelerated later.

Proposed location

Missoula, Montana, is ideally located for a major concentration of wilderness research. Nearby are 7.3 million acres of existing or proposed wilderness. Within 200 miles are five designated Wilderness Areas totaling 2.5 million acres, four Primitive Areas totaling 1.6 million acres, and two National Parks containing 3.2 million acres proposed for inclusion in the Wilderness Preservation System.

The Forest Service has research facilities at Missoula and closely related research already underway. Projects at the Northern Forest Fire Laboratory and the new Forestry Sciences Laboratory can provide excellent scientific support for some of the proposed lines of research.

Missoula presents excellent opportunities for close association with University faculties and graduate students, and it has good library services. The University of Montana is located at Missoula; within 200 miles are three other major universities, all with demonstrated competence for research and training in wild-land management. Thus the Forest Service could develop strong cooperative research with these universities on critical wilderness resource problems.

The proposed research would be carried on by the Forest Service's Intermountain Forest and Range Experiment Station.

Estimated cost

This wilderness research program will require $300,000 annually to finance an interdisciplinary team of scientists and support staff necessary to meet the program's objectives.

AMOUNT OF FUNDS FOR RESEARCH

Chairman Hayden. The estimated cost of this program is $300,000. How much of the forest recreation budget estimate of $811,000 is to be devoted to wilderness research?

Mr. Jemison. We have in this budget we are considering $175,000 identified for wilderness recreation research.

Chairman Hayden. Well, in what areas would these funds be expended?

Mr. JEMISON. The principal areas where we are doing or will do wilderness research are in the Boundary Waters Canoe Area of the Lake States, and in the northern Rocky Mountain area, in Idaho and Montana.

Chairman HAYDEN. What are the amounts of money there involved?

Mr. JEMISON. We would propose to add $50,000 to the program in the Boundary Waters Canoe Area, $75,000 for the wilderness recreation research program at Missoula, Mont. We would also strengthen the program in the Pacific Northwest by $55,000. This would be directed toward improving our knowledge of visitor requirements and visitor preferences to put a sounder basis under the planning of recreational developments. $70,000 would go to California, where we are working on landscape management problems. You know, the Forest Service and other agencies, in the West particularly, are under heavy pressure to reduce or eliminate clear-cutting practices that some people don't understand, and that they think of as an eyesore on the landscape. What we are trying to do with this research program is incorporate into our timber harvesting techniques the know-how that will reduce the impact by managing the landscape in an effective way, and thereby relieve the pressure from those who want us to reduce timber utilization.

Finally, we would put about $40,000 into stepping up our recreation research on private properties, especially dealing with the ways to make recreational developments more a part of rural economic improvement. There also is, I think, a $42,000 balance here which would be used for grants to universities, particularly to study the small owner recreation problem.

CLOUD SEEDING TECHNIQUES

Chairman HAYDEN. I see. I note that a part of your forest fire research includes developing operational cloud-seeding techniques. How much do you propose to expend on this, and where will you do the research work?

Mr. JEMISON. The budget includes $180,000, Mr. Chairman, for this work, the same as we have in the current fiscal year. This project is headquartered at Missoula, Mont., and it deals with the techniques of preventing lightning or reducing lightning, I should say, in the entire Rocky Mountain area, including Arizona and other parts of the Rocky Mountain system.

GRANT TO INSTITUTE OF ATMOSPHERIC SCIENCES

Senator MUNDT. At that point, Mr. Chairman, I think this is a very interesting development. Seeded clouds are less likely to have lightning strokes, and as you know, out in the Rapid City, S. Dak., near our forests out there, the Institute of Atmospheric Sciences has been doing a lot of work on cloud seeding at various levels.

It seems to me that this is one place where various branches of the Government can and should work together. That happens to be under the Bureau of Reclamation out there.

I wonder, Dr. Jemison, if you would look into this matter, and let me know whether if the money were to be made available, you would be in a position to contract with the institute, say, for about $50,000 per year to continue this type of work? Their job is primarily to make it rain and to cut down on hail. It would certainly be a great national dividend, if in fact, it can be demonstrated that it is likely to cut down lightning strikes which create forest fires.

Mr. JEMISON. Senator Mundt, we certainly would be glad to look into this and give you a report. I might say that many years ago, when this program started, I had the privilege of going to Rapid City and working with these people, and I know that since the beginning we have worked very closely together. I am not sure of this, but I believe that we have in the years past entered into contracts with the institute there, and certainly have pooled our efforts, in a very productive way.

Senator MUNDT. It seems to me that at just a very minimal cost, it might provide you with useful information, which you can build into your whole firefighting and forest protection program, and I would be happy to have this report.

Thank you.

Mr. JEMISON. Yes, sir.

BIOLOGICAL CONTROL OF FOREST INSECTS AND DISEASE

Chairman HAYDEN. Have you any significant research accomplishments to report in biological control of forest insects and disease?

Mr. JEMISON. Yes, there has been some really outstanding progress here, Senator Hayden. I might give just two examples: one in the insect field, and one in the disease field.

This past year, for the first time, our scientists in California have been able to synthesize a bark beetle attractant. This has proved to be a very potent attractant in the laboratory, and now this coming season, we are going out into the field. Of course, the significance of this is that with a sexual attractant, you can lure beetles to their death, so to speak, and perhaps then have a method of controlling destructive bark beetles, without the hazards of some chemical methods that we now have to employ.

In the disease field, we have made real progress by finding a soil antibiotic which is extremely antagonistic to root rot organisms. In dilutions of as little as 50 parts per billion it effectively stops the growth of root rot infections. We think this is a real breakthrough, and we hope to expand on this research.

BARK BEETLE CONTROL

Senator MUNDT. Mr. Chairman, let me say a word about the bark beetle. I think that is very encouraging. It appears to be sort of a breakthrough on this matter. I notice you have $2,630,000 in your request for bark beetle control this year. Is that going to be devoted largely to this new breakthrough, if that is the proper description of what has happened?

Mr. CLIFF. Mr. Chairman and Senator Mundt, the attractant that has been developed, as I understand it, is effective only on one bark beetle, the Ips beetle, and the Ips beetle is not the species that we have been fighting in the Black Hills, or the one which we are fighting in the Targhee and Teton areas in Wyoming and Idaho.

Senator MUNDT. It is an altogether different kind of bark beetle?

Mr. CLIFF. It is a different species. However, the fact that we are able to synthesize the attractant for this one bark beetle gives us encouragement to think that we may be able to synthesize an attractant for the other bark beetles. We will be working on that, but as of right now, we still have to go ahead with the control work on these other bark beetles.

Senator MUNDT. What is the situation out in western South Dakota on your bark beetle program?

Mr. CLIFF. I think it is pretty well under control there now.

Senator MUNDT. That is what I had been led to believe.

Mr. CLIFF. We had a bad flareup there a year or two ago, but it is my understanding that it is now on a maintenance basis. Is that right, Art?

Mr. SPILLERS. There are indications that it is coming back this spring, Senator Mundt.

Senator MUNDT. Beetles are coming back, you mean?

Mr. SPILLERS. Yes, sir; into the national forest in the Black Hills, and we have just recently assigned $59,000 to work on the Black Hills beetle. We are concerned that it is building up, and we are going to take action against it this year.

Senator MUNDT. But you haven't——

Mr. SPILLERS. We also are providing for it in the fund for 1968, Senator.

Senator MUNDT. You have not found any new attractant or any other device for fighting the Black Hills bark beetle?

Mr. SPILLERS. No, sir; unfortunately, we have not. It is very much like the mountain pine beetle that the Chief told you about that is causing so much damage down in the Targhee National Forest.

Mr. CLIFF. I did not intend to interrupt Dr. Jemison's comment on the sex attractant. If I have made any error in describing that, George, I would appreciate it if you would correct me.

Mr. JEMISON. I think you did very well, and rounded out my statement.

Senator MUNDT. Very good. Thank you.

FOREST ENGINEERING RESEARCH

Chairman HAYDEN. You are asking for some $215,000 additional in forest engineering research during the coming year. Would you please indicate the research projects to which you plan to distribute this increase, showing the amounts to go to each of the projects?

Mr. JEMISON. Mr. Chairman, I already have covered, I think, the fact that $90,000 of the increase will be used to strengthen the aerial logging research in the Pacific Northwest. We plan to put $50,000 at the Houghton, Mich., Engineering Laboratory where we are working on methods of using small-sized, low-grade material for pulp chips, and on the problem of separating bark from chips, a very necessary requirement in using this low-grade material. An amount of $40,000 would go to our engineering laboratory at Morgantown, W. Va., to speed the work on harvesting and log transportation problems in the rough topography of the Appalachians, and $35,000 would go to our Southern Engineering Laboratory in Alabama, where we are working on methods of seeding forests and of harvesting primarily small-sized pulpwood stands in the flat terrain of the South.

FOREST SURVEY

Chairman HAYDEN. What have you accomplished during the past year in the forest survey, and why is an increase needed?

Mr. JEMISON. During the past year, we completed reinventorying 49 million acres of forest land in 10 States. We completed analytical reports and published these for five States. We completed a special timber supply-demand analysis for the Columbia River area of the Northwest. The problem with the nationwide forest survey is that with increasing costs, we have gradually been falling behind in making reinventories that are necessary if we are to pick up the major changes or trends, and get the information necessary to plan ahead for many of our important forestry programs.

We are currently on about a 12-year average reinventory schedule, and we would like to get down to about an 8- to 10-year schedule, in order to have information accurate enough to make major program decisions. The $103,000 increase proposed for the survey would be used primarily to strengthen the work in the Southern States and in parts of the north central and northeastern area.

FOREST ECONOMICS RESEARCH PROGRAM

Chairman HAYDEN. Will you please explain your forest economics program and indicate why you need an increase of $297,000?

Mr. JEMISON. Mr. Chairman, in our forest economics research program, we find out what kind of forestry management practices pay, and how much. This work is directed at finding out the costs and benefits of alternative systems of management, such as thinning and reforestation, and other stand improvement practices; it is aimed at finding out how a land manager can fit together in the best way alternative measures that deal with not only timber, but with watershed management, wildlife habitat development, and so on. In this way the forester knows how he can use limited funds to maximize the payoff.

This is what we are doing in our forest economics research. The increases we have proposed here would be used primarily to make a study in depth of our timber production program, involving Douglas-fir, primarily, in the Northwest, to determine the comparative effects of alternative rotation ages, intensities of cutting, thinning programs, road developments and the like.

Also, we would accelerate work in finding out how to fit multiple use practices together to maximize benefits.

USE OF WOOD IN HOUSING

Chairman HAYDEN. Please explain just what contributions you are making and expect to make to the more effective use of forest products in housing and in other major uses.

Mr. JEMISON. Mr. Chairman, in the last year or two, we have brought together a great deal of information that we have developed in our forest products research program to the problem of making better use and fuller use of wood in housing. We have concentrated particularly on some of the lower quality woods, such as ponderosa pine that we find in the Southwest, where the general run-of-the-woods tree produces a rather low quality lumber.

I brought here this model house, which illustrates some of the new floor systems, roof systems, and wall systems, that have been developed in this research.

I would just like to mention specifically two of them. This cutaway I am holding illustrates a wall system where the 2 by 4 studs placed flatwise can be 4 feet apart, and where an insulating board and sound barrier is placed between them. It is surfaced on the inside with, you see, a gypsum board face on low-quality pine back stripping.

Now, the interesting thing about this is with this design, the house wall can be put up in large panels, say, 4 by 8, or 4 by 12 feet.

The roofing system is interesting, in that it uses low-grade backing made of plywood, faced with a fiber or plastic covering, which goes on the truss system on the roof with mastic and blind nailing. This roof will certainly outlast the life of the house, 50 years or more.

Now, the significant thing of all of this research is that we estimate a saving in cost of materials of $100 to $200 and $1,000 saving in the cost of labor per house. If only one-tenth of the homes to be built this year—1¼ million homes—used this system, the saving would be more than we have spent on all forest products research in the last 40 years. I think this illustrates the value of this type of research.

PULP AND PAPER RESEARCH

You asked about other fields. Let me just say that we have made similar progress in the field of pulp and paper research. I think I mentioned last year that we have perfected a system that is called the polysulfide system of pulping, in which we can increase the yield of usable pulp by 20 percent from the same unit of raw material. This year, we have gone farther with this process, and it has some very important antipollution features involved with the system.

STUDY OF POSSIBILITY OF PLYWOOD PLANT IN SOUTH DAKOTA

Senator MUNDT. What you have just said about plywood brings to mind that a number of my constituents out in South Dakota have talked to me many times about the possibility of the Forest Service conducting a study of the potential of a plywood plant in that general area. They have the feeling that the timber out in that area would be very suitable for that purpose, and I would appreciate it, if you would have your people look into this idea, and supply my office within the next few weeks, before markup time over here, a report as to whether or not you feel that such a study might be conducted. If you find such a study feasible please provide the estimated cost of the study. We have, as you know, a very fine forest products facility out in Rapid City, which could conduct this study. You may rather have it conducted by someone else. That is not important, but we would like to find out whether or not there is really enough timber there, and enough demand for plywood, to justify somebody putting money in it.

Mr. CLIFF. We will be glad to do that, Senator.

SAVINGS IN USE OF WOOD FOR HOUSING

Senator MUNDT. Thank you very much. That is an astonishing saving. Would you be able to break that down, Mr. Jemison, in the kind of homes that you keep coming to us for more reprograming money, because the cost keeps going up? And our limitations are pretty low. In a $27,000 house, as you are building it now, have you any idea what it would save in terms of one house?

Mr. JEMISON. Well, these figures I gave are average figures per house. I mentioned, I think, $100 to $200 per house in material saving costs, but the main saving of $1,000 per house is in labor, because of the engineering and the possibility of using a panelized construction rather than individual strip construction. So I would say that for a $27,000 home that is built mostly of wood, using this system, those savings would be representative.

Senator MUNDT. Maybe I should straighten up the record. Our clerk reminds us that you have only $21,500 allotted for the house, instead of $27,000. I guess $27,000 is a reprograming figure we look at all the time. All right.

ACCELERATION OF RANGE AND WILDLIFE HABITAT RESEARCH

Chairman HAYDEN. No increases are requested in several forestry research categories. Does this mean that the long-range study does not provide for acceleration of this work—range and wildlife habitat, for example?

Mr. JEMISON. Mr. Chairman, the long-range study does project ahead for the next 5 to 10 year periods increases in each of the categories or research fields that we have mentioned, and that appear in our budget. This particular year, there is no increase proposed for wildlife habitat and range management research as you suggest, and one or two other items. This is because, within the overall budget structure, we felt that the places where we put the increases were of higher priority than these items you mentioned.

Eventually, we would hope to program for these other areas, however.

RECRUITING SCIENTISTS

Chairman HAYDEN. How many additional scientists would you recruit if the budget increases for research are allowed? Are there problems of finding competent scientists in areas of expansion?

Mr. JEMISON. Mr. Chairman, if the budget increases are allowed, we would expect to add about 30 scientists. We have not had any particular problem, generally speaking, in recruiting scientists.

There are, of course, one or two problem areas. I might mention economics, for one, where we have had some difficulty in recruiting and holding economists. However, our needs are rather modest in this area, and we don't really anticipate any particular problem.

WOOD CHEMISTRY BUILDING, MADISON, WIS.

Chairman HAYDEN. The budget estimate for research construction is $2,278,000. Of this amount, $1,300,000 is for the wood chemistry building at the Forest Products Laboratory, Madison, Wis. In fiscal year 1965, $3,800,000 was appropriated for this purpose. What has been the difficulty that the construction has not gotten under way, and that in order to build this addition, another $1,300,000, making a total of $5,100,000, is necessary?

Mr. JEMISON. Mr. Chairman, I will have to go back to fiscal year 1963 to answer your question.

At that time, we discussed before this committee a wood fiber and wood chemistry laboratory project that would cost an estimated $4 million. Planning funds were provided, and during the architectural planning of this laboratory structure, it became evident that we were not going to get the entire structure for the $4 million that had been previously mentioned.

In spite of economies in the design, we found that when we went to invite bids for the construction contract in fiscal year 1965, the lowest bid exceeded the $3.8 million we had appropriated that year by, in round numbers, $1 million. We rejected all of the bids, and readvertised, and still the lowest bid was a million dollars over the amount we had.

Our only alternative was to eliminate the wood chemistry laboratory wing. Now, we made a study of comparative building costs on the campus of the University of Wisconsin, and we found that the costs were just running that much higher than the estimate made several years previously. Since that time, of course, building costs have gone up more and our current estimate is that to build this wood chemistry wing will now require $1.3 million.

I have a photograph here that might be useful to show at this time. The top picture there shows the new wood fiber laboratory, and outlined in white is where the wood chemistry laboratory would have gone, had we been able to build it. That is the spot where the wood chemistry wing will go, if the budget request is approved. This is a very fine laboratory. It makes good use of wood, of course, and the pulp and paper wing, which is almost completed, is a really outstanding building. We are very proud of it.

FOREST SCIENCES LABORATORY, MOSCOW, IDAHO

Chairman HAYDEN. When was the first stage of the Forest Sciences Laboratory at Moscow, Idaho, built?

Mr. JEMISON. The first stage of that laboratory was built with fiscal year 1962 funds.

Chairman HAYDEN. I judge from the description of this proposed addition that it will require $800,000 to build the second phase of the laboratory. Is that right?

Mr. JEMISON. Yes. The laboratory structure itself is estimated to cost $600,000, but an additional $200,000 is needed for greenhouses and auxiliary facilities.

FOREST SCIENCES LABORATORY, RESEARCH TRIANGLE

Chairman HAYDEN. When was the first stage of the Forest Sciences Laboratory at Research Triangle built?

Mr. JEMISON. Yes, that is near Durham, N.C. That was built in 1961.

RESEARCH LABORATORY, RHINELANDER, WISCONSIN

Chairman HAYDEN. Well, when did you build the existing laboratory at Rhinelander, Wis.?

Mr. JEMISON. That was built in fiscal year 1959.

STATUS OF CONSTRUCTION FUNDS PROVIDED IN 1967

Chairman HAYDEN. Last year funds were provided for the construction of or addition to four laboratories and funds were also provided for design and specifications for 10 others. Would you please place in the record a statement indicating the present status of the construction and the design work?

Mr. JEMISON. Yes, we will be glad to do that, sir.

(The information follows:)

Location	Amount (thousands)	Estimated completion
Construction funds:		
1. Athens, Ga	$1,000	Intermediate working drawings completed. Construction to start June 1967.
2. Carbondale, Ill	690	Intermediate working drawings completed. Construction to start May 1967.
3. Olympia, Wash	450	Construction started November 1966.
4. Oxford, Miss	450	Final working drawings being prepared. Construction to start May 1967.
Planning funds: [1]		
1. Berea, Ky	40	March 1968.
2. Burlington, Vt	40	February 1968.
3. Corvallis, Oreg	170	June 1967.
4. Delaware, Ohio	72	January 1968.
5. Durham, N.H	75	Do.
6. LaGrande, Oreg	28	June 1967.
7. Lincoln, Nebr	28	February 1968.
8, Madison, Wis	180	June 1968.
9. Nacogdoches, Tex	25	May 1967.
10. Provo, Utah	37	February 1968.

[1] All projects are now under architectural and engineering contracts. Plans will be completed on dates shown.

OFFICE-LABORATORY, FORT MYERS, FLA.

Chairman HAYDEN. Senator Holland has proposed construction of an office-laboratory facility at Fort Myers, Fla. Have plans and specifications for such a building been prepared?

Mr. JEMISON. Yes, these plans are complete and available. They were made as a result of a $16,000 planning appropriton that the Congress made in fiscal year 1965.

Chairman HAYDEN. How much is it estimated that construction of this facility would cost?

Mr. JEMISON. We estimate this laboratory would cost $220,000, sir.

STATE AND PRIVATE FORESTRY COOPERATION ACTIVITIES

Chairman HAYDEN. You are not proposing any changes in your State and private forestry cooperation activities. Do you have any particular comment you care to make regarding them?

Mr. CLIFF. Mr. Chairman, I would like to make a general comment on State and private forestry. We do propose a $100,000 increase for general forestry assistance, but other than that, this budget does not propose any increases. We consider that our State and private forestry responsibilities are very important.

The importance is illustrated by the fact that nearly three-quarters of all of the commercial forest land in this country is privately owned. About 73 percent is privately owned, and the extent to which this country is going to be self-sufficient in forest products in the future is going to depend largely on how well this three-fourths of the forest land is managed.

A little over one-fourth of our commercial forest land is publicly owned. The public forests, mainly national forests, are being reasonably well managed. We are moving ahead on the management of the public forests.

We are not making as good progress on the private forests. Of the three-fourths of the commercial forest land that is privately owned, only 13 percent of the total 100 percent, is owned by forest industry. The industrial forest landowners are making good progress in forestry, on this 13 percent.

Sixty percent of the total commercial forest land is owned by what we call small owners. On the 60 percent that is in the hands of these small owners, the forestry programs are lagging. We are not making as good progress as we need to make, in reforestation, forest protection, and forest management on this large amount of forest that is in small ownerships.

Half of this is in the hands of farmers. It is an integral part of farming activity, or should be.

The other half of this 60 percent is owned by a large spectrum of people who own it for various purposes. But it is land that should be better managed, and land on which we are going to depend in the future for more and more products and services; not only timber, but good watershed protection, wildlife, recreation, and so forth.

We are emphasizing multiple-use management of these properties, and we are trying to encourage better management in every way we can. We are making some progress, but I am sorry to say it is not enough. We cooperate on these programs with all 50 States. Every State in the Union, and Puerto Rico is now in our cooperative program. We are very proud of our cooperation with the States. Arizona was the last one to come in, just this last year, Senator. We are glad to have Arizona in this cooperative program, and that made the 50th State. There is not a great deal of privately owned forest land in Arizona, which is probably the reason that it was late joining the program.

In this budget, we were unable to recommend increases for State and private forestry programs. We hope in future budgets that we can move forward in proportion to the importance of this program.

NEW DEPUTY CHIEF

We have a new deputy chief in charge of State and private forestry activities in the Forest Service. He is Mr. E. M. Bacon, who replaced Boyd Rasmussen, who was promoted to the directorship of the Bureau of Land Management. Mr. Bacon is ill today, and is not here. His associate, Mr. Arthur Spillers, is here, and he will answer any further questions that you might have on State and private forestry activities.

HEADQUARTERS BUILDING, CUSTER, S. DAK.

Senator MUNDT. Mr. Chairman, we jumped into the State and private forestry from the construction. I had one question on construction. It deals with the status of the building at Custer. We appropriated money for the design of a headquarters building last year.

May I have something on that?

Mr. CLIFF. I am going to ask Mr. Hendee to comment on that. That is an administrative office.

Senator MUNDT. That is a different type?

Mr. CLIFF. That is a facility for administration, and not research. Mr. Hendee will comment.

Mr. HENDEE. Yes, Senator Mundt, you recall in the current year's budget, we had planning money for the headquarters building at Custer, S. Dak., and we have moved forward to where we have the architectural engineering contract about ready to let.

It will be let sometime this month. And they will go forward with the plans, the schedule that they have would indicate that the plans and final drawings would be completed by sometime in December of this calendar year.

Senator MUNDT. Thank you.

STATE AND PRIVATE FORESTRY ACTIVITIES

Mr. BAKER. Mr. Chairman, I would like to add to what Mr. Cliff just said about State and private forestry. The Secretary of Agriculture also puts a very strong emphasis and high priority on the importance of this undertaking, and is pressing us to expand and strengthen State and private forestry activities of the Forest Service and the Department of Agriculture generally.

Senator MUNDT. Suppose you have a piece of forest land that is privately owned. What can you do? What tools do you have? Does the State use tax devices, and so on, to encourage people to engage in the proper practices, or what do you do?

I know what you do in the public forest. What do you do with the private forests?

Mr. BAKER. Let me mention just a few, Senator Mundt, and I am going to ask Ed Cliff to go into considerable detail on this, because this is an important item.

We need better tax structures and a forest crop insurance program like we have crop insurance programs for wheat. We need a better credit system for privately owned forests. Improved development, and harvesting operations, and credit programs are needed. We need a greater recognition of the importance of forests, farm forests, small land ownership, as a multiple-use resource, to provide income to small landowners, both farmers and nonfarmers and for the public benefits.

Ed, I wish you would expand on some other aspects of this. It is not fully understood, Senator Mundt, as you know, and there is no idea here that the Federal Government ought to either exercise land use control or management control over privately owned forest land.

On the other hand, there is a national interest in the conservation, preservation, use, and development of the total forest resources. Multiple use on privately owned land should be encouraged by the Federal Government through technical assistance, credit, educational activities, and other efforts, that would be of assistance to private landowners. They could thus attain their own aspirations in the use of their forest resources.

Ed?

Mr. CLIFF. Thank you, John.

I am glad you mentioned the fact that these programs we have now and those that we contemplate are entirely voluntary. There is no regulation.

Senator MUNDT. I would assume they would have to be because the tracts are privately owned. With 73 percent of the land owned by the private individual it creates a problem.

Mr. CLIFF. We have about four major programs going now with the States. One is forest protection, where we contribute part of the cost of forest firefighting and fire prevention, on State and private lands.

We have a similar program, where we help with the insect disease control on a matching funds basis.

There also is a cooperative program where the Federal Government helps finance the employment of service foresters to work with these small landowners. Technical assistance is rendered to the private landowners who request it through the service foresters or sometimes called farm foresters. These men are employees of the State forester.

We work all of these programs through the State forester. We think this is the proper way to do it. This program is very similar to the county agent system, where the Federal Extension Service contributes to the employment of the State extension people and the county extension people. This effort should be strengthened, more service foresters are needed to do the job that needs to be done.

Senator MUNDT. What keeps that part of the program from proceeding with optimum speed? Is it a failure of the Federal Government to provide the matching funds or a failure of the States?

Mr. CLIFF. In the cooperation in forest management and processing program there are two or three reasons why we have not moved faster. First, the program is not well understood and lacks general public support. Secondly, we can't move any faster than the States are able to match the funds. In total the States are more than matching funds for cooperative forest management. In many States we are fully matching State expenditures. There is a limitation in the law as to the total amount that can be appropriated by the Federal Government.

This will have to be looked at. We are limited in progress by the extent to which the States can get financing and can proceed.

The States are way overmatching our fire control work now, and they are way overmatching our forest planting stock production program. The latter is a program where we help underwrite the cost of producing nursery stock for planting out on forest lands.

Senator MUNDT. How about the farm forestry? Are they overmatching that, or undermatching?

Mr. CLIFF. They are more than matching it. The exact figures, I don't have in mind.

STATE MATCHING OF FEDERAL FUNDS

Senator **Mundt**. Would you put a breakdown in the record?

Mr. **Cliff**. We can supply that for the record.

Senator **Mundt**. State by State?

Mr. **Cliff**. Yes; we would be glad to.

(The information follows:)

Cooperative forest management progress and expenditures, fiscal year 1966

State	Expenditures		
	Federal	State	Total
Alabama	$45, 168	$45, 168	$90, 336
Alaska	15, 535	15, 535	31, 070
Arkansas	56, 096	56, 096	112, 192
California	53, 100	89, 953	143, 053
Colorado	45, 100	52, 151	97, 251
Connecticut	32, 700	44, 771	77, 471
Delaware	5, 100	5, 364	10, 464
Florida	139, 400	258, 446	397, 846
Georgia	134, 100	168, 584	302, 684
Hawaii	12, 000	12, 172	24, 172
Idaho	22, 585	28, 780	51, 365
Illinois	72, 700	82, 894	155, 594
Indiana	57, 000	58, 617	115, 617
Iowa	42, 200	45, 672	87, 872
Kansas	46, 500	46, 500	93, 000
Kentucky	124, 500	178, 037	302, 537
Louisiana	46, 900	47, 169	94, 069
Maine	80, 100	104, 238	184, 338
Maryland	61, 500	96, 276	157, 776
Massachusetts	36, 833	36, 833	73, 666
Michigan	98, 300	114, 454	212, 754
Minnesota	66, 200	156, 079	222, 279
Mississippi	79, 200	103, 282	182, 482
Missouri	111, 400	175, 845	287, 245
Montana	20, 726	20, 726	41, 452
Nebraska	22, 980	22, 980	45, 960
Nevada	18, 965	18, 965	37, 930
New Hampshire	43, 100	52, 583	95, 683
New Jersey	37, 400	62, 379	99, 779
New Mexico	28, 200	29, 839	58, 039
New York	165, 900	215, 058	380, 958
North Carolina	167, 900	310, 005	477, 905
North Dakota	26, 214	26, 214	52, 428
Ohio	92, 900	113, 213	206, 113
Oklahoma	12, 437	12, 437	24, 874
Oregon	32, 700	41, 531	74, 231
Pennsylvania	120, 200	139, 139	259, 339
Rhode Island	4, 673	4, 673	9, 346
South Carolina	101, 921	101, 921	203, 842
South Dakota	23, 457	23, 457	46, 914
Tennessee	74, 390	74, 390	148, 780
Texas	49, 800	57, 037	106, 837
Utah	15, 273	15, 273	30, 546
Vermont	69, 500	125, 880	195, 380
Virginia	181, 800	286, 201	468, 001
Washington	55, 400	82, 140	137, 540
West Virginia	70, 600	95, 331	165, 931
Wisconsin	215, 600	269, 787	485, 387
Wyoming	11, 857	11, 857	23, 714
Fiscal year 1966, U.S. total	3, 148, 110	4, 235, 932	7, 384, 042
Puerto Rico	23, 000	23, 000	46, 000
Grand total	3, 171, 110	4, 258, 932	7, 430, 042

FUNDS PROVIDED BY STATES

Mr. **Spillers**. They are providing, if I may add, the States are putting up $4.9 million compared to our $3.5 million in farm forestry. They are all overmatching us in farm forestry.

Senator MUNDT. Yes, they are. Are we limited under the law?

Mr. SPILLERS. We are limited under the law to $5 million.

Senator MUNDT. But we are not putting that much up?

Mr. SPILLERS. No, sir; we are only putting up $3.5 million.

Senator MUNDT. If we put up the five, we would be just about matching.

Mr. SPILLERS. With respect to fire, Chief, if I may add, we are putting up $12.8 million; the States are putting up $72.3 million; thus, six times as much as we are in the fire program.

LETTER FROM SENATOR TALMADGE

Chairman HAYDEN. I will place in the record a copy of a letter addressed to me by Senator Talmadge proposing an increase of $3 million in the activity "Cooperation in forest fire control." What comment do you have with regard to this proposal?

Mr. CLIFF. May we supply a statement for the record?

Chairman HAYDEN. That will be satisfactory.

(The documents follow:)

UNITED STATES SENATE,
COMMITTEE ON FINANCE,
February 3, 1967.

Hon. CARL HAYDEN,
Chairman, Interior and Related Agencies Subcommittee,
Appropriations Committee, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: It has been brought to my attention that our states are in great need of an increase in cooperative forest fire prevention funds. This need has been caused by the increase in costs of salaries, equipment, operation and maintenance for fire protection.

Because of the recent Fair Labor Standards Act of 1966, wages paid for fire protection have been increased, making an unexpected demand on the available funds.

Since 1962 the states have received only $200,000 increase for fire protection, yet four states have been added to the program and, in addition, new areas are now being protected in the participating states. Because of this additional coverage the percentage of funds allocated to the various states have been forced to be reduced to make this fire protection possible. The states in 1965 spent $63,778,950 for fire protection, while the Federal Government only provided $12,811,000 in 1967. It should be noted that in 1965, federal participation was only 18.59% of the total.

An adequate fire protection program in each state is basic to sound forestry and related programs. Dependent upon this protection are soil and water programs, game and fish, tourism, and our timber for private industry.

Various state forestry departments consider the need of forest protection as today's greatest problem. Unless they are met, all other forest expenditures may be drastically cut in the future to provide for adequate fire protection. It is for these reasons that I strongly urge your consideration in increasing the appropriation for forest fire control under the State and Private Forestry Cooperation Program to $15,811,000.

With best wishes and kindest personal regards, I am.

Sincerely,

HERMAN E. TALMADGE.

DEPARTMENTAL STATEMENT

In 1966 a joint study of the forest fire protection situation on the State and privately-owned forest and watershed lands of the nation was completed by the Forest Service and the cooperating State Foresters in 49 States. It was determined that over 519 million acres should be protected under the cooperative program and that the estimated cost of protection to levels of tolerable loss would be $123 million.

Fiscal year 1966 expenditures were:

	Amount	Percent
State	$72,249,427	85
Federal	12,803,000	15
Total	85,052,427	100

Thus, in FY 1966 about 69 percent of the total forest protection need was being met.

During the period 1961–1965 the average annual rate of damage to or destruction of forests and watersheds amounted to about 4 million acres.

We share with the cooperating State Foresters, as expressed by their National Association, the conviction that the determination of need and cost is valid. We share their conviction that intensified fire protection to prevent destruction of privately-owned forests is basic to resource development and the support of dependent industries and communities.

An accelerated protection program could be undertaken if additional funds were made available. These funds could be effectively used, primarily by the States, to provide needed additional fire prevention and protection capability. If appropriated at the level proposed, the Federal share would be increased from 15 percent currently to 18 percent compared to an authorized Federal sharing level of 50 percent.

COOPERATIVE FOREST FIRE PREVENTION

Chairman HAYDEN. Senator Bible has requested that there be inserted in the record a copy of a letter that he has received from Mr. George Zappettini, State forester of Nevada, in which he supports an increase of $3 million in fiscal year 1968 for cooperative forest fire prevention.

(The letter follows:)

STATE OF NEVADA,
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES,
DIVISION OF FORESTRY,
Carson City, Nev., March 1, 1967.

Hon. ALAN BIBLE,
Senate Office Building,
Washington, D.C.

DEAR ALAN: I have been informed that the National Association of State Foresters is requesting an increase of $3 million in federal Clarke-McNary funds for cooperative forest fire prevention for the fiscal year beginning July 1, 1967. This will raise the fund from the present $12,811,000 to $15,811,000. Present law authorizes up to $20,000,000.

The request for increase in funds is based on the following factors:

1. Since 1962 costs to states for forest fire prevention have greatly increased for salaries, equipment, operation, maintenance and others.
2. New federal wage and hour laws effective 1967 and 1968 will greatly affect every phase of operation with expanded increases.
3. U.S.D.A. Timber Trends in the U.S. Resource Report #17 predicts an 80% increased demand for forest material by the year 2000.
4. Private commercial forest lands comprise 72% of total in U.S. and account for 75% of annual timber cut. Small forest landowners own about 60% of the commercial forest area of private ownership.
5. Since 1962 states have received only $200,000 increase in forest protection funds. Yet four states have been added to the program and additional forest area in some other states. Funds have been reduced to all states to make these additions possible.

6. Federal funds now total $12,811,000 in 1967. The states receive $11,826,500—$1 million administration purposes. The states spent $63,778,950 in 1965 for forest fire prevention—and it increased in 1966. In 1965 federal funds were only 18.59% of the total.

7. An adequate forest fire prevention program in each state is basic to a sound forest and related program. Dependent upon it are soil, and water, game and fish, recreation, tourism and the growing of timber for industry.

8. The various state forestry departments consider the needs of forest protection as today's greatest problem. Unless these needs are met, all other forest expenditures are on an uncertain future.

At present in Nevada, surveys show that approximately five million acres of forest and watershed in State and Private ownership are in need of protection. Of this we are extending adequate protection to less than a million acres. We have brought this to the attention of our legislators and county commissioners, but they are faced with ever increasing demands from other sources, especially education, and fire protection takes a back seat. However, in our present budget the State and counties are providing 80% of the total, the remainder coming from federal Clarke-McNary funds. Therefore, if an increase in federal funds was granted, Nevada would definitely be in for a fair share. This would, of course, be of great help in extending protection to our vital water producing areas.

Your consideration of the matter would be deeply appreciated.

Very truly yours,

GEORGE ZAPPETTINI,
State Forester.

1967 HARDWOOD IMPROVEMENT PROGRAM

Chairman HAYDEN. In the second supplemental appropriations act for 1967, $200,000 was budgeted and approved by the Congress for the purpose of initiating a hardwood improvement program on State and private lands. Would you please bring the committee up to date on the use made of this fund and the results obtained under this activity for which you are requesting an extra $100,000 in fiscal year 1968?

Mr. CLIFF. Mr. Spillers will respond to that, sir.

Mr. SPILLERS. Senator Hayden, you probably will recall that during the year, your committee provided us with $200,00 as a supplement for us to begin this type of work. This work was suggested by the President's Council of Economic Advisers because of the rapidly rising prices for hardwood timber and, also, the growing scarcity of quality timber. The Timber Trends study that we had made a few years ago clearly identifies the problems of supply of quality timber, both as to the short term and the long term. The sizes, the species and the grades of fine hardwoods that our industry and country needs are in short supply.

I would just like to show you this chart. Since October 1966, prices have fallen off largely because the select red oak flooring had dropped very rapidly and that was brought about by a decline in housing starts.

Toward the end of 1966, the housing starts were going at a rate of about a million a year. At the beginning of this year, we are estimating that they are running at about 1.1 million and experts tell us that for the last half of 1967, housing starts are expected to be up to 1.4 million, so we think that the decline has bottomed out, that we are on the up trend.

I did not show you some other species on here besides red oak. If I had plotted maple, No. 1 common gum, and black walnut, it would have shown that they have continued to go on up in price. I noticed the other day that the furniture manufacturers are again having some difficulty in filling their orders. We have a very difficult hardwood tree quality situation and if it continues, of course, it means greater scarcity, and the public just won't have the good, high quality hardwood that they want.

The industry, of course, will also be adversely affected by the inroads of substitutes, so we would like to work on this program with the industry and with the States.

The Hardwood Associations, at first, because of the decline in the prices during the second half of calendar year 1966, thought that this program was unnecessary. When I say the associations, I must except the Fine Hardwood Association, and the Walnut Association, who are very much interested in this program.

Now, since then, the Hardwood Associations are setting up a subcommittee of hardwood technicians, to help work with the small hardwood lumber producers. We think this is a verification of the need to do something about the hardwood situation. With the $200,000 that you granted us, we set up some pilot projects to see just what we could do to step up the growth of high quality hardwoods.

We have gotten well started in Michigan, Ohio, Pennsylvania, Georgia, and Virginia, and we are also doing some planning work in Tennessee, North Carolina, and South Carolina.

Of course, we have got quite a problem here, because the Timber Trends study showed us that a great number of our hardwood trees are small, of low quality, or are culls, and even though the growth and the inventory of hardwoods is constantly building up, that is just for the total amount of hardwoods, regardless of size or quality.

The hardwoods that are declining are the bigger size classes and the better species. In fact, our survey showed that only 29 percent of the hardwood sawtimber volume was in trees with grades 1 and 2.

So we have got a big problem here, to try and overcome this scarcity of high quality hardwoods. Does that answer your question, sir?

Chairman HAYDEN. It does.

GENERAL FORESTRY ASSISTANCE PROGRAM IN APPALACHIA

Under the general forestry activity you refer to an Appalachian regional program.

How much was devoted to this program under general forestry assistance? Please describe how the funds were expended and what advantages were gained?

Mr. SPILLERS. The Appalachian area is about 80 percent forested. We are doing everything there we can to accelerate the State and private forestry programs.

Under the general forestry assistance program, we were given $322,000, sir, and we distributed that to 11 States from Alabama to New York. The objective here is to help the small woodland owners, and the primary processors. As you know, in that area, most of the private woodland ownerships are very small. We are trying to carry to them the better management techniques that we have on the national forests, including multiple use. We are trying to help the small woodland owner in Appalachia practice the very best type of forestry he can. Of course, to do that, he needs protection from fire and insects; he needs help in tree planting; and he needs help particularly in management, marketing, and utilization and the sale of his products.

So that money is being spent to help the whole Appalachian community. We find that it is not only helpful to the individual landowner, but it is also helpful to the community, the small industries, and it makes Appalachia a better place to live in and to visit. This is also helpful to the entire Nation.

FOREST ROADS AND TRAILS

Chairman **Hayden**. For forest roads and trails in fiscal year 1968, you propose an appropriation of $110,500,000, an increase of $9,270,000 over the amount appropriated in fiscal year 1967. The justification for this estimate will be printed in the record.

(The document follows:)

Appropriation Act, 1967, and base for 1968	$101, 230, 000
Budget Estimate, 1968	110, 500, 000
Increase	+9, 270, 000

Project Statement

The following tabulation reflects the *total program* for the construction and maintenance of roads and trails on the National Forests by combining the funds available under the appropriation "Forest roads and trails" with the permanent appropriation of 10% of National Forest receipts. This permanent appropriation for "Roads and trails for States" (10% Fund) is estimated at $17,160,000 for 1968 compared with $16,778,480 for 1967, an increase of $381,520.

Project	1966	1967 estimate	1968 estimate	Increase or decrease
1. Construction of roads and trails	$77, 016, 582	$89, 051, 480	$118, 160, 000	+$29, 108, 520
2. Maintenance of roads and trails [1]	40, 514, 546	33, 535, 000	19, 000, 000	−14, 535, 000
Total obligations	117, 531, 128	122, 586, 480	137, 160, 000	+14, 573, 520
Transfer from "Roads and trails for States"	−14, 203, 671	−16, 778, 480	−17, 160, 000	−381, 520
Program under "Forest roads and trails" contract authorization	103, 327, 457	105, 808, 000	120, 000, 000	+14, 192, 000
Obligations incurred under unfunded contract authorization	−1, 191, 457	−4, 578, 000	−9, 500, 000	−4, 922, 000
Total available or estimate	102, 136, 000	101, 230, 000	110, 500, 000	+9, 270, 000

[1] Includes obligations incurred under Pacific Northwest Disaster Relief Act of 1965 (Public Law 89-41) approved June 17, 1965:

1966	$19, 745, 152
1967	15, 604, 848

Estimated obligations for Appalachian region (funds in connection with Appalachian Regional Development Act of 1965):

1966	$2, 250, 000
1967	2, 250, 000
1968	2, 191, 000

An increase of $9,270,000 is needed to meet cash requirements for liquidation of contract authorization. This appropriation provides for the liquidation of obligations incurred for the construction and maintenance of forest roads and trails pursuant to the authorization contained in the Federal-Aid Highway Act. An appropriation of $110,500,000 for 1968 is required to:

(1) Pay for obligations of the prior year which will be due for payment in fiscal year 1968.

(2) Pay the portion of 1968 obligations of $120 million contract authorization which will require cash payment in that year. This includes $170 million 1968 authority made available by the Federal-Aid Highway Act of 1966 less: (a) $3.3 million advanced to fiscal year 1967 for construction of timber access roads in Appalachian region and increased pay costs and, (b) $46.7 million deferred to later years.

The presence or lack of access by road or trail has a direct and controlling influence on all aspects of forest management, protection, utilization, and development. An adequate system of forest development roads and trails must be installed and maintained to facilitate the maximum practicable yield and use of all forest resources on a sound sustained-yield basis.

Use of $120 million of contract authorization in 1968 will permit a start on full accomplishment of the long-range program. The first objective is to increase the amount of advance road construction by the Government prior to the sale of timber, thereby reducing the amount of timber purchaser road construction. This will enable the Government to proceed toward the objective of placing the timber program on the planned basis. Plans are being developed for adequate transportation systems in the new National Recreation Areas, on lands purchased under the Land and Water Conservation Fund Act, and on Forest Service lands where reservoirs are constructed by other agencies.

Following is a summary of the major road construction and restoration to be undertaken in 1968 as compared with fiscal years 1966 and 1967:

[Dollar amounts in thousands]

	Fiscal year 1966		Fiscal year 1967		Fiscal year 1968	
	Miles	Amount	Miles	Amount	Miles	Amount
Recurrent road maintenance	113,417	$15,136	114,664	$14,738	116,459	$16,000
Recurrent trail maintenance	102,947	4,335	102,744	3,192	102,500	3,000
Bridge construction (units)	212	3,141	200	4,348	210	7,100
Road construction	1,496	50,957	1,795	56,588	2,139	76,560
Trail construction	668	3,457	1,287	4,240	600	4,500
Surveys, plans, and supervision for timber purchaser roads	5,000	16,713	5,089	18,385	5,000	20,000
Supplementing timber purchaser roads	1,995	2,263	1,083	4,495	1,500	8,000
Road purchase		486		995		2,000
Flood and earthquake damage repairs		21,043		15,605		

Authorizations for appropriations [1]

Fiscal year	Construction	Maintenance	Total	Funded	Unfunded
1966	$69,800,000	$53,200,000	$123,000,000	$123,000,000	
1967	69,000,000	16,000,000	85,000,000	48,374,000	$36,626,000
1968	151,000,000	19,000,000	170,000,000	110,500,000	59,500,000
Total	289,800,000	88,200,000	378,000,000	281,874,000	96,126,000

[1] The annual appropriation language and the department presentation combine the appropriation for "Forest roads and trails" made pursuant to 23 U.S.C. 205 and the appropriation of 10 percent of forest receipts for construction and maintenance of roads and trails pursuant to 16 U.S.C. 501. This merger of funds is made in order to simplify the programing, allotment, and accounting of funds at the field level. Since the accounts for these two funds are merged, it is not practicable to distribute obligations and expenditures between the 2 appropriations on a precise basis. The amounts shown for the "Forest roads and trails" appropriation are a proration based on the percentage that contract authorization used under the appropriated funds is of total available funds. Expenditure amounts for maintenance are based on all such obligations requiring cash payment during the fiscal year.

Status of unfunded authorizations

Unfunded contract authorizations beginning of 1967:	
Federal-Aid Highway Act of 1964	$137,856,000
Federal-Aid Highway Act of 1966 (1968 authorization available in 1967)	170,000,000
Appropriation, 1967	—101,230,000
Total unfunded beginning of 1968	206,626,000
1968 Budget estimate (cash requirements)	110,500,000
Balance to remain unfunded as of June 30, 1968	96,126,000

Analysis of cash requirements

1. Unliquidated obligations, June 30, 1966	$45,409,941
2. Estimated cash requirements to finance 1967 program	[1] 65,896,665
3. Total cash requirements by June 30, 1967	111,306,606
4. Less cash on hand 1967:	
Balance from 1966	10,076,606
Appropriation, 1967	101,230,000
Total	111,306,606
5. Obligations in 1967 for which cash was not provided in item 2	39,911,000
6. Estimated cash required to finance 1968 program	[2] 70,589,000
7. Total cash required for 1968	110,500,000

[1] An estimated 61% of the $90,203,000 new obligations and 70% of $15,605,000 obligations for Pacific Northwest flood damages will require cash payments during the fiscal year.

[2] An estimated 59% of the $120,000,000 new obligations will require cash payments during the fiscal year.

ROAD SYSTEM

Chairman HAYDEN. Do you have any particular comment regarding this program?

Mr. NELSON. Yes, Senator Hayden, I would like to comment on this program. Our transportation system affects every phase of our overall Forest Service work in the management of the national forests, and is very important. All of the visitors that visited the national forests last year, and spent 173 million visitor days, used this road system. All of the 12 billion board feet of timber were hauled over some part of this road system. It is used for disbursing hunters, the fishermen use it for access, it is used for our access for firefighting and for insect disease control work.

I think the Congress itself recognized the importance of a good road and trail system for the national forests needed for their complete management. In 1966, the Congress increased our authorization for roads and trails, up to $170 million a year. It is important. Even the wilderness visitors use trails, and we must have trails within the wilderness to make the wilderness usable. So even those that want national forest land left for wilderness use a part of these funds.

We have in existence at the present time 190,000 miles of roads within our road system, which is more miles than any other road agency has to administer. We are responsible for maintaining 161,000 miles of this road system, but 29,000 miles is maintained by some other public road agency. So our transportation system is a very important activity for all of our use of all our activities on the national forest, and we feel that we must move ahead with this program. This program, this budget for 1968, would allow us to move ahead at the rate of using $120 million of the $170 million authorization which is available for this year by authority of the 1966 Federal-Aid Highway Act.

Mr. Baker discussed this earlier in the testimony.

PROGRAM IN BLACK HILLS

Senator MUNDT. I receive a lot of correspondence about these roads and trails. Of course, the Black Hills area is a great tourist country. We have more people, 20 times over, come there to visit each year than we have people in the State.

Would you send me a letter setting out a little background on what you have now in the hills and what you plan in connection with this program?

Mr. NELSON. We will be very glad to do that, Senator Mundt.

Senator MUNDT. Thank you very much.

LAND ACQUISITION, SPECIAL ACTS

Chairman HAYDEN. There will be placed in the record the justification for your estimate of $80,000 needed for the acquisition of lands under various legislative enactments.

(The justification follows:)

ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

Appropriation Act, 1967, and base for 1968	**$80, 000**
Budget estimate, 1968	**80, 000**

Project statement

Project and authority	1966	1967	1968 estimate	Increase or decrease
1. Cache National Forest, Utah, act of May 11, 1938, as amended	$19, 973	$20, 000	$20, 000	
2. Uinta-Wasatch National Forest, Utah, act of Aug. 26, 1935, as amended	19, 935	20, 000	20, 000	
3. Toiyabe National Forest, Nev., act of June 25, 1938, as amended	7, 638	8, 000	8, 000	
4. Angeles National Forest, Calif., act of June 11, 1940			32, 000	+$32, 000
5. Sequoia National Forest, Calif., act of June 17, 1940	176	32, 000		−32, 000
Unobligated balance reverted to national forests fund	32, 278			
Total available or estimate	80, 000	80, 000	80, 000	

The Congress has enacted several special laws which authorize appropriation from the receipts of certain specified National Forests for the purchase of lands to minimize erosion and flood damage. Amounts appropriated and laws under which authorized are shown above.

There are critical watershed lands needing soil stabilization and vegetative cover restoration to prevent serious erosion and damaging floods within these National Forests. Land treatment measures must be applied and subsequently maintained on all lands in these areas to make corrective action fully effective. To assure full program effectiveness, the intermingled private lands must be acquired by the Federal Government.

During fiscal year 1966, 1,954 acres of land were purchased under the special purchase authorities applying to the Cache, Uinta and Wasatch National Forests in Utah. No lands were purchased in the National Forests of southern California in 1966.

Cache National Forest.—In fiscal year 1966, funds were available from two sources for purchase of lands within the Cache National Forest in Utah.

1. The Receipts Act of May 11, 1938, as amended—$20,000. This is an annual appropriation.
2. The Act of July 24, 1956—$200,000 was appropriated under this authority in fiscal years 1957 through 1960. These funds remain available until expended. Through fiscal year 1966, $181,908 has been obligated from this appropriation.

These funds are used to acquire key tracts of land in the steep, rough, and highly important watershed areas lying north of the Ogden River along the Wasatch front and on Wellesville Mountain of the Cache National Forest. These are rugged mountain lands above the river valley which have been damaged and their watershed functions impaired through forest fires or overgrazing. This contributes to excessive rainfall runoff causing severe erosion. The damaged watershed lands are potential sources of floods and mudrock flows. Many tracts of land are located in the north fork of Ogden River and on the drainage of Pineview Reservoir, a Federal reclamation project. Others are within the watersheds of the city of Ogden and the other small towns along the Wasatch front. Public ownership of these lands and the subsequent restoration and protection of their vegetative cover is a highly important part of a vigorous cooperative program with the local community and agencies.

The 1956 Act requires that expenditures of Federal funds be matched by contributions by local agencies or people. This requirement has been met through donations of lands valued at $185,000. Additional contributions are expected in fiscal year 1967.

The appropriation of $20,000 under the Act of May 11, 1938, is from receipts of the Cache National Forest. In the absence of this appropriation, the local counties would receive 25% of these receipts for roads and school purposes. Therefore, the local counties, in effect, are contributing one-fourth of the amount of this appropriation. These appropriations are extremely important to the continuation of a vital and worthwhile program extending over twenty years and shared in by both the local agencies and the Federal Government through the National Forests.

Through fiscal year 1966, 30,323 acres have been approved for purchase pursuant to the Receipts Act of 1938, and 15,307 acres under the Special Act of 1956. The 1967 objective is to acquire 1,500 additional acres of these critical watershed lands.

Uinta-Wasatch.—In fiscal years 1963 through 1967, an appropriation of $100,000 was made under the Uinta-Wasatch Receipts Act of August 26, 1935 for acquiring critical watershed lands in the American Fork Canyon watershed. A total of 2,126 acres has been approved for purchase through fiscal year 1966 and an estimated 700 acres will be acquired during 1967. It is estimated that it will take from two to three years to complete the necessary American Fork acquisitions.

Sequoia National Forest.—In each of fiscal years 1966 and 1967, $32,000 was appropriated under this Act to acquire critical watershed lands. No lands were approved for purchase in fiscal year 1966 as no desirable tracts were available at reasonable prices. For this reason the transfer of this program to Angeles National Forest is proposed for fiscal year 1968. It is estimated that approximately 300 acres will be purchased during 1967.

Toiyabe National Forest.—$8,000 was appropriated under this Act in each of fiscal years 1966 and 1967. During fiscal year 1966 one very key tract of land was acquired to consolidate National Forest holdings. The 1967 objective is to acquire 300 additional acres of important watershed lands in the Toiyabe National Forest.

MISCELLANEOUS LAND ACQUISITIONS

Chairman HAYDEN. Also I will include in the record the statements which you have supplied concerning funds appropriated in prior years for land acquisitions but for which no requests are being made this year.

(The statements follow:)

ACQUISITION OF LANDS FOR UINTA NATIONAL FOREST

Appropriation Act, 1967 and base for 1968	$300,000
Budget Estimate, 1968	--------
Decrease	—300,000

Project statement

Project	1966	1967	1968	Increase or decrease
Acquisition of lands for Uinta National Forest	------------	$300,000	------------	−$300,000

Public Law 89–226 authorized the purchase of approximately 10,000 acres of non-Federally owned land within a described part of the Uinta National Forest in Utah for the purpose of promoting the control of floods and the reduction of soil erosion through restoration of adequate vegetative cover. $300,000 were appropriated in fiscal year 1967. The lands to be acquired are located on the South Fork of the Provo River and constitute the watershed from which the City of Provo draws its municipal water supply. The lands are intermingled with, and surrounded by, National Forest land which is now the property of the United States and acquistion of the 10,000 acres authorized by Act would consolidate the National Forest area and not only serve to halt erosion and promote flood control, but facilitate administration of the National Forest.

As of December 31, 1966, 8,800 acres have been acquired at a cost of $203,500. It is anticipated that essentially all of the remaining lands will be acquired by the end of fiscal year 1968.

ACQUISITION OF LANDS FOR WASATCH NATIONAL FOREST

Project statement

Project	1966	1967	1968 estimate
Acquisition of lands for Wasatch National Forest	------------	$114,260	------------
Recovery of prior year obligations	−$2,951	------------	------------
Unobligated balance brought forward	−111,309	−114,260	------------
Unobligated balance carried forward	114,260	------------	------------
Total available or estimate	------------	------------	------------

The Act of September 14, 1962 (PL 87–661) provided authorization for the appropriation of $400,000 for purchase of privately owned lands within the Wasatch National Forest in Utah. The full amount of this authorization has been appropriated with the funds remaining available until expended.

As of June 30, 1966, approximately 10,000 acres had been acquired under this authority. It is expected that a large part of the remaining 9,000 acres will be acquired by the end of fiscal year 1968.

ACQUISITION OF LANDS FOR SUPERIOR NATIONAL FOREST

Project statement

Project	1966	1967	1968 estimate
Acquisition of lands for Superior National Forest	$273,804	$51,488	------------
Unobligated balance brought forward	−325,292	−51,488	------------
Unobligated balance carried forward	51,488	------------	------------
Total available or estimate	------------	------------	------------

The Act of June 22, 1948 (PL 80–733) as amended, provided authorization for the appropriation of $4.5 million for the purchase of lands and improvements thereon in the Boundary Waters Canoe Area, Superior National Forest, Minnesota. The full amount of this authorization has been appropriated with the funds remaining available until expended.

The legislation authorized and directed the Secretary of Agriculture to acquire any properties which in his opinion should be in Federal ownership in order to restore and preserve the wilderness character of the remaining canoe country along the Canadian boundary in Minnesota.

This purchase program is in its final stages. No further purchase negotiations will be carried on under this authorization and the appropriated funds are all obligated.

ACQUISITION OF LANDS FOR CACHE NATIONAL FOREST

Project statement

Project	1966	1967	1968 estimate
Acquisition of lands for Cache National Forest	$5, 119	$18, 092	
Unobligated balance brought forward	−23 210	−18, 092	
Unobligated balance carried forward	18, 092		
Total available or estimate			

The 1956 Appropriation Act provided $200,000 for the acquisition of lands in the Cache National Forest Pursuant to the Act of July 24, 1956 (70 Stat. 632). Obligations under this fund are in addition to the appropriation from National Forest receipts authorized by the Act of May 11, 1938 and provided in the appropriation, Acquisition of Lands for National Forests, Special Acts. Under the 1956 Act, funds appropriated must be matched by contribution of funds or land by local agencies or persons. Explanation of this program and the accomplishments thereunder are included on page 1746.

TIMBER DEVELOPMENT ORGANIZATIONS

Chairman HAYDEN. You estimate your needs under section 204 of the Appalachian Regional Development Act of 1965 at $746,000, all of which is an unobligated balance brought forward from fiscal year 1967. The statement which you submitted in connection with this proposal will be included in the record.

(The statement follows:)

TIMBER DEVELOPMENT ORGANIZATION LOANS AND TECHNICAL ASSISTANCE

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Loan and related expenses		$154, 000	$746, 000	+$592, 000
Technical assistance	$4, 180	45, 820		−45, 820
Unobligated balance brought forward	−950, 000	−945, 820	−746, 000	+199, 820
Unobligated balance carried forward	945, 820	746, 000		−746, 000
Total available or estimate				

In many areas of the Appalachian region, a chronic condition of underdevelopment and severe unemployment exists. As a result, many people are denied reasonable economic and cultural opportunities. In addition, the productive force in both physical and human resources is severely limited in its contribution to the Nation, while the costs of essential welfare services are steadily increasing. Technological advances have displaced the employment opportunity of many workers. This situation can be alleviated through purposeful and dynamic use of resources and technology available to us today. This region has great resources. Its people are productive and self-reliant.

At one time the Appalachian region was a center of lumber production. But when the lumber industry had harvested the virgin forests, production was drastically reduced. In its wake were left large areas of cut-over forest lands that have taken decades to regenerate to the extent that they can once again be regarded as usable resource. For these reasons, special supplementary forestry programs are being provided for the Appalachian region under authority provided in Section 204 of the Appalachian Regional Development Act of 1965.

TDO ACCOMPLISHMENTS TO DATE

Chairman HAYDEN. This program was started with a $1 million appropriation in the Second Supplemental Act of 1965. What have you accomplished with this fund thus far?

Mr. CLIFF. I think you are referring to what we call the timber development organization, and I will ask Mr. Spillers to comment on that.

Mr. SPILLERS. Thank you very much. Senator Hayden, first may I define a timber development organization. We call them TDO's and as you know they are provided for by the act.

A timber development organization is a nonprofit management marketing association. It is a means of managing fragmented forest ownerships. It applies particularly to the Appalachia area, where we have so many small forest tracts. Ofttimes, a farmer might have a dozen trees to sell, but he can't sell them himself, whereas if he could combine with a number of other landowners to have maybe 200 trees, they could find a ready market.

So the emphasis here is to provide a means for managing fragmented small ownership. The timber development organization will provide the management, sales and round wood marketing services, to landowners, and also provide them and the processors with professional forestry assistance for a nominal fee.

Now the Act does not permit the timber development organization to build or acquire an industry, nor does it enable them to buy land, except for demonstration purposes.

The timber development organization is a new idea, and we hope that it will work particularly in Appalachia, where it is so badly needed.

Last year, the Appalachia Commission provided money to the McDonald consultants to study what a timber development organization is, and what it could do. They made that study, and after they made the study, the Commission asked the U.S. Department of Agriculture to go ahead with three feasibility studies in Appalachia.

We have them well started in a very likely area in Tennessee, and one in New York. We will move into Kentucky in a very short time. These feasibility studies will show us whether or not a timber development organization has a good opportunity to succeed under the very difficult situations we find in Appalachia.

Chairman HAYDEN. How much of the amount carried forward into the fiscal year 1967 have you disposed of thus far?

Mr. SPILLERS. In fiscal year 1967, we will have disposed of $49,300 for the McDonald study, about $5,000 for overhead, and for assistance from the Farmer Cooperative Service, which is helping us study what can be done in that area and $35,000 for the feasibility studies.

Chairman HAYDEN. How much do you estimate that you will carry forward into fiscal year 1968?

Mr. SPILLERS. We estimate that we will carry forward only about $10,000 in 1968, sir.

Mr. CLIFF. Is that correct, Art?

Out of the million dollars, how much will we have left at the end of this fiscal year?

Mr. SPILLERS. Oh, I am sorry. I am overlooking the loaned funds. The big item in this, Senator, is the $900,000 for loan funds to help these timber development organizations once they get started.

To date, we have not spent any of this $900,000 but this is a carryover fund, as you know and as soon as the feasibility studies prove that TDO's can be started, they will need loan funds. We do not anticipate that they will be needing any of these loan funds, in fiscal year 1967.

Chairman HAYDEN. All right.

MISCELLANEOUS FUNDS AND ADMINISTRATIVE PROVISIONS

There will be printed in the record the statements which you have furnished concerning cooperative range improvements, assistance to States for tree planting, access roads, administrative provisions, permanent appropriations, working capital fund, and trust fund.

(The statements follow:)

COOPERATIVE RANGE IMPROVEMENTS

Appropriation, 1967 and base for 1968	$700,000
Budget estimate, 1968	700,000

Part of the grazing fees from the National Forests, when appropriated, are used for revegetation of depleted rangelands, construction and maintenance of range improvements, rodent control, and eradication of poisonous plants and noxious weeds. These funds are advanced to and merged with the appropriation, Forest protection and utilization, subappropriation, Forest land management.

FORMULA FOR APPROPRIATION

Section 12 of the Act of April 25, 1950 (Granger-Thye Act), provides that of the money received from grazing fees by the Treasury from each National Forest during each fiscal year there shall be available at the end thereof when appropriated by Congress an amount equivalent to 2 cents per animal month for sheep and goats and 10 cents per animal month for other kinds of livestock under permit on such National Forest during the calendar year in which the fiscal year begins.

Since figures for animal months permitted are not available until after more than one-half of the fiscal year for which funds are appropriated has elapsed, the 1968 appropriation request of $700,000 necessarily represents the best current approximation of the amount which will become available in the calendar year 1967 under the animal-months-permitted formula.

For calendar year 1965, the latest available figures, animal months permitted were 5,914,106 for cattle and horses, and 6,008,997 for sheep and goats. This calculates to $711,590 available under the formula.

ASSISTANCE TO STATES FOR TREE PLANTING

Appropriation, 1967 and base for 1968	$1,000,000
Budget estimate, 1968	1,000,000

Project statement

	1966	1967 estimate	1968 estimate	Increase or decrease
Assistance to States for tree planting	$972,677	$1,046,899	$1,000,000	−$46,899
Unobligated balance brought forward	−19,576	−46,899		+46,899
Unobligated balance carried forward	46,899			
Total available or estimate	1,000,000	1,000,000	1,000,000	

This program authorized under Section 401 of the Agricultural Act of 1956 (16 USC 568e) effectively assists the States in their reforestation programs. It has been responsible for directly speeding up the needed rehabilitation work on State and county forest lands. This program is making valuable contributions to the overall reforestation program for the Nation. To meet our timber goals, about 10 million acres will require some form of Federal tree planting aid during the 10-year period beginning with fiscal year 1968. Almost 2 million acres will require assistance through this program.

Through 1965, the program helped reforest about a half million acres. There are approved State plans for almost 1.3 million acres to be planted at an estimated Federal-State cost of $41 million. Thirty-five States are participating. Thirteen States have 53 seed orchards with 1,517 acres for the production of genetically improved forest tree seed. This program is largely responsible for these important developments.

Following are the major benefits that have been or will be obtained from Federal appropriations when matched with State appropriations:

	Unit	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968
Area planted or seeded	Acre	90,000	100,000	100,000
Volume increase in Nation's production and supply of high-quality timber.	Cubic feet	10,000,000	10,500,000	10,500,000
Area of improved watershed conservation	Acre	8,000	9,000	9,000
Area of improved wildlife habitat	do	4,000	4,000	4,000
Area of forestry practices contributing to natural beauty.	do	6,000	7,000	6,000
Employment resulting in rural areas	Man-days	100,000	120,000	120,000

	Fiscal year 1966	Fiscal year 1967	Fiscal year 1968
Appropriation level:			
Federal	$1,000,000	$1,000,000	$1,000,000
State	2,400,000	2,500,000	2,500,000
Total	3,400,000	3,500,000	3,500,000

ACCESS ROADS

Project statement

Project	1966	1967	1968 estimate
Access roads	$53,951	$9,274	
Unobligated balance brought forward	−63,224	−9,274	
Unobligated balance carried forward	9,274		
Total available or estimate			

The unobligated balance from the fiscal year 1962 appropriation is $9,274. During fiscal year 1966 one road system involving 19 miles of existing roads was purchased at a cost of $53,950. The small remaining balance will be used to pay any excess awards which may result from settlement or trial of road condemnation cases initiated under this program.

Effective with fiscal year 1964, this appropriation was eliminated and future access road purchase, beyond that to be accomplished with the balance remaining in this appropriation, will be accomplished under the Forest Road and Trail appropriation.

ADMINISTRATIVE PROVISIONS, FOREST SERVICE

CHANGES IN LANGUAGE

Changes in language of this item are proposed as follows. New language is italicized. Deleted matter is enclosed in black brackets.

"Appropriations to the Forest Service for the current fiscal year shall be available for: (a) purchase of not to exceed [one] *two* hundred and [sixty-five] *fifty-nine* passenger motor vehicles of which one hundred and [fifteen] *sixty-five* shall be for replacement only, and hire of such vehicles; operation and maintenance of aircraft and the purchase of not to exceed four for replacement only; (b) employment pursuant to the second sentence of section 706(a) of the Organic Act of 1944 (5 USC 574), and not to exceed $25,000 for employment under section 15 of the Act of August 2, 1946 (5 USC 55a); (c) uniforms, or allowances therefor, as authorized by the Act of September 1, 1954, as amended (5 USC 2131); (d) purchase, erection, and alteration of buildings and other public improvements (5 USC 565a); (e) expenses of the National Forest Reservation Commission as authorized by section 14 of the Act of March 1, 1911 (16 USC 514); and (f) acquisition of land and interests therein for sites for administrative purposes, pursuant to the Act of August 3, 1956 (7 USC 428a).

"Except to provide materials required in or incident to research or experimental work where no suitable domestic product is available, no part of the funds appropriated to the Forest Service shall be expended in the purchase of twine manufactured from commodities or materials produced outside of the United States.

"Funds appropriated under this Act shall not be used for acquisition of forest lands under the provisions of the Act approved March 1, 1911, as amended (16 USC 513–519, 521), where such land is not within the boundaries of an established national forest or purchase unit."

The three changes would provide authority for the Forest Service to purchase 259 passenger motor vehicles of which 165 will be replacements. The justification of this need follows:

PASSENGER MOTOR VEHICLES

Purchase of passenger motor vehicles

During fiscal year 1968, it is proposed to replace 165 passenger vehicles. Of these, 150 will meet replacement standards and 15 will require replacement because of accidents or excessive maintenance costs. It is also proposed to purchase 94 additional passenger cars. Of these, 69 will be used as replacements or in lieu of additional one-half ton pickups and carryalls which are more expensive. The other 25 passenger motor vehicles will be additions to the Service-wide fleet to meet expanding program needs.

The Forest Service had a net fleet of 660 (includes 2 damaged vehicles disposed of in 1966 to be replaced in 1967) passenger carrying vehicles at the start of fiscal year 1967. It will add 45 units to its fleet during the fiscal year, making a total of 705 units available at the start of fiscal year 1968, excluding possible transfer to other agencies. It is proposed that the total number of passenger carrying vehicles be increased to 799 by the end of fiscal year 1968. Due to program needs, it may be necessary to replace sedans with station wagons or vice versa, but this would not change the total number of passenger motor vehicles scheduled for replacement or addition.

As of June 30, 1966, the age and mileage classes of the passenger vehicles on hand, exclusive of two buses, were:

Age data		Mileage data	
Year	Number of vehicles	Miles	Number of vehicles
1961 and older	68	60,000 and over	78
1962	128	50,000 to 59,999	99
1963	160	40,000 to 49,999	132
1964	130	30,000 to 39,999	121
1965	123	20,000 to 29,999	74
1966	90	10,000 to 19,999	90
		0 to 9,999	105
Total	[1] 699		[1] 699

[1] Includes 39 vehicles on hand awaiting disposal.

Justification for Substitution of Passenger Carrying Vehicles for Light Trucks

As of June 30, 1966, the Forest Service operated a net fleet of 660 passenger carrying vehicles. In addition, the Forest Service has 7,919 one-half to one ton trucks, 2-wheel drive. It is now possible to advantageously substitute some passenger carrying vehicles for pickups and carryalls. The pattern of utilization in some areas requires a sedan or station wagon-type vehicle in lieu of a truck.

The sedan or station wagon costs less to operate and maintain than a truck. During fiscal year 1967, we are replacing 40 light trucks, such as carryalls, pickups, panels, and sedan delivery trucks, with sedans and station wagons. The total estimated cost savings is $14,965 per year. If the Forest Service could substitute 69 passenger cars for light trucks in fiscal year 1968, this would result in an additional savings of about $25,000 each year.

Use of Vehicles

Passenger motor vehicles are used by:

(1) Forest officers in the protection, utilization, management, and development of the National Forests and land utilization projects and in the program for control of forest pests.

(2) Research technicians on experimental forests and ranges, on field research projects and forest surveys.

(3) Foresters engaged in carrying out the laws providing for State and private forestry cooperation.

(4) Regional office field-going administrative personnel in performing, directing, and inspecting field work.

The Forest Service is essentially a field organization and its passenger motor vehicles are located mainly at regional, National Forest, and ranger district headquarters, and experimental forests and ranges. There are over 225 million acres within the exterior boundaries of the National Forests.

About 435 million acres of State and private forest land are included within the areas which benefit from Federal participation in the cooperative forest program. Much of this area is without common carrier service, and most forest areas and research centers are remote from commercial travel routes, requiring extensive use of motor vehicles as a means of transportation. The major portion of transportation needs, particularly at forest regional and supervisor levels and at other larger headquarters involves multiple passenger use and can be more expeditiously and economically met by use of sedans and station wagons than by other types of vehicles.

Justification of Replacements

Dependability of passenger vehicles is an important factor in keeping work programs on schedule and in meeting emergencies. Vehicle breakdowns while on field travel cause disruptions and delays in field work as well as loss of effective work time of employees. The continued use of over-age equipment is undesirable from a safety standpoint since most of it is operated over rough, narrow, winding roads in mountainous country under adverse conditions. This use generally results in excessive operating and repair expenses when vehicles reach or exceed replacement standards.

In order to maintain passenger cars in a safe and satisfactory operating condition, it is the policy of the Forest Service to schedule periodic preventive maintenance inspections, services, and tune-ups to reduce the necessity for costly repairs and major overhauls, and to minimize lost time resulting from field breakdowns.

It is desirable to maintain a reasonable balance in the age class of the passenger vehicle inventory. The age class distribution is based upon conforming with replacement standards which recognizes that some units will be retired under the age standard and others under the use standard. Prescribed replacement standards, although applicable, are not always appropriate for all Forest Service vehicles because of the wide range of operating conditions and the comparatively short field season in many of the National Forests at higher elevations. Decision on replacement of passenger vehicles which reach replacement age is based on an appraisal of each unit. This involves a review of the history record combined with a mechanical inspection of the vehicle's condition and repair liability. When such appraisal indicates that the vehicle is satisfactory for further service without unreasonable repair expenditures, it is retained and assigned to lighter work, even though such action tends to upset the age standards for the fleet inventory.

The vehicles selected for replacement are those which cannot be operated another season without excessive repair expense. They are unsatisfactory for further use both as to safety and mechanical condition. The replacement authorization requested is within the normal annual replacement standards prescribed by the General Services Administration.

Essentially all passanger motor vehicles are pooled for use by all activities with replacement of pooled units financed from a Working Capital Fund. All appropriations reimburse this fund in ratio to use of vehicles on activities financed by the respective appropriations.

None of the replacements requested will be assigned to areas served or scheduled to be served by Inter-Agency Motor Pools.

Justification of Additions

The Forest Service analyzes current work plans and program in determining its overall passenger car requirements. This analysis includes a careful study of the number of vehicles needed at each field station, using as a guiding principle the ownership of only the minimum number of dependable units required to serve programs for which funds are budgeted. Also, it is Forest Service policy to utilize Inter-Agency Motor Pools or commercial car rental services to the fullest practicable extent. Passenger car use is restricted and is integrated with various activities so as to attain good utilization of all vehicles. Expanding activities in research, timber sales, public use of recreational facilities, fire protection, and other land management activities are increasing the need for more passenger cars. These increasing needs are being met in some areas through greater use of Inter-Agency Motor Pool vehicles. These pools, however, serve only very small parts of the total land area administered by the Forest Service; therefore, increasing requirements for passenger car transportation in several areas cannot be fully met except through purchase of additional units for the Forest Service fleet. None of the additions requested will be assigned to areas served or scheduled to be served by Inter-Agency Motor Pools.

Additions are financed from program funds in direct relationship to the anticipated use of the equipment. Distribution of costs to appropriations is based on analysis of use of the equipment fleet for the past three years and the estimated use for the budget year.

AIRCRAFT

Replacement of Aircraft

The 1968 estimates propose replacement of four aircraft by purchase and four by transfer from other agencies as available. The Forest Service currently has 57 aircraft:

Single-engine reconnaissance and transport airplanes	11
Light twin-engine reconnaissance and transport airplanes	13
Medium and heavy cargo transport airplanes (9 medium, 4 heavy)	13
T-34B lead airplanes (2-place scout)	19
Heilcopter	1

The reconnaissance and transport airplanes are multipurpose aircraft used primarily to transport firefighters, smokejumpers, administrative personnel, equipment and supplies to remote and inaccessible areas where commercial service is inadequate, or not available for detection and suppression of forest fires. They are also used to locate and survey timber stand and vegetation conditions, such as insect infestations, blowdown, diseased areas, undesirable species, and to appraise resources and damage, and evaluate effectiveness of control.

One light twin-engine airplane has been modified, equipped and is used primarily for fire mapping and infrared equipment in low visibility of smoke and at night.

The T–34B "lead" airplanes are primarily a single-purpose military model aircraft used by air tanker bosses to direct and control the dropping of fire retardants on forest fires by more than 120 tanker aircraft usually contracted from private owners.

The helicopter is used for training forest personnel in tactical use of helicopters and experimental development of techniques and equipment for direct tactical suppression of forest fires. It is currently assigned on the study project to develop safe and effective use of helicopters at night on fires.

The replacements requested will be primarily light twin-engine airplanes. They will be utility airplanes that may be used for several purposes, such as lead planes for air tankers, small paracargo dropping, reconnaissance, and transporting freight and passengers. These will be new standard manufactured airplanes to upgrade with greater utility some old surplus T–34B's and single-engine reconnaissance airplanes which have reached an age in total number of flying hours where it is uneconomical to overhaul or modernize them to meet civil airworthiness requirements. These replacements will provide a more effective operation, with the wider twin-engine operation safety margin. Forest Service aircraft are operated to a large extent over rough mountainous terrain where landing fields are poor and few. It is especially important that these aircraft be maintained for maximum performance and dependability to provide an adequate standard of safety.

Other aircraft currently in use may be replaced as newer and more suitable models and types become available from military services as excess property. They would be obtained on transfer without reimbursement and would not increase the fleet beyond 57 aircraft. Medium and heavy cargo and transport airplanes are needed to meet requirements as a result of rapidly diminishing number available from supplemental air carriers and other commercial sources. When aircraft are partially or completely destroyed in a crash accident, they may be replaced out of any available fund. The majority of current Forest Service aircraft were manufactured during World War II, and obtained from military surplus. Most of these planes have nearly reached their limit of useful age. The military services have a few types of aircraft which have more potential suitability for Forest Service work that may become surplus in the near future.

Roads and Trails for States, National Forests Fund

Appropriation, 1967	$16,778,480
Budget estimate, 1968	17,160,000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1967)	+381,520

The permanent appropriation of 10% of National Forest receipts pursuant to the Act of March 4, 1913 (16 USC 501) is transferred to and merged with the annual appropriation for Forest Roads and Trails. The explanation of the use of these funds is included in the justification for that appropriation item.

Expenses, Brush Disposal

Appropriation, 1967 and base for 1968	$10,200,000
Budget estimate, 1968	10,300,000
Increase	+100,000

Project statement

	1966	1967 estimate	1968 estimate	Increase or decrease
Brush disposal	$9,004,649	$9,500,000	$9,600,000	+$100,000
Unobligated balance brought forward	−9,987,145	−11,178,168	−11,878,168	−700,000
Unobligated balance carried forward	11,178,168	11,878,168	12,578,168	+700,000
Total available or estimate	10,195,672	10,200,000	10,300,000	+100,000

Timber cutting normally increases the fire hazard because of dry fuel increase in the form of logging slash. This slash may also contribute to the buildup of insect populations, increase certain disease infestations, and cause damage to stream channels.

National Forest timber sale contracts require treatment of debris from cutting operations or deposit of funds to pay for the work. When economical and expedient the work is performed by the timber purchaser. If it is not feasible for the purchaser to do the work, it is done by the Government using deposits made by the timber purchaser to cover costs of the work as authorized under section 6 of the Act of April 24, 1950 (16 USC 490).

The effect of timber cutting and the manner of treating slash vary widely among regions. In the three eastern regions, volume cut per acre is relatively low, utilization is high, and generally, humid atmospheric conditions result in rapid decomposition of debris so little slash disposal work is necessary. An exception occurs in some sales where a heavier cut per acre is made, such as the jack pine stands of Minnesota. In such areas, slash is broken and mixed with mineral soil by discing with heavy equipment. This reduces the hazard and provides a good seedbed to aid regeneration. Treatment of slash to prevent insect epidemics is sometimes necessary in these areas.

In contrast, the cost of slash abatement on most sale areas of the West is high. High volumes per acre generally produce heavy slash. Long dry periods with much lightning and man-caused fire risk result in extremely hazardous fire potential. The warm, humid condition necessary for rapid slash deterioration seldom occurs so more intense slash disposal is required. Treatment varies greatly with different methods of cutting. Clear-cut areas are broadcast burned. In selectively cut areas, debris may be piled for burning over the whole area or in strips which serve as firebreaks.

While slash disposal follows general prescriptions within regions, individual needs of each sale offering are planned and appraised prior to advertisement and appropriate specific requirements are incorporated into each timber sale contract. In each instance the method used is the one which will attain adequate protection of the area at the least expense. In some instances adequate protection from fire is attained by providing additional protection until the slash hazard reverts to near normal. Logging debris which may move into water courses under these conditions must be removed. Greater intensity of fire protection for several years and occasional stream clearance may be less costly than complete slash disposal immediately after cutting. In such cases Brush Disposal funds are used to provide the needed manpower and facilities.

FOREST FIRE PREVENTION

Appropriation, 1967 and base for 1968	$45,000
Budget estimate, 1968	45,000

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Forest fire prevention	$23,892	$42,000	$47,000	+$5,000
Unobligated balance brought forward	−45,041	−64,195	−67,195	−3,000
Unobligated balance carried forward	64,195	67,195	65,195	−2,000
Total available or estimate	43,046	45,000	45,000	

The purpose of the project is public education on the need for the prevention of man-caused wildfires on all the Nation's forests and rangelands. Its goal is the further reduction of man-caused forest fires on all ownerships to the point where their impact on natural resource management programs is negligible.

This project is accomplishing its purpose in two ways:

1. By the dissemination to the public of Smokey Bear's forest fire prevention messages on commercial products licensed by the Chief of the Forest Service.

2. By support of the Smokey Bear Junior Forest Rangers and of the Smokey Bear Awards program through the contribution of fees and royalties by licensees.

The Smokey Bear licensing program is an important part of the Cooperative Forest Fire Prevention Campaign which has been in effect for 25 years. The campaign itself has been conducted each year since 1942 as a cooperative project of the State Foresters and the Forest Service, United States Department of Agriculture, and is a public service program of the Advertising Council. The campaign utilizes the free public service resources of the various national advertising channels such as car cards, poster display systems, radio and television networks, and magazine and newspaper allocation plans in developing public cooperation in the prevention of man-caused forest fires. Since 1945, this campaign has been built around Smokey Bear who has become recognized and accepted by the public as a nationwide symbol of forest fire prevention.

Under authorization of the Act of May 23, 1952 (18 USC 711), the Secretary of Agriculture has issued rules and regulations governing the licensing program. These licenses specify payment of royalties (usually 5%) and set up certain controls for administering the program and collecting the royalties including advance deposits to protect the Government's interest. Such collections, along with appropriated funds, are used to finance the Cooperative Forest Fire Prevention Campaign.

The licensing program provides about one-tenth of the total funds required for the Cooperative Forest Fire Prevention Program.

Examples of Recent Accomplishments

In fiscal year 1966, receipts from the commercial support educational programs were $43,046. These receipts came from 43 licensees.

Thanksgiving Day, Smokey Bear was featured twice on network television. A sixty-foot Smokey Bear balloon was in the Macy's Parade in New York City in the morning and in the evening an hour long color film titled "Ballad of Smokey Bear" was presented. The viewing audience for each of these programs is estimated at 50 million people. A forest fire prevention float was entered for the second successive year in the Pasadena Rose Parade on New Year's Day. The estimated television audience for the parade was 100 million people. The 1966 forest fire prevention film spot "Family Trees" won top honors for TV shorts and spots presented by the National Committee on Films for Safety.

New commercial Smokey Bear items included a book, "Letters to Smokey Bear," silver charm, electric clock, record, and sweat shirt.

State and Federal units purchased Smokey Bear material valued at $179,000 for the 1966 Campaign to supplement the material valued at $85,000 printed for them with appropriated funds.

RESTORATION OF FOREST LANDS AND IMPROVEMENTS

Appropriation, 1967 and base for 1968	$25,000
Budget estimate, 1968	25,000

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Restoration of forest land and improvements	$23,259	$39,979	$25,000	-$14,979
Unobligated balance brought forward	-18,443	-14,979		+14,979
Unobligated balance carried forward	14,979			
Total availble or estimate	19,795	25,000	25,000	

Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance, are used to complete improvement, protection, or rehabilitation work on lands under Forest Service administration. Funds received as settlement of a claim are used for improvement, protection, or rehabilitation made necessary by the action which led to the cash settlement (Act of June 20, 1958, 16 USC 579c).

PAYMENT TO MINNESOTA (COOK, LAKE, AND ST. LOUIS COUNTIES) FROM THE NATIONAL FORESTS FUND

Appropriation, 1967 and base for 1968	$144, 815
Budget estimate, 1968	145, 000
Increase	+185

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Payment to Minnesota from the national forests fund (total available or estimate)	$140, 619	$144, 815	$145, 000	+$185

The Act of June 22, 1948, as amended (16 USC 577c–577h) provides that the Secretary of the Treasury, upon certification of the Secretary of Agriculture, shall pay to the State of Minnesota at the close of each fiscal year an amount equivalent to three-fourths of one percent of the fair appraised value of certain National Forest lands in the counties of Cook, Lake, and St. Louis situated within the Superior National Forest. The Act further provides that payment to the State shall be distributed to each of these counties in conformity with the fair appraised value of such National Forest lands in each county.

PAYMENTS TO COUNTIES, NATIONAL GRASSLANDS

Appropriation, 1967 and base for 1968	$431, 250
Budget estimate, 1968	431, 250

Project statement

Project	1966	1967 estimate	1968 estimate
Payment to counties (total available or estimate)	$429, 041	$431, 250	$431, 250

At the end of each calendar year, 25% of the revenues from use of submarginal lands are paid to counties under the provisions of Title III of the Bankhead-Jones Farm Tenant Act, approved July 22, 1937 (7 USC 1012). Payments are made on the provision that they are used for school or road purposes, or both.

PAYMENTS TO SCHOOL FUNDS, ARIZONA AND NEW MEXICO

Appropriation, 1967 and base for 1968	$102, 931
Budget estimate, 1968	105, 000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1967)	+2, 069

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Payments to school funds (total available or estimate)	$112, 130	$102, 931	$105, 000	+$2, 069

Under provisions of the Act of June 20, 1910 (36 Stat. 562, 573) certain areas within National Forests were granted to the States for school purposes. The percentage that these lands are of the total National Forest area within the State is used in determining payments to the States. The receipts from all National Forest land within the State are used as the basis for applying the percentage. For example, if total receipts for the State are $100,000 and if 10% of lands are in the "granted for school purposes" category, the payment to the State would be $10,000. The amounts so paid are deducted from the net receipts before computing the 25% payments to States.

As soon after the close of the fiscal year as the receipts from National Forests and the area of school lands in the States of Arizona and New Mexico are determined, the payments are made to the States. Estimated payments in fiscal year 1967 to Arizona will be $102,572 and to New Mexico $359.

PAYMENTS TO STATES, NATIONAL FORESTS FUND

Appropriation, 1967 and base for 1968	$41, 942, 319
Budget estimate, 1968	42, 900, 000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1967)	+957, 681

Project statement

Project	1966	1967 estimate	1968 estimate	Increase or decrease
Payments to States (total available or estimate)	$35, 504, 367	$41, 942, 319	$42, 900, 000	+$957, 681

The Act of May 23, 1908, as amended (16 USC 500) requires, with a few exceptions that 25% of all money received from the National Forests during any fiscal year be paid to the States in which the forests are located, for the benefit of public schools and public roads of the county or counties in which such National Forests are situated. The amount of this appropriation varies each year in direct proportion to National Forest receipts during the previous fiscal year.

The amounts set aside from receipts collected for the sale of National Forest timber, grazing, special use permits, power, mineral leases, and admission and user fees, before the 25% is applied are listed below:

1. Payment to the State of Minnesota covering certain National Forest lands in the Counties of Cook, Lake, and St. Louis situated within the Superior National Forest is made under the terms of the Act of June 22, 1948, as amended (16 USC 577c–577h). Receipts collected from the areas covered by this Act are excluded when the 25% payment to the State of Minnesota is computed.
2. For lands in certain counties in Utah, Nevada, and California, the States receive 25% of receipts only after funds, if made available by Congress, have been set aside for the acquisition of National Forest lands within the specified National Forests under the terms of special acts authorizing appropriations from forest receipts for this purpose.
3. Payments to the States of Arizona and New Mexico under the provisions of the Act of June 20, 1910 (36 Stat. 562, 573), of shares of the gross receipts from the National Forests in those States which are proportionate to the areas of land granted to the States for school purposes within the National Forests.

WORKING CAPITAL FUND, FOREST SERVICE

The Working Capital Fund was established by the Act of August 3, 1956 (16 USC 579b), as amended by the Act of October 23, 1962 (76 Stat. 1157). It is a self-sustaining revolving fund which provides services to National Forests, experiment stations, and when necessary, to other Federal agencies, and as provided by law, to State and private agencies and persons who cooperate with the Forest Service in fire control and other authorized programs.

The Working Capital Fund requires no cash appropriation. Initially, its assets were purchased by regular Forest Service appropriations and were donated to the fund. Where expansion of facilities, equipment, and inventories is required, the expansion is financed pro rata by benefiting Forest Service appropriations and the additional assets are donated to the fund. Some additional assets have been obtained from excess sources without cost to Forest Service appropriations or the Working Capital Fund. Some expansion was financed by profits realized in the first few years of operation of the fund. Since July 1, 1962, expansion has been financed by benefiting Forest Service appropriations.

Since July 1, 1962, some earnings have been applied to the excess of replacement cost over original cost of equipment replaced. Some earnings have been reserved for future excess replacement costs of equipment. The balance of accumulated earnings is limited to not more than 5% of gross income for one year to provide working capital. This is an administratively imposed limitation which restricts earnings but does not require additional profits to meet the standard whenever working capital is adequate.

The following is a tabulation of information pertaining to the capital and earnings of the Working Capital Fund:

Analysis of capital and earnings

[In thousands]

	Actual, through June 30, 1966	Estimated, through June 30, 1967	Estimated, through June 30, 1968
Value of assets donated to the fund	$29,993	$30,894	$31,894
Earnings applied prior to July 1, 1962, to additional equipment and excess replacement costs	3,751	3,751	3,751
Earnings applied since July 1, 1962, to excess replacement costs	1,915	3,307	4,207
Earnings reserved to cover future excess replacement costs	2,021	1,800	1,711
Earnings to provide working capital for operation	----------	202	202
Total	37,680	39,954	41,765

The following services are provided by the Working Capital Fund:

1. *Equipment Service.*—This service owns, operates, maintains, and replaces common use motor driven and similar equipment. This equipment is rented to National Forests, experiment stations, and in some cases, other agencies, at rates which recover the cost of operation, repair and maintenance, management, and depreciation. The rates also include an increment which provides additional cash which, when added to depreciation earnings and the residual value of equipment, provides sufficient funds to replace the equipment.

2. *Aircraft Service.*—This service operates and maintains Forest Service owned aircraft used in fire surveillance and suppression and in other Forest Service programs. The aircraft are rented to National Forests, experiment stations, and in some cases, to other agencies, at rates which recover the cost of operation, maintenance, repair, and improvements in the airworthiness of the aircraft. Replacement and the costs of additional aircraft are financed pro rata by benefiting Forest Service appropriations.

3. *Supply Service.*—This service operates the following common services:

(a) *Central Supply.* This is a centralized service for procurement, warehousing, and supply of common use items, such as work project tools, provisions, and supplies, which are issued and sold to National Forests, experiment stations, and others at prices which recover cost.

(b) *Photo reproduction.* These facilities store, reproduce, and supply aerial photographs, aerial maps, and other photographs of National Forest lands. The photographic reproductions are sold to National Forests, experiment stations, and others at cost.

(c) *Sign Shop.* These are small shops which manufacture and supply special signs for the National Forests for use in regulating traffic and as information to the public and other users of the National Forests. The signs are sold to National Forests and experiment stations at cost.

(d) *Subsistence.* These are facilities which prepare and serve meals at cost to Forest Service work crews in remote areas where adequate public restaurant facilities are not available.

(e) *Cribbing.* This facility manufactures special concrete structural material used in embankments along access roads in the National Forests. This material is sold to National Forests at prices which recover costs.

4. *Nursery Service.*—This service operates forest tree nurseries and cold storage facilities for storage of tree and seed stock. Tree seed is procured, cleaned, bagged, and stored in refrigerated facilities. Tree and seed stock are sold to National Forests, States, and other Federal agencies at cost.

COOPERATIVE WORK, FOREST SERVICE (TRUST FUND)

Contributions are received from cooperators, including counties, States, timber sale operators, individuals, and associations, and are expended by the Forest Service in accordance with the terms of the applicable cooperative agreements. The work consists of protection and improvement of the National Forests, work performed for National Forest users, and forest investigations and protection, reforestation, and administration of private forest lands.

The major programs conducted under this account are described below in terms of the projects reflected in the statement at the end of this section.

1. *Construction and Maintenance of Roads and Trails, and*
2. *Construction and Maintenance of Other Improvements.*

Under the Acts of June 30, 1914 (16 USC 498) and March 3, 1925, April 24, 1950 (16 USC 572) and October 13, 1964 (16 USC 537) deposits for cooperative work are accepted from State and local government agencies, associations, Federal timber purchasers, users of roads, and others for the construction and maintenance of roads, trails, and other improvements and for performing work which is the National Forest users' responsibility, this method of performance of the work being of mutual benefit or of benefit to the public at large. Cooperative deposits received for wildlife habitat improvement for States from their hunting and fishing fees are included in this activity.

3. *Protection of National Forest and Adjacent Private Lands.*—The Act of June 30, 1914 (16 USC 498) authorizes the acceptance of deposits for the protection of the National Forests and the Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572), authorizes the acceptance of contributions for the protection of private lands in or near the National Forests. The major portion of the obligations is for the protection of private lands from fire. This arrangement helps both parties since there are millions of acres of private forest land intermingled with Federal ownership on the National Forests. The lands in private ownership are usually in small tracts. It would be uneconomical for the owner to set up a fire control organization for the protection of his land. The advantage to the Government is that in many cases it would be necessary to suppress the fires on the private land without reimbursement in order to protect the adjoining Federal land.

4. *Sale Area Betterment (including reforestation).*—Section 3 of the Act of June 9, 1930 (16 USC 576b) provides for deposits of funds by timber sale purchasers to cover the cost of reforestation and special cultural measures to improve the future stand of timber on the areas cutover by the purchaser. Deposits in fiscal year 1966 under this authorization totaled $22.6 million. Fiscal year 1966 accomplishments under this program are reported under the Forest land management subappropriation along with accomplishments for reforestation and stand improvement for that subappropriation.

5. *Scaling.*—Under provisions of the Act of April 24, 1950 (16 USC 572) and of Section 210 of the Act of September 21, 1944 (16 USC 572a) acceptance of deposits from timber purchasers for cooperative scaling service is authorized. Such arrangements are established only when requested by the operator and when the operator pays the extra cost of such services, either in advance or through reimbursement under appropriate payment guarantees.

6. *Research Investigations.*—The Acts of June 30, 1914 (16 USC 498) and May 22, 1928 (16 USC 581i-1) authorize the acceptance of deposits for forestry research. Deposits are received from State and other public agencies, and from industrial, association, and other private agencies to finance research projects of mutual interest and benefit to both parties. The deposits may be made either

in a single sum or on a continuing basis, and may either partially or wholly cover the cost of the research. The cooperative research projects may involve any aspect of forestry and vary widely as to scope and durations. A very common example of such cooperation is for a State to make a deposit to the Cooperative work fund in order to intensify or to speed up completion of a comprehensive survey of the forest resources of the State. Other examples are State contributions toward forest fire research. The results of such cooperative investigations are made available to the general public as well as to the depositor.

7. *Administration of Private Lands.*—The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of contributions for the management of private lands. These contributions are made by private owners having land intermingled with or adjacent to National Forests who wish these lands managed in accordance with good forest management practices. Their holdings are usually too small to warrant the employment of professional foresters to administer such tracts. The advantages to the Government include the avoidance of possible high fire hazard areas resulting from improper cutting practices, the elimination of the necessity of precisely marking the boundaries of the private land, and additional private forest land handled under proper forest practices.

8. *Reforestation (private lands).*—The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of contributions for reforestation of private lands situated within or near a National Forest. This work is limited to areas of private land within a planting project on the National Forests or to areas in which certain civic and other public-spirited organizations have taken an interest.

9. *Statement on Utilization of Funds.*—Following is a statement of funds received and obligated and balances available by major activities:

Cooperative work, Forest Service (trust fund)

Project	Balance available June 30, 1965	Actual, fiscal year 1966			Estimate, fiscal year 1967			Estimate, fiscal year 1968		
		Funds received	Obligations	Balance	Funds received	Obligations	Balance	Funds received	Obligations	Balance
1. Construction and maintenance of roads and trials	$1,181,030	$1,932,751	$1,513,829	$1,599,952	$1,930,000	$1,930,000	$1,599,952	$1,930,000	$1,930,000	$1,599,952
2. Construction and maintenance of other improvements	608,011	541,497	595,697	553,811	540,000	540,000	553,811	540,000	540,000	553,811
3. Protection on national forests and adjacent private land:										
(a) Fire	533,002	1,957,296	1,985,582	504,716	1,955,000	1,955,000	504,716	1,955,000	1,955,000	504,716
(b) Other	1,289,333	1,612,298	1,366,723	1,534,908	1,600,000	1,600,000	1,534,908	1,600,000	1,600,000	1,534,908
4. Sale area betterment on national forest lands (including reforestation)	32,100,873	22,576,232	17,957,006	36,720,099	22,095,000	22,095,000	36,720,099	23,095,000	23,095,000	36,720,099
5. Scaling of timber	238,843	902,185	869,628	271,400	900,000	900,000	271,400	900,000	900,000	271,400
6. Research investigations	278,991	922,422	845,045	356,368	920,000	920,000	356,368	920,000	920,000	356,368
7. Administration of private lands	9,470	15,306	13,538	11,238	15,000	15,000	11,238	15,000	15,000	11,238
8. Reforestation (private lands)	89,108	46,428	37,064	98,472	45,000	45,000	98,472	45,000	45,000	98,472
Subtotal	36,328,661	[1] 30,506,415	25,184,112	41,650,964	30,000,000	30,000,000	41,650,964	31,000,000	31,000,000	41,650,964
Advanced to forest protection and utilization for fighting forest fires [2]			3,800,000	−3,800,000		−3,800,000				
Total	36,328,661	30,506,415	28,984,112	37,850,964	30,000,000	26,200,000	41,650,964	31,000,000	31,000,000	41,650,964

[1] Includes $1,279 reimbursed to appropriation.

[2] Reflects obligations in 1966 for fighting forest fires which were recovered from the 1967 appropriation for fighting forest fires.

NOTE: Balances carried forward are due primarily to necessity of deferring work for which funds are deposited until the most practicable time. For instance, funds for sale area betterment are received in advance of cutting, but work cannot be started until cutting operations are completed. The time lag sometimes extends for several years, depending on the amount of preparatory work required in the sale area and weather conditions.

Above obligations for 1966 include:

(1) Transfers to National Forests Fund of earned sale area betterment deposits in excess of obligations for sale area betterment work	$145,616
(2) Refunds to cooperators	166,321
	311,937

Chairman HAYDEN. Would you care to comment on any of these statements?

Mr. CLIFF. I don't have any comments. I will ask the members of the staff if they care to comment on any of these particular items.

No, we have no comments, Senator.

Chairman HAYDEN. Do you have any questions?

Senator MUNDT. Just a few, Mr. Chairman.

RANGE RESEARCH WORK, RAPID CITY

On page 81 of the justification, you discuss range management work. Some of this type of work is being done at your facility out in Rapid City. Can you give us a report on the status of what Rapid City is doing in this area?

Mr. CLIFF. That is the range research work I believe you are referring to, and I again will ask Dr. Jemison to comment on that, if I may.

Mr. JEMISON. We are making good progress there at Rapid City with quite a modest program. We have found out the carrying capacity for some of the more productive bottom land range types in the Black Hills that are used for grazing, and we have found methods for improving these more productive ranges in the Black Hills.

Also, we are working out the place that grazing can find in a multiple-use type of forestry practice in the area, where some forage is available in timber stands that have been recently harvested, or that have been thinned and also that are being used for watershed purposes.

These are the principal things we have been working on.

Senator MUNDT. You mentioned Dr. Jemison, that this is a rather modest program. Do you have what is needed, and what is planned for carrying this program forward at the optimum speed?

Mr. JEMISON. Well, in our long-range study, there is a plan to accelerate this program, when it is possible to do so. We are making good progress with it. I think we have three scientists there now on this program, but we do anticipate speeding up the work, when we can do so.

Senator MUNDT. Is the facility there actually staffed in accordance with your original plan?

FACILITY EXPANSION

Mr. JEMISON. Well, again, the long-range study plans to increase the staff at that Rapid City facility, when we can do so. We are hoping when it is possible, to increase the work in timber management as well as——

Senator MUNDT. When you use the words "When we can do so," are you talking in terms of the financial situation, or is there a problem of a facility there?

Mr. JEMISON. Well, I guess I am referring to both. We do have, as you know, constraints on our budget, and we try to identify the higher priority things within the limits that we have to work under, but we are also crowded at Rapid City and we will need eventually to expand our facilities there.

Senator MUNDT. What do you anticipate in terms of expansion when finances permit?

Mr. JEMISON. I believe the plan is to put a small addition on to the present laboratory, and to add some auxiliary facilities that would require about $300,000 as I recall.

Senator MUNDT. You can put that in the record, if you want to.

Mr. JEMISON. Yes, it is $300,000, for construction, which would require $24,000 for the architectural planning which of course, would have to come first.

SAGEBRUSH CONTROL

Senator MUNDT. At the bottom of page 81 of the justification you discuss sagebrush control needed on some 95 million acres.

Are there any of these areas that you are talking about located in South Dakota? I don't recall much discussion about the sagebrush problem.

Mr. JEMISON. I think the work we are doing, I believe in southern Idaho, is work that would permit any control programs to be applied in South Dakota, if there were areas there that were in need of treatment.

Now, I am not sure exactly where these might be, but there might be some in South Dakota.

Senator MUNDT. I am not sure either, I just remembered that sagebrush used to be found out there.

Would there be anybody that could find that out?

Mr. CLIFF. I can comment on that, Senator. I know the Black Hills National Forest quite intimately, and also, I am acquainted with the national grassland areas. We don't have this problem in South Dakota, to the extent that it is present in other States, further west. There is a great deal of sagebrush in Wyoming, Utah, Nevada, Oregon, and Idaho, and other Western States.

Senator MUNDT. Does it destroy the grazing land? Is that what it does up there?

Mr. CLIFF. Well, on range that has been overgrazed in the past, the sagebrush tends to thicken up and it takes the soil moisture, and replaces the better species. Once it gets established, it is difficult for the better forage species to compete with it. So this research and the action program that we have is designed to reduce the sagebrush, and to give the better plant species an opportunity to grow. Sometimes we even have to reseed the better species after the sagebrush has been reduced.

Senator MUNDT. Is this a tough thing?

Mr. CLIFF. Sagebrush is an aggressive and persistent plant but we have several effective ways of controlling it. We don't plan on eradicating all sagebrush by any means, because sagebrush is a natural part of the environment. It is controlled only where it has increased abnormally, and where it has replaced good forage species. We are very careful that we leave enough to provide for the big game.

Big game animals browse on sagebrush, in the wintertime, and at some other times of the year, so we coordinate this program very closely with the State game departments. We are not trying to have a widespread elimination or eradication program, but one of control.

Senator MUNDT. This is not a weed that you approach like you approach halogeton, for example?

Mr. CLIFF. No, it is not in the same category. Halogeton is a very poisonous plant, and the action directed at that is one of eradication.

Senator MUNDT. When you say big game browse on sagebrush, are you talking about elk?

Mr. CLIFF. Primarily antelope and mule deer, but elk would make some use of it, too. In this program, we do reserve leave strips and we coordinate our efforts with the game people.

RANGE MANAGEMENT FINANCING NATIONAL FOREST, NEV., IMPROVEMENT

Chairman HAYDEN. Senator Bible has requested that there be inserted in the record a series of questions relative to adequate financing of range management and improvement in the national forest in Nevada. This will be done and these questions as well as one related to recreation may be answered also by insertion in the record.

(The questions and answers follows:)

Question. When did the Forest Service last request a program increase for range management?

Answer. In fiscal year 1963.

Question. Does this mean that range management has been adequately financed since that time?

Answer. As Mr. Cliff mentioned in reply to a question of relationship of this budget to the Development Program for the National Forests, there are a number of our program elements where it has not been possible to attain the levels of financing contemplated by the Development Program. However, we have established priorities within the Program and have met the most urgent needs. We must admit, however, that sustaining our current grazing load of 11 million animal unit months of livestock grazing, a level somewhat in excess of our current estimates of capacity, while we get our ranges in better condition, is becoming increasingly difficult at present levels of range development.

Question. One of your goals is to get all range allotments under intensive management. What is the value of intensive management?

Answer. Intensive management is the application of the best kind of practical knowhow and improvement to the individual range allotment. Its major values are better resource protection and higher assurance of sustained livestock use and permittee tenure. A majority of our 20,000 rancher-permittees are small operators who depend heavily upon forest ranges for grazing. For example, 70 percent of our cattle permittees own less than 200 cattle. These and other permittees need a larger animal base. In 1966, forest permittees told us they would like to graze 8 million more animal unit months of livestock than we now can permit. Intensive management with its facilitating revegetation and structural improvements will help us toward meeting this advance evidence of an expected higher future grazing demand upon all rangelands.

On an allotment basis, intensive management costs about $2200 annually, of which about $900 covers costs of range development and maintenance of improvements. Doing the minimal or extensive job that we do on most allotments costs about $600 per year per allotment. Outputs of livestock production, rural employment added and wildlife values, for extensive management are valued at approximately $9500. For intensive management the outputs are valued at $17,500.

Question. I assume you are practicing intensive management on National Forest ranges in Nevada?

Answer. Yes. We have 58 out of the total of 365 National Forest allotments in Nevada under intensive management.

Question. With 365 range allotments in Nevada and only 58 of them under intensive management, it seems to me you have a long way to go. Our Nevada forest ranges are very important forage sources. They need to be properly managed and improved so the stockmen can have more grazing. In addition, the forest ranges produce water that is the lifeblood to our State and they need to be properly handled for this important resource.

You have provided us your estimate of total needs in range on all the National Forests and National Grasslands. What are the needs in Nevada forest ranges? How long will it be before you can get these important Nevada ranges producing at their potential?

Answer. I agree, Senator, that Nevada's National Forest ranges are important. We want to do all we can to improve them to their potential.

In 1966, we made an inventory of needs on Nevada's forest ranges. This inventory showed range improvement needs of about $12 million. Improvements needed are primarily fencing, plant control and seeding, and water developments. There is need to complete analysis of Nevada's allotments, too, at a cost of approximately $330,000.

At existing funding levels, Nevada's ranges will not produce their potential before year 2000. With funding at an annual level of $900 thousand for range revegetation and improvement and $80 thousand for watershed improvement, together with $450,000 for range management, Nevada's National Forest ranges can be operating close to optimum productivity by about 1980.

Question. You have provided us with a statement of funding needs for range management in Nevada and goals. Can you expand upon the table in the Explanatory Notes (page 11) and tell us where range management stands for all National Forests and National Grasslands in relation to the proposed funding level for FY 1968 in the Development Program for the National Forests? And then I would appreciate it if you could provide us with an estimate of annual needs to accomplish your proposed program of intensive range management within reasonable time goals.

Answer. In FY 1968, the proposed schedule of financing for range management was to have been $16,357,000. Requests are for $11,823,000, or about $4.5 million under the Development Program level. Thus, in 1968, at requested levels, range would be financed at 72 percent of the planned level in the Development Program.

Annual needs through 1972 to accomplish the program of range resource management set forth in the Explanatory Notes within the time goals shown average about $17.1 million. Amount of need varies from year to year due to program phasing. Our best estimates show that range needs will increase to about $22 million in 1980, a reasonable time goal to accomplish intensive range management.

Question. From your testimony and the Explanatory Notes, it appears that this range development job will cost something over $150 million for improvements and if I have made the correct computation, about $100 million for revegetation. This totals one-quarter billion dollars. Then you have your management costs on top of that. What will the American public get for that quarter billion?

Answer. From a long-term expenditure of approximately one-quarter billion dollars for range resource developments, the American public should get ample return. This investment in good management will produce a range with higher capacity for livestock and wildlife. It will also provide a more attractive environment for the general forest visitor. The range will be producing at its potential for all resources and uses; it will be land properly managed under multiple use.

We are dealing with a 106-million acre segment of the public lands that is receiving more and more public attention and use. It must be developed and managed properly to meet the high demands expected to be made upon it. While the range has been used by the rancher since before the national forests were established, and the hunter and fisherman also has benefitted from it for many years, the general public now is beginning to find out about ranges. Hikers, trail riders, wilderness users and other forest visitors are insisting that the range resource be maintained in satisfactory condition both for their enjoyment and for soil and watershed protection.

This investment will provide specific benefits to the American community of farmer-rancher families. As you know, we have reported findings from some of our studies about these benefits in the Explanatory Notes (page 33 and Figure 4–a). The added value to the livestock ranching economy from the expected higher grazing allocation levels should prove the effectiveness of these programs of public range management and development. Other projections show that the American public will lose some 150 million animal unit months of grazing and its attendant values over the next 32 years at existing levels of range management and development.

Question. Has the Forest Service at any time spent any of their funds for the construction or operation of ski facilities?

Answer. It is our policy that both construction and operation of ski facilities on National Forests will be handled by private industry under special use permit. This has worked very well for the 200 developed ski areas we have on the National Forests. As near as I can recall, there has been only one case where appropriated funds have been used for construction of a ski lift. This was in the 1930's on Mt. Hood in Oregon and was one of the first chair lifts. Recently, it was reconstructed by funds made available by the Oregon and California Counties. It is still owned by the Forest Service but is operated under a special use permit. Also, in the 1930's, a few ski warming huts were constructed using emergency funds and labor such as Civilian Conservation Corps personnel. Since that time such facilities have been built with private capital or local public funds (not funds appropriated to the Forest Service).

It has been our experience that if a new ski development does not have an economic base sufficient to justify a private capital investment, it is likely that it will run into trouble in its operation costs and the promoters will be disappointed.

Chairman HAYDEN. Also, Senator Bible requested that there be inserted a letter to him under date of October 14, 1966, from the Associate Chief of the Forest Service on this same subject.

(The letter follows:)

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., October 14, 1966.

Hon. ALAN BIBLE,
U.S. Senate.

DEAR SENATOR BIBLE: We certainly appreciated receiving your letter of September 20 and the copies of your correspondence with Mr. Riley Chambers and Regional Forester Iverson concerning the inadequate financing provided for range improvements and revegetation.

The Secretary of Agriculture has furnished the Forest Service with budgetary guidelines within which we must work. These guidelines reflect the Administration's effort to restrain Federal spending for domestic programs as a measure to combat inflation. They do not provide for full satisfaction of the financial needs of the Forest Service to ideally carry out its programs.

Our Fiscal Year 1968 budget estimates were recently submitted to the Secretary and we expect to have Bureau of the Budget hearings later this month. The estimates submitted are based on the relative needs of all Forest Service programs and the public demand for the various resources which we administer. In line with a policy of restraint, we have not provided in our estimates for full satisfaction of the budgetary needs of any of the Forest Service programs. The budget which will ultimately be submitted to the Congress will represent our best judgement of priorities among programs within the budgetary guidelines furnished us by the Secretary of Agriculture.

Regional Forester Iverson's letters to you of July 7 and 16, 1966, present a good analysis of the range management problems on the National Forests in Nevada. His observations are generally applicable to National Forest System ranges throughout the Western United States.

We are extremely conscious of the important part that National Forest ranges play in maintaining the stability of the livestock industry in the West. Livestock grazing has always been and continues to be a major use of the National Forests. It is a major objective of the Forest Service to improve and restore the National Forest rangelands to their full productivity potential.

Because of the heavy demands made on public grazing lands before and during the early period following their incorporation in the National Forests, the Forest Service has been faced with the long-term problem of rehabilitating deteriorated ranges and bringing stocking rates in line with sustained grazing capacity. We are still faced with this problem in many areas. The permitted grazing use on many National Forest System ranges continues to exceed the capacity of these ranges, in their present condition, to support this load on a sustained-yield basis. Without the necessary cultural treatment and management, the soil and vegetation continue to deteriorate in these areas and the productivity of the land for all resources is being further impaired.

Some very spectacular accomplishments have been made in recent years in arresting this deterioration and restoring the productivity of a number of National Forest System ranges. The generally fine cooperation of permittees is responsible for much of this accomplishment. Much more remains to be done.

Management of the range resource under the longstanding multiple-use principle of the Forest Service, which was given statutory sanction in the Multiple Use-Sustained Yield Act of 1960, is a complex task. Multiple objectives must be established. Coordinating measures must be taken to insure that all resources are protected and that the many uses can exist in harmony with each other. As the demand for the various resources grows, their management gets more complex. This takes more time and effort.

We are moving into a phase of range management which is much more intensive than practiced in the past. Intensive management systems are prescribed allotment by allotment based on thorough and systematic analysis. These intensive management systems have been initiated on about 4000 range allotments to date. The goal is to have all 11,600 range allotments in the National Forest System at this new level of management by 1973. This can only be done if the commensurate funding is provided.

The 10-year "Development Program for the National Forests", endorsed and sent to the Congress by President Kennedy in 1961, is the blueprint that is guiding many of our current activities on the National Forests. Range resource management is one of these major activities. Unfortunately, the development schedule recommended in that program has not been fully realized. From an overall budget standpoint we are about two years behind schedule already.

The intensive management necessary to assure improvement and continued productivity of forage resources fully coordinated with other values is requiring more range improvements than were formerly planned. In order to reevaluate improvement needs for range and for the other resources, our field units recently completed an enumeration of project needs for all phases of National Forest System management. Data are currently being evaluated in this office. Preliminary summaries of range improvements needed, and of areas needing revegetation, indicate that the estimates in the 10-year development program were very conservative.

We thank you for your interest in the programs of the Forest Service and hope we have given you the information you requested.

Sincerely yours,

A. W. GREELEY,
Associate Chief.

QUESTIONS SUBMITTED BY SENATOR HRUSKA

Senator MUNDT. Mr. Chairman, Senator Hruska submitted a list of questions for me to ask, but I think that it would be perfectly appropriate simply to put them in the record and let the representatives from the Forest Service prepare their answers for the record.

Chairman HAYDEN. All right.

(The questions and answers follow:)

SHELTERBELT LABORATORY, UNIVERSITY OF NEBRASKA

Question. Last year, Congress appropriated $28,000 for planning money for the construction of a Shelterbelt Laboratory in conjunction with the University of Nebraska at Lincoln. Can you tell us what progress has been made in completing the plans for this facility with that money?

Answer. An excellent prospectus for the laboratory has been prepared. General Services Administration has negotiated a contract with a local architect for the design of the laboratory. Plans and specifications are now being prepared.

Question. There is no budget request for the construction money for this facility. Do you expect to have the plans and specifications completed in time so that you could let contract for the construction during fiscal year 1968 if you had the money? In other words, could you use the money in fiscal year 1968 if you had it?

Answer. According to the schedule for the design contract, the plans and specifications will be completed in February, 1968. If funds were appropriated in fiscal year 1968, construction could start in the spring.

Question. Can you describe the building or buildings that would be constructed at Lincoln, together with any attached greenhouse facilities and the like? How much will the cost of the construction come to?

Answer. The major building will provide modern office space and specialized laboratories for our scientists and cooperators. They are learning how to culture shelterbelts, how to breed superior varieties of shelterbelt trees, and how to protect them from damaging diseases. The estimated cost of building the structure and developing this site is $350,000. An additional $150,000 is needed for the required headhouse-greenhouse and storage facilities. Together $500,000 is needed to construct the facilities planned for this phase of construction.

Question. What sort of cooperation have you been receiving from the University of Nebraska? Is the University making any contribution toward this project?

Answer. The University of Nebraska has been most cooperative. They have leased to the Forest Service a building site in a desirable location. Currently, they are putting in access roads. In all ways the University has helped us to continue our shelterbelt research program. They, like us, are anxious to see this Shelterbelt Laboratory built on the campus, so Forest Service and University scientists can forge ahead in their cooperative research.

Question. Is it not true that forestry research has tended to lag behind various other types of research? Is this partly because trees grow more slowly than other types of plants, and it, therefore, requires a longer span of years to obtain useful results?

Answer. Yes, I can truthfully say that forestry research lags behind other types of research. Expenditures by all forestry research agencies and industries nationwide only amounts to about one-half of one percent of the portion of gross national product generated by timber production activities alone. This compares with about two or three percent for research in some other areas. This lag, as you suggest, may in part result from the relatively long periods of time that forestry research takes. Probably of greater significance is the lack of realization by most people that forestry research produces substantial benefits in many cases very quickly. Many examples could be cited but one will illustrate the point.

In 1959, we found that eastern red cedar, an important shelterbelt tree, was being heavily damaged by a blight. In less than two years, research had developed a highly effective chemical control. Soon, thereafter, all tree nurseries were using the treatment prescribed with the result that the disease is no longer a problem.

Question. Can you describe some of the types of problems that will be studied at the Shelterbelt Laboratory at Lincoln when it is constructed?

Answer. As I mentioned earlier, two of our research projects will use the proposed facilities. One group of sicentists will be concerned with learning how to grow better shelterbelts; the other with protecting them from diseases. The first group is working on spacing of shelterbelt plantings to find the most effective design of tree plantings within a shelterbelt and the best distances between shelterbelts to control wind speed. Breeding trees for shelterbelts also promises exciting benefits. Certain species, varieties and individual trees have been found to have excellent properties for shelterbelt planting. Our plant pathologists are developing controls for the diseases that kill young trees and those that decimate the foliage of older trees. Shelterbelt plantings cost a great deal to establish and maintain. Our research is aimed at helping farmers to get the most long-term benefits from investments in shelterbelts.

QUESTIONS AND ANSWERS

Senator MUNDT. That is all I have.

Chairman HAYDEN. I also have questions presented by a number of Senators which can be handled in the same manner.

(The questions and answers follow:)

RESPONSES TO QUESTIONS BY SENATOR RUSSELL

BURNING OF COMMERCIAL FOREST LANDS

Question. How much acreage of privately-owned commercial forest land burned last year?

Answer. A total of about 850,000 acres.

Question. Of this total how much was in the South?

Answer. About 600,000 acres.

Question. Does the Forest Service consider present levels of fire protection under this program adequate?

Answer. Existing levels of protection have not precluded heavy fire losses, especially in dry years when suppression is difficult and costly and large fires occur. Current fire protection efforts by State Foresters have not brought about a reduction in the number of man-caused fires despite the work of Smokey Bear. Also, expansion of the use of aircraft for fire suppression and detection is a necessary modern technique.

Question. What are the legislative limitations on funding?

Answer. Section 3 of the Clarke-McNary Act authorizes to be appropriated not more than $20 million.

Question. What are the Federal and State contributions?

Answer. Fiscal year 1966 total expenditures were about $85 million. Of this, State expenditures were about $72 million, and the Federal share about $13 million. This represents a Federal participation of 15%.

Question. What level of appropriations for fiscal year 1968 did the Forest Service and the Department request?

Answer. The request to the Budget Bureau for Cooperative Forest Fire Control activities for fiscal year 1968 was for an increase of $3,472,000.

Question. Do you think that adequate provisions are being made for the future timber supplies for our new and expanding forest industries?

Answer. There are several reasons which point to a growing demand on forest resources in the future. Demands for industrial roundwood have been increasing more rapidly than the level of projection forecast in the Timber Trends report. There have been large increases in stumpage and log prices. In the South there has been very rapid expansion of timber based industries, especially in softwood plywood and wood pulp. At the present time, there are 34 mills which are operating or are under construction with a capacity of 2.6 billion board feet of softwood plywood. The expansion of all has increased the southern pine by 0.6 billion cubic feet, or roughly 25% since 1962. It has been recently estimated that mills in the South will have the capacity to use an additional 6 million cords of wood by 1968. Reduction of fire losses will be essential to meet this level of demand in the South.

Question. If Congress appropriates an additional $3 million for this program, what effect could be expected on the long range timber supply outlook?

Answer. The funds would permit the States to intensify their protection and economically reduce timber losses. This would be particularly true in the southern pine area where, as stated above, 600,000 acres of commercial forest land burned last year. Building up and maintaining adequate protection forces will be necessary if we are to assure the supply of raw material to the mills. As new forests are planted to supply future timber needs, protection forces will be in a better position to provide the necessary protection to these crops.

Question. How would an increase in this cooperative fire program permit States and private woodland owners to apply the latest findings of research?

Answer. Added funds would permit the States to employ additional technical specialists to work with private landowners. Specific application of research findings in use of prescribed fire, better use of all types of aircraft in detection and suppression, and expanded use of fire weather and fire danger measurements as a basis for determination of fire suppression strength would be possible. Full utilization of fire damage assessment techniques would be possible both for timber damages and other damages as measurement techniques are developed by research. Prevention and suppression strength is not now sufficient to fully utilize these newer more expensive techniques.

RESPONSES TO QUESTIONS BY SENATOR YOUNG

RESEARCH LABORATORY, BOTTINEAU, N. DAK.

Question. It is my understanding that initial staffing of the research laboratory at Bottineau, North Dakota, has been completed. Is this correct?

Answer. Yes.

CLARKE-MCNARY SECTION IV PROGRAM FUND DISTRIBUTION

Question. How is the distribution of funds to the various States handled under the Clarke-McNary Section IV Program?

Answer. With respect to this program which is listed as line item "Cooperation in Forest Tree Planting" on page 114, the current formula for distributing Federal funds allows a maximum of $12,000 to States with high operating costs per unit of production. These are primarily States with small production programs. Currently eligible for the maximum allotments are the States of Colorado, Idaho, Kansas, Montana, New Mexico, Nevada, North Daktoa, Oklahoma, South Dakota, and Utah. Some of these, however, may not qualify for the full amount. Eight other States are classed as "medium-well" financed and are eligible to receive up to $4,000. All other States may receive up to $3,000 if expenditures exceed receipts by a sufficient amount. Some States receive enough income from the sale of trees to fully finance nursery operations and do not claim Federal funds.

Question. Is there any way in which the funds for this program can be reapportioned so that funds could be shifted from one area to another as program needs change?

Answer. Yes sir. The current formula is the result of attempts to do just that. The formula can be changed whenever a better one can be devised. The Forest Service is always happy to consider suggestions for improvement of the formula. Upon several occasions each year this program is discussed thoroughly with either the National Association of State Foresters or its Executive Committee.

Question. Are the States required to provide any matching funds for this program?

Answer. Yes sir. At least 50% as required by the Clarke-McNary Act.

Question. How much money did you request for this program for Fiscal Year 1968?

Answer. $300,000.

Question. If additional funds were made available, how would they be utilized?

Answer. The States could match the full authorization and still stay within the 50% matching provision. Additional funds within the $2,500,000 statutory authorization would be used for two urgently needed steps:

To strengthen the States where more Federal-matching funds are needed, and to expand the activities of the State Foresters in the production of genetically-improved tree seed and planting stock. Recent research findings prove conclusively that trees can be genetically improved with results that will match improvements in wheat and cattle. New strains of trees can be genetically produced that have resistance to insects and disease that grow much faster and produce higher quality and financial returns. Only three States—Florida, Georgia, and Texas—has been making good strides in this activity. Seed orchards are expensive. In about one-half the States there is no effort to produce genetically-improved seed and planting stock, while in other States only a meager start has been made. Greater Federal financial assistance would speed up this effort.

FOREST LAND MANAGEMENT, NORTH DAKOTA

Question. I note that you have a budget increase of $9,600 for Forest Land Management in North Dakota. Would you give us the details?

Answer. This increase will be used to construct recreation facilities at Sather Lake, which is west of Watford City, North Dakota. It is estimated that these facilities will accommodate 35 people at one time.

WATER POLLUTION CONTROL

Question. Your justification book on Page 14 indicates a bid for an increase of about $3.4 million to improve waste treatment systems at 25 recreation sites for water pollution control, to develop recreational facilities, and to clean up existing recreation sites.

Do you propose to undertake any of these activities in North Dakota?

Answer. No, Senator, none of these improvements to existing waste treatment systems will be in North Dakota.

RESPONSES TO QUESTIONS BY SENATOR BYRD

WATERSHED DEVELOPMENT

Question. What is the status of the work at Trout Lake?

Answer. I'm happy to report that this is coming along well. We have already contracted to construct the dam. Work will be started soon if it is not already in progress. Through your efforts funds for this were included in the fiscal year 1967 budget. We have in this fiscal year 1968 budget now being considered enough funds to install the basic water and sanitation systems, a camping site on one of the loop roads, and preparation of a picnic ground site.

Question. Will this complete the necessary work here?

Answer. No, it will not. I believe last year we told you the total cost of what is needed in the way of recreational facilities to fully develop this area would cost about $800,000 with an additional $250,000 for roads. What we have in the budget for fiscal year 1968 will get the job well started, but it will not complete the necessary work.

Question. How are you coming along with the needed improvements at Sherwood Lake?

Answer. Again, Senator Byrd, I'm happy to say that we can report reasonably good progress here also. With fiscal year 1966 funds we were able to start a bathhouse, build a parking area and road to the bathhouse, and install a water and sewage system. In fiscal year 1967 the Anthony Job Corps Camp that is located not far from Sherwood Lake became fully operational. Much of the needed improvement work at Sherwood Lake is just the kind of work needed for training for the corpsmen, so they have been working there. With this help and the fiscal year 1967 funds we had budgeted, we are working on a beach development, a boat dock, the bathhouse and toilet, and doing some landscaping. This work will go forward in fiscal year 1968. In this fiscal year 1968 budget, now before you, we have included funds for some rather extensive maintenance and repair work on the dam and spillway. I think we will have Sherwood in good shape in the next year or two.

Question. What is the status of the work on the Spruce Knob-Seneca Rocks National Recreational Area?

Answer. This is coming along, but probably not as fast as it should. As you know, this area is getting lots of publicity here in the East; there is much interest in it and I am afraid the visitors will probably be coming faster than we will be ready for them.

You will recall that last year we told you we had funds to prepare the master plan for the area and to get started on a recreation development at Big Bend on the South Branch of the Potomac. Supervisor Olliver and Regional Forester James now have a draft of the development plan in our office for review. Because of the interest in the area and the somewhat conflicting ideas among those interested, this plan has to be very carefully considered. It must meet the objectives intended by Congress in establishment of the area, and must consider all resources with the needs of the recreation visitor paramount. Work on the campground at Big Bend is in progress. We have some funds to continue work here in the proposed fiscal year 1968 budget.

We are making some good progress, too, on needed road work in the area. You will recall that the access road to Spruce Knob from Highway No. 33 is pretty poor. With fiscal year 1967 funds, we are locating and designing a better road up the mountain. In the fiscal year 1968 budget, because of the increase proposed in our road funds, which incidentally makes us mighty happy, we have been able to program $1 million to start construction on this better access road. You will be interested, I'm sure, to know that the proposed increase in road funds will enable us to put an additional $1,800,000 of road funds in West Virginia. Last year we had available for West Virginia only about $1 million so this is almost a three-fold increase with a good part of it scheduled for the National Recreation Area.

Question. Will this development take care of the needs for this new area? Are there possibilities for water impoundments which are so lacking here and have such tremendous use when constructed as demonstrated by the small lake at Brandywine? I had the pleasure of dedicating the recreational facilities there several years ago.

Answer. No, Senator, this will not take care of the needs for this new area. I believe that at the time your bill to create the National Recreation Area was being considered by Congress, we estimated the cost of doing a good job of development in the first five years would be $8,450,000 with a further investment of $7,830,000 needed in subsequent years. So, while what I have told you we are now doing is a good start, it is a long way from meeting the needs of the area.

Now, to your question regarding the possibility of some water impoundments in the National Recreation Area. Yes, there are some good possibilities. Supervisor Olliver has told us that there are at least five sites which hold such possibilities. Altogether they could give a total surface area of perhaps 225 acres.

As was true at Trout Lake and the other lake sites we have talked about previously, the first step is to make detailed feasibility studies of dam sites. We won't be able to get to this in Fiscal Year 1968 with the budget you are looking at now.

Question. What is proposed in the way of developments on the South Branch of the Potomac River? This is an important part of the National Recreation area.

Answer. The Big Bend Campground I mentioned earlier is on the South Branch of the Potomac River. Construction has started on the campground and the proposed 1969 budget provides for the continuation of this work. The cost of the total project will exceed what will be available in 1968, so it will have to be finished in subsequent years.

With increase in road funds we hope to be able to start improvement work that is badly needed on the road down the South Fork in the not-too-far distant future.

Question. What has been accomplished in the matter of building an observation tower on Spruce Knob?

Answer. Well, Senator, because of your good help, I can report good progress here. Construction of this tower will begin in May and will require about four months to complete. Funds are available now for this contract. We will still need to enlarge the parking area to accommodate more cars and buses. We should also put some interpretive exhibits in the tower and install some interpretive nature trails around the top of this interesting peak. As it looks right now, this work will have to wait awhile but the tower should be usable late in 1967 or early in 1968.

Question. A question has been raised about Summit Lake in Greenbrier County. Can you tell me something about this?

Answer. Summit Lake, you may recall, Senator, is located about two miles off Highway No. 39 just a few miles east of Richwood. It is a small lake that was built cooperatively in 1955 with the State of West Virginia as a fishing lake. I believe the two-mile access road was financed with donations from citizens of Richwood to the State Road Commission. We have some rather modest recreation improvements around the lake. It is a very popular spot. The recreation facilities should be enlarged by building two campgrounds and the existing primitive-type campground should be converted to a picnic area. This would be in line with plans developed by well-qualified landscape architects and professional recreation planners. Aso, there are some minor repairs needed on the overflow tube in the dam. As it looks now, we will not be able to get to this work in fiscal year 1968.

Question. We discussed Eagle Lake on Hells Creek in Pocohontas County at last year's hearing. Will you give me a status report on this area?

Answer. Senator, I wish I could report good progress here, but I can't. Nothing has been done since we were here last year. Our preliminary studies show, as we reported them, that a dam is feasible in this locality.

Question. What is needed just to get this important project started?

Answer. Like in the case of Trout Lake, the first job would be to enter into a contract with an engineering firm to design the dam and prepare actual plans and cost estimates. The recreation developments should also be designed. Altogether probably $75,000 to $80,000 is needed to get this project in motion.

Question. Last year we also talked about a lake on Laurel Fork in Randolph County. Can you tell me where this project stands?

Answer. Here again, Senator, I will have to make the same report as I just made for Eagle Lake. Since our first studies affirmed that a dam is feasible, nothing further has been done.

Question. What will the Laurel Fork project cost and are funds provided in this budget?

Answer. Without sound engineering estimates on the cost of the dam, we cannot be too precise but our best estimate at this time is that the construction of the dam, construction of needed roads and parking, and installation of adequate recreation facilities would cost about $1,200,000 to $1,300,000. As I just said about Eagle Lake, the first step would be to get plans and specifications for the dam and a design of the facilities needed. I believe the engineering and design cost here would be about the same as at Eagle Lake; that is, $75,000 to $80,000. As is true for Eagle Lake, there are no funds in the budget for this project.

PRINCETON RESEARCH LABORATORY

Question. I am very much interested in the research program at the laboratory at Princeton, West Virginia. I believe you have two lines of work there—forest products marketing and utilization. Is that correct?

Answer. Yes.

Question. I have followed closely the forest products marketing project and have been impressed with the progress being made. What does this budget provide for that work?

Answer. $700,000, the same as for fiscal year 1967.

Question. Then no increase is being requested?

Answer. That is correct.

Question. Please outline for me the scope of your research in forest products marketing and give some examples of recent accomplishments.

Answer. The purpose of this research is to examine the factors that influence the flow of wood products into the market place. We determine and evaluate the things that make wood competitive with other products in construction, manufacturing and shipping. These studies show how production and marketing practices can be modified to make the use of woods more profitable and more extensive. We also do research to determine the feasibility of wood industry expansion.

We have made good progress at Princeton through marketing studies. Thirty publications tell the story of our accomplishments—13 of them this year. Major effort has gone into research on hardwood flooring, that has lost more than half of its market in the past 10 or 12 years. We now know why this has happened. The trend toward high rise apartments and slab onground dwellings has led to problems and high costs when strip wood flooring is used. But we are on the track of improvement that will reverse the trend toward use of substitute floor materials.

Another example of research progress relates to the use of low-quality hardwoods for pallets. Pallets, which are used in material handling, now account for about 20 percent of all hardwood lumber consumption but the potential for future growth in utilization is tremendous. We have recently shown that in one important industry—food handling—that palletization of dry grocery warehousing and shipping would save that industry millions of dollars a year. It should reduce the cost of food distribution 10 to 12 percent and hopefully lower the housewife's food bill. This research is expected to open a great new market for wood pallets.

The Princeton marketing research group have contributed in many other ways during the year; in new lumber drying procedures that increase values by $12 M bd. ft., in a mammoth apartment rehabilitation project in New York City, and in handling 250 requests for marketing information and assistance.

Question. How big a staff do you have at Princeton to do the marketing research job?

Answer. Presently we have a staff of 50; that is, 25 scientists and 25 support personnel.

Question. Now, may I ask you some questions about the forest products utilization research at Princeton? What is the present level of staffing and financing of this project?

Answer. This program is presently staffed with three scientists and three supporting personnel, a total of 6. It is financed in fiscal year 1967 with an appropriation of $100,000.

Question. What does the fiscal year 1968 budget request include for forest products utilization research at Princeton?

Answer. The same amount as for this year—$100,000.

Question. Then the research on utilization problems will presumably continue for the coming fiscal year at the same level as heretofore.

Answer. That is correct.

Question. What is being done in the utilization research program at Princeton?

Answer. We are working to improve wood products and techniques for utilizing hardwood logs and bolts. New products and new uses for hardwood materials are under study. Last year, I described research leading to the use of wooden highway guardrail posts. This year, the Princeton research has shown that a machine for driving these posts is practical and can drive posts at lower in-place costs than posts of competing materials. The research also includes pilot testing of new or modified wood products that have not been developed to the industry acceptance stage. For example, special railway ties are now under test in a mainline road with distinct possibility of proving more economical than standard ties, and reducing the probability of increased use of other materials.

Question. Is the present funding at a level you feel is adequate for attack on these utilization problems?

Answer. We plan ultimately to increase the allocation to this work when funds can be budgeted for it.

Question. What increase is needed to conduct this program at a reasonably full-scale pace?

Answer. The forest products utilization research program, to most effectively meet the needs as we see them, would require an annual expenditure of about $250,000.

This would mean an increase of $150,000 above the present level of financing. The research effort could make effective use of such increased financing whenever the budget situation permits.

Question. What would be done with this increased funding, if it were appropriated?

Answer. The gross supply of hardwoods in West Virginia is more than adequate, but the species mix and quality require the development of techniques for using economically the less preferred species and lower grade logs. Existing log conversion systems are unable to operate profitably on the large volumes of low quality material available. Appreciably increased use depends on development of new, more efficient, systems of log conversion or on a general increase in product value made possible through use of improved processing techniques or more effective use of alternate species. The strengthened program would enable us to move ahead vigorously in developing this technology.

Question. I believe you said you have 50 people at Princeton in marketing research and six in utilization studies. The laboratory facilities there were constructed several years ago. Are they adequate to house the present program?

Answer. The 56 people we have now at Princeton somewhat overtax our facilities. We have been able to crowd them in but they are working with some inefficiency due to space limitations. Of much more critical concern to us is the lack of adequate laboratory facilities for the development and pilot testing research in utilization and marketing. The minimum space we now have for this kind of work has to be used on a scheduled basis. One study group may have to delay or postpone an important step in their program until another study group vacates space or surrenders commonly-used equipment. The program will move ahead much more effectively when we can solve this problem.

Question. Have you determined what you need in the way of new facilities at Princeton?

Answer. Yes, as part of the long range study I mentioned earlier, we have carefully analyzed our laboratory needs and have made cost estimates.

Question. What do you estimate such laboratories would cost?

Answer. $500,000 to construct but first we would have to do the architectural and engineering planning. This is estimated to cost $39,000.

Question. Such planning funds are not included in your 1968 budget request. Is that correct?

Answer. No planning funds are in the budget.

Question. If $39,000 was made available in fiscal year 1968, could you feasibly go ahead with the project?

Answer. Yes. We have specific overall ideas of what we need and architectural planning could go ahead promptly.

MORGANTOWN RESEARCH LABORATORY

Question. What is the present level of staffing and financing the forest engineering research program at Morgantown, West Virginia?

Answer. The present engineering research program at Morgantown is now staffed with four scientists and four support personnel. It is financed in fiscal year 1967 with an appropriation of $150,000.

Question. Your budget request includes an increase for engineering research. How much of this do you plan to allocate Morgantown?

Answer. About $40,000.

Question. That would bring the funds available up to $190,000. How would you spend such an amount if appropriated?

Answer. We would expand our staff of systems engineers, probably to five. We would continue to work cooperatively with scientists at the University of West Virginia. Our program at Morgantown is aimed at developing improved systems for harvesting Appalachian hardwood timber in the rough mountain topography of the region.

Question. In the long range research study what level of financing have you determined to be necessary for a full-scale attack on these problems?

Answer. We believe a totally adequate effort would require about $360,000 per year.

Question. This would be, then, about $170,000 more than you say is included in the fiscal year 1968 budget request. Is that correct?

Answer. Yes.

Question. Could you feasibly expand the program to the $360,000 level in fiscal year 1968 if funds were available?

Answer. Yes, this amount could be used effectively when it can be appropriated. We have adequate facilities and high-level leadership at Morgantown to undertake such a program. We believe there is great promise in systems engineering studies that will lead to radically improved timber cutting, log loading, and other materials handling systems for Appalachian conditions.

Question. Please elaborate.

Answer. A basic requirement for the expansion and establishment of forest industries in Appalachia is the availability of low cost raw materials in the form of logs, poles, chips, and other wood products. Harvest of these materials must be done at the lowest possible cost if those industries are to remain competitive. It must provide a reliable flow of material at high rates for modern processing plants. It must be mechanized to obtain maximum labor productivity, radically improved safety conditions, and employment at maximum wage levels. The harvesting must also be done by methods compatible with preserving soil, water, and recreational values.

Logging equipment and systems are not now available to do this job in Appalachian forests. Only one-fourth of the timber being produced is actually used because much of it is of small size, low quality, or otherwise unprofitable to harvest under currently available methods of logging and handling. Typically, logging costs are more than half of the total cost of wood delievered to the mill.

Research is well along on new sources of power for woods work, new tools, better logging methods, and engineering systems to utilize large volumes of low grade wood and wood waste as fuel for power generation. Systems engineering studies have already resulted in information of value to loggers and equipment users. Strengthening the program would provide the means of moving this work ahead effectively during these next few years that are critical to the forest industry and the economy of the Appalachian region.

PARSONS RESEARCH LABORATORY

Question. Last year I believe I discussed with you the timber management research program at Parsons, West Virginia. How is this project progressing?

Answer. We continue to make good progress there in finding better ways to grow timber on lands being managed for watershed purposes as well. One of the more recent findings shows how cultural practices influence the proportion of high value species in a stand. Guides have been published for use by forest managers.

Question. What does this budget provide for the timber management research at Parsons and what is the staffing?

Answer. $105,000, the same as for fiscal year 1967. We have 4 scientists and 10 support personnel on this project.

Question. What further funding would be required to bring this work to full strength?

Answer. Our plans call for building this project to $140,000, an increase of $35,000.

Question. I notice that your budget request includes a substantial increase for forest tree improvement (genetics) research. Is this type of research underway in the Appalachian Region?

Answer. No, not at the present. The increase you mentioned will be used to strengthen projects of long standing where leads show very substantial benefits can be obtained by accelerating the research. Most of the increase would be used for research on the Pacific Coast, deep South, and Lake States.

Question. Is there a job to do through tree improvement research in the Appalachian Region? Are there likely to be "substantial benefits" as you say, from this sort of research?

Answer. Yes, very much so. Probably the biggest gap in this part of our program is in improvement of oaks, yellow poplar, black cherry, ash, and other Appalachian species. We know for sure that the opportunities for increased growth rates, high quality, and pest resistance can be developed through selection, propagation, and tree breeding.

Question. Since this is an important field of research and since you do not have an estimate in this budget for such research, I would like you to give this serious consideration in the development of your budget request for fiscal year 1969. It sounds to me this is a program we should get started on as soon as possible.

Answer. We will certainly do this for the 1969 budget.

STATE AND PRIVATE FORESTRY COOPERATION

Question. I note that the budget request for cooperative forestry includes $12,834,000 for Cooperation in Forest Fire Control. We have before us a request from the National Association of State Foresters that an increase of three million dollars be appropriated for this purpose. Could this amount be efficiently used if it were appropriated?

Answer. Yes it could. Loss of forests to disastrous fires could be reduced if additional funds were made available for this purpose.

Question. If this increase was appropriated, approximately what amount would be made available to West Virginia?

Answer. The present allocation is about $156,000. It would be increased to approximately $200,000.

Question. What is the present level of fire losses in the country and in West Virginia?

Answer. In 1965, approximately 0.25 percent of the protected State and private lands burned throughout the Nation, while approximately 1 percent burned in West Virginia. West Virginia's record is not good compared with most States in holding down the size of individual fires. For instance, in 1965 West Virginia had 60 large fires (over 300 acres each) which burned 54,745 acres or about 54 percent of the State's total burn. This was the largest number of fires over 300 acres recorded by any State that year. Using the total number of such fires for the past 4 years, West Virginia was second highest in the Nation.

It is important that we get on top of this big fire problem. Additional personnel, tankers, and other equipment are needed to provide the capability needed to hit potentially bad fires harder and quicker. This need is especially apparent during periods of unusually severe fire conditions when carelessness means more fire starts and when most of the disaster fires occur.

Question. With additional financing do you think you can show progress in preventing fire occurrence?

Answer. Yes. An intensified fire prevention program is needed, particularly in the East where suburban developments and greater uses by the public are causing more fires. Studies are now in progress that we hope will develop new and effective approaches to this problem.

As an example, in 1965, smoking, debris burning, and incendiary fires accounted for approximately ⅔ of the fires and 64 percent of the burned acreage in the State of West Virginia. A stepped-up prevention effort should reduce this record appreciably.

Question. What are some of the important values we are protecting that will justify increased expenditure in the fire control program?

Answer. First, the values protected have increased tremendously in recent years as the economy expanded.

The hard statistics of "so many dollars per cubic foot" of annual timber growth is only a portion of the value protected.

Water, soil, wildlife, and recreation, as well as timber, must be considered. The cost of protection must be weighed against all of these, plus the intrinsic value of scenery and other aesthetics. Protection of the woodland areas from fire becomes even more important as outdoor recreation facilities become more valuable to the millions of people living in the rapidly expanding eastern and central metropolitan areas.

A protective cover of vegetation on lands above water resource development projects is necessary to assure continued effectiveness of reservoirs and assure full realization of other planned benefits.

Fire protection is doubly important where corrective measures have been taken to heal the areas left bare by strip mining in several of our eastern States.

From the industrial outlook, it is known that protection of forests from fire is a prerequisite. A company looking for an area to expand their operation or to develop a permanent wood-using plant must be assured that the supply, both current and future, will be protected from the losses resulting from wild fire.

Question. I would like to follow up on the General Forestry Assistance item. A $100,000 increase for increasing hardwood lumber output. What States are they in and how do these projects operate?

Answer. These funds were sufficient to set up projects in five States for the last half of the year. The States are Michigan, Ohio, Pennsylvania, Virginia, and Georgia. The $100,000 increase is needed to fund these on-going projects for the full F.Y. 1968.

These projects are designed to offer services through the State Forester's organizations to landowners in the marking and harvesting of their timber, to loggers in improving the efficiency of their operations, and to sawmill owners in improving their manufacturing and seasoning processes.

Each of the five States has employed a sawmill specialist to provide services to sawmill owners. Services to landowners and loggers are being provided by specially assigned crews or through agreements with consultants.

Also under this program we have stationed a specialist at the Forest Products Laboratory to provide new research findings to processors and feedback on processing problems to the researchers.

A 4-week sawmill workshop was held in Poplar Bluff, Missouri, from January 23 to February 17. Ten sawmill specialists from nine eastern States and four Forest Service specialists were given intensive on-the-ground training in lumber manufacture. More workshops are planned.

Question. What is the situation with respect to hardwood supplies?

Answer. About 85 percent of the Nation's hardwood timber lands are privately owned—12 percent on forest industry holdings and about 73 percent in farm and miscellaneous private ownerships.

This hardwood timber inventory is widely distributed over large numbers of farm and other nonindustrial holdings on which forest management is generally lacking.

Survey statistics indicate that the total growth of hardwood sawtimber has been steadily rising in recent years and inventories have been increasing. However, these figures for total inventory seriously overstate the supply of hardwood logs suitable and available for economic utilization. Much of the inventory is in poorly formed and defective trees, small trees, and species having limited markets. Part of the inventory is in private woodlands held for recreation or other purposes where the owner is not interested in timber harvest. About one in every five trees over five inches in diameter is a cull tree. Such trees contain about 18 percent of the total volume of wood in hardwood stands. Hardwood stands with more than 1,500 board feet per acre comprise only one-third of the total hardwood acreage. The problem of small size and low quality is illustrated by Forest Survey classifiactions of eastern hardwood sawtimber trees by standard log grades. These show that only 11 percent of the hardwood sawtimber volume is in No. 1 lumber logs and only 29 percent in log grades No. 1 and 2 combined.

Further declines in the size and quality of hardwood trees are in prospect if the timber cut continues to increase and forest management programs continue near current levels. The outlook is for rising costs of lumber production, increased marketing problems and increasing use of substitutes for wood unless timber supplies are expanded and improvements in technology are achieved.

Question. Forests cover about three-fourths of West Virginia. What are you doing in hardwood improvement there?

Answer. West Virginia was to be one of the pilot States for a project. However, the State Forester, Mr. McClung, has had a serious problem in recruiting foresters. At the time we discussed a project for West Virginia, he had 14 vacancies in 29 authorized forester positions. He decided that his first obligation to the general Statewide forestry program was to attempt to fill these vacancies. West Virginia's program needs bolstering, and we will work with the State Forester in every way that we can.

Question. Could you effectively use an increase in this program?

Answer. Yes. While this is a pilot program, we could effectively increase services in the five States now participating. This pilot program could be extended to two or three additional States, especially West Virginia, where there is available hardwood timber and sufficient mill capacity to produce more lumber.

Question. What are your plans beyond this pilot phase?

Answer. We hope that the State Foresters in the major hardwood areas will pick up this hardwood program and keep it moving as an important part of their regular cooperative forest management programs.

RESPONSES TO QUESTIONS BY SENATOR M'GEE

Proposed Elk Management Research in Wyoming

Question. For the past several years I have strongly advocated the establishment of a program to conduct research on elk management in Wyoming. As members of this committee will recall, this item in prior years, has been approved by the committee and the Senate, but has been rejected by the House.

In hearings before this subcommittee in prior years, Forest Service officials have supported my request for funds to establish this project, and I would hope they will do so this year. It appears to me that the need for such a facility is becoming more apparent as each day passes.

I have just returned from hearings of this subcommittee in Casper, Wyoming, which pertained to the management of the Northern Yellowstone elk herd. which has been the subject of such controversy in recent weeks, and indeed in recent years. While this is somewhat a special problem, I am certain that the information and data that would be produced from a research project as I have suggested would be of significant help in the management of the Yellowstone Park elk as well as other elk herds in the Western states.

I repeat, as I stated last year, that new and increased demands are being made upon our lands, both public and private for many uses, including the grazing of both domestic and wild animals.

Last year you indicated that an appropriation of $100,000 would be necessary to maintain such a research program. Of this amount what would be required in the initial year to get this program underway?

Answer. To implement an elk habitat research program we would need the full $100,000 which you refer to if the problem is to be resolved in a reasonable period of time.

Question. If this amount were made available by this committee and the Senate, could the Forest Service undertake this program this fiscal year and could this money be expended wisely and beneficially for this purpose?

Answer. Yes, we could use the money effectively to implement the program during the 1968 fiscal year. Because of the importance of this research, we made some readjustments of our program at Laramie this year to free one scientist to do the planning and lay the groundwork for just such an effort. That planning is moving along well and we will be in a good position to implement the needed research as soon as funds are made available.

Question. Would you please comment generally on the merits of this proopsal?

Answer. Yes, I will be glad to. The elk herds of Wyoming are nationally known for aesthetic qualities and for hunting. However, abuse and overuse of the ranges on which the elk live and feed have had serious impacts on the elk herds, as well as on grazing of domestic animals and on watershed values and fish habitat. A strong research program is needed to determine how best to improve and manage elk ranges to allow optimum production of elk and yet not detract from other land use values. More specifically, research is needed to determine how both elk and livestock should be managed to permit restoration of deteriorated ranges and stabilization of vegetation and soil. Where native forage has been destroyed, we need to find out how to revegetate with suitable forage plants. Management methods must also be developed to allow use of cutover areas for range while new timber stands are being established.

RESPONSES TO QUESTIONS BY SENATOR PROXMIRE

Forest Products Laboratory, Madison, Wis.

Question. Dr. Jemison, I am delighted to hear of the progress that has been made on the building program at the Forest Products Laboratory in Madison. The two structures to be soon completed are excellent examples of functional design in laboratory construction and use wood to good advantage in their construction. The Wood Fiber Products Research buildings, providing both pilot plant and office space, have long been needed to alleviate the crowded conditions that hampered the progress of research on new and improved pulping and papermaking processes. It was our plan that you should complete the present phase of the building program as an efficient unit providing for the most efficient collaboration between wood chemists and wood fiber research scientists. It is unfortunate that you were unable to construct the planned third building with the money that was appropriated in 1964.

I am pleased to see that you followed the recommendation of this committee, made in connection with last year's budget hearings, to include funds for construction of a wood chemistry building at the Laboratory. Can you explain why it is important to your program that you complete construction of this third and final unit of the wood-fiber-chemistry complex, as originally planned?

Answer. It is important that we complete the wood fiber products-wood chemistry complex as originally planned because our programs in wood fiber products and wood chemistry are very closely related. Effective progress in wood fiber products research requires close daily collaboration and consultation on questions of cellulose and lignin chemistry. Effective progress in wood chemistry research requires close working relations with scientists working on studies of pulping methods and pulp processing chemicals. Neither group can work most effectively far removed from the other.

Many of the facilities used in wood chemistry research are similar to those used in wood fiber products research. Yet, it is not efficient to use the same facilities because of special requirements of the work in the two areas. It is therefore important that the facilities for these two areas of work be located close to each other and that space also be provided for the special, distinct, kinds of equipment needed by each group.

Economic reasons for going ahead with the wood chemistry portion of the complex are the steady rise in building costs that each year add about five percent to the cost of such construction and the fact that moving the wood chemistry group to the new facility will considerably facilitate the job of remodeling the present Laboratory space for efficient use by other scientists.

CHEQUAMEGON WATERS

Question. In 1966 Taylor County, Wisconsin, started construction of Chequamegon Waters, a 2,700-acre recreation lake about 20 miles west of Medford. The new lake is entirely within the Chequamegon National Forest. Much of the land along the shoreline suitable for recreation use is in Federal ownership, and the County contemplates full development of this land to maximize the potential of the lake. The estimated total cost of the Forest Service developments in the Chequamegon Waters plan is $1,700,000. Were funds requested by the Chequamegon Forest to start development of Chequamegon Waters?

Answer. The Chequamegon National Forest personnel have been working with Taylor County, who has developed a plan for Chequamegon Waters. Our people in the field are constantly working with local groups to see how National Forest lands might contribute to the rural economy. This, of course, is part of Secretary Freeman's program for the development of Rural America. In this case, Supervisor Yurich did identify the importance of the development but we found it impossible, due to overall budget limitations, to include this project in the fiscal year 1968 budget.

Question. How much would be needed to start this project in fiscal 1968 so that facilities are available to meet the projected additional use that will be attracted by the project by 1970?

Answer. If funds were to be made available so that the Forest Service could carry its share of the development of Chequamegon Waters in such a way as to fully meet the visitor load anticipated by 1970, about one-third of the job should be done in each of the next three years. If the project were to be completed in the three-year period, we would suggest $560,000 would be needed in fiscal year 1968. I believe it would be more realistic, however, to spread this over a five-year period, starting in the neighborhood of $300,000 the first year. This would be used to make a start in the development of the camping and picnicking facilities, the swimming beaches, the boating sites, the water and sanitation systems, and the interpretive services that this area warrants and which its visitors will need.

As you know, the State of Wisconsin is one of our important recreation areas and people spent 1,660,000 visitor-days on the National Forests in this State this past year. The Chequamegon area is heavily used by people from the urban areas of Minneapolis, St. Paul, Chicago, and Milwaukee.

LA CROSSE FOREST EXPERIMENT STATION

Question. I received a letter recently from the La Crosse County Water and Soil Conservation Supervisors urging additional funds to strengthen the work being done by Forest Service scientists at the La Crosse Forest Experiment Station. In your estimation would funds in addition to what is in the budget be helpful? If so, how much more would be needed to make a concerted attack on the floods and erosion that still plague the Coulee Region Forests area?

Answer. Our watershed management research at La Crosse is currently funded at $55,000 annually. The two scientists there are making good progress and have good laboratory facilities. Increased funds, when such can be provided, would certainly be helpful in strengthening and accelerating that research. A most effective concerted attack on flooding and erosion problems would require a program increase of $150,000.

Question. Have any funds been designated for Recreation Research in the Boundary Waters Canoe Area by the North Central Forest Experiment Station? I have received a number of letters urging that $100,000 be set aside for this purpose. What effect would the appropriation of this amount have on the area?

Answer. The budget for fiscal year 1968 includes a $50,000 increase for recreation research in the Boundary Waters Canoe Area.

The program there, which was begun in 1966, has made a start on some of the most urgent research needed to manage the area for heavy visitor use. An increase of $100,000, if appropriated, would make it possible to strengthen the work considerably by adding studies of patterns and densities of recreational use that can be accommodated on the area without excessive damage to forest cover and sites, pollution of water, or loss of the area's attractiveness. We would also be able to strengthen work aimed at determining how the recreational resource there can best be developed and maintained. This expanded research program would enable us to advance much faster in determining how best to guide recreational development and use to insure the area's continued value as a major recreational resource.

Question. I noticed the budget states additional funds and personnel will be needed for forest fire control. It goes on to say "costs above the amounts estimated for the current and budget years are authorized to be met from advances from other Forest Service appropriations. In addition, a supplemental appropriation for fighting forest fires is anticipated for 1967 under legislation proposed for later transmission. Could you give us some details on this item, such as the increase requested for fiscal 1968 over this year and the reasons for such an increase?

Answer. The item referred to is our regular Supplemental for Fighting Forest Fires which we have each year in varying amounts. This is an appropriation item which is difficult to predict since the amounts vary so widely each year dependent on the severity of the fire season. The Congress annually has been appropriating an initial $5,000,000 for that purpose with the understanding that the additional amounts will be submitted to the Congress later, as is being done this year.

SYLVANIA TRACT

Question. What amount is in the budget for development of the Sylvania Tract in the Ottawa National Forest, which became public property on July 28, 1966?

Answer. A total of $992,000 is budgeted for this project. This includes $300,000, mostly for recreation facilities but including necessary planning; $500,000 for roads; and $192,000 for a visitor services structure.

Question. What can be done under this amount?

Answer. In order to accommodate the first influx of visitors, we will (1) build a road with spurs to the sites planned for development; (2) construct facilities at Clark and Crooked Lakes, including items such as picnic grounds, swimming beaches, boat landings, and initial water and sanitation facilities; (3) initiate the Visitor Center structure at Watersmeet. We will also continue work on the special surveys and plans necessary to properly develop this outstanding area.

Question. In order of priority, what additional sums are required for Fiscal Year 1968, in your judgment, to (1) plan the development for protection and use of the area; (2) construct facilities; and (3) administer the use?

Answer. In addition to the $992,000 budgeted, if an additional amount up to $250,000 were provided, we would of course be able to make more rapid progress in providing recreation facilities that will be necessary before we can properly cope with and serve the area's influx of visitors. While some additional planning and design work would need to precede construction, the major part of this increase would be used for the additional facilities to protect the site and serve its visitors.

RESPONSES TO QUESTIONS BY SENATOR STENNIS

TREE SEED LABORATORY, STATE COLLEGE, MISS.

Question. Please tell us what this budget provides by way of a research program at the State College, Mississippi, tree seed laboratory.

Answer. Through adjustments in other programs at the Southern Station, we were able to allocate $16,000 to get the tree seed project underway at State College in F.Y. 1967. The new budget provides no increase to implement the seed research program. Therefore, in the coming year the program will continue at the same level. One scientist is assigned to this research.

Question. How much would it take to implement the program at a reasonable level?

Answer. An additional $75,000 would provide for two more scientists, including adequate technical assistance.

Question. What is the status of the Tree Seed Laboratory construction project at Mississippi State University?

Answer. $20,000 was appropriated in F.Y. 1966 for architectural planning. These plans are now complete.

Question. Could construction proceed immediately? What will the laboratory cost?

Answer. Construction can proceed as soon as funds are available. We estimate this construction will cost $290,000.

Question. Are funds included in the F.Y. 1968 budget for this facility?

Answer. No, they are not.

Question. Could you work effectively on an expanded tree seed research program before a seed laboratory is constructed?

Answer. Yes, Mississippi State University has provided us with temporary office and laboratory space. Our first job will be revision of the 20-year-old *Woody Plant Seed Manual*, a major reference on the characteristics of tree seeds throughout the country. This work will not require much laboratory space. Completion of this Manual will provide the starting point for new research in seed physiology, seed quality, and seed handling.

RESPONSES TO QUESTIONS BY SENATOR COTTON

PROPOSED RESEARCH LABORATORY, UNIVERSITY OF NEW HAMPSHIRE

Question. During one of my recent visits to New Hampshire I had an opportunity to check on the status of the proposed research laboratory at the University of New Hampshire. I was pleased to receive the report that the planning was underway with the $75,000 which Congress approved last year.

It was also pleasing to learn that considerable progress has been made and that the planning would be completed in January 1968. However, I am told that the budget for FY 1968 does not contain funding for the continuation of this project beyond the planning stage. As I understand it, the total cost of this laboratory would be about $955,000. If I am wrong on this figure, I would like to be corrected.

Experts in the field of forestry, as well as many other people who have been following this project, have expressed keen disappointment at the present situation. Your service has recognized the need for research in an effort to overcome several of the New England area's critical forestry problems. As you know, some of this research is being done in space provided by the University of New Hampshire which, like many other educational institutions across the country, is faced with critical space requirements caused by the rapid increase in enrollment. As a consequence, the University is in need of the space now devoted to the research and officials of the institution have offered campus space for the Forest Service to build a laboratory.

The research for which the facility is needed includes (1) studies of management of the beech-birch-maple forests of New England; (2) studies of management of eastern white pine; (3) forest genetics and tree improvement of white pine and selected high-value hardwoods in the Northeast; and (4) studies on flood-runoff reduction and water-yield improvement for the New England States. The beech-birch-maple forests are an important multiple-use resource on 10 million acres in New Hampshire and adjacent New England States. Eastern white pine, likewise, has been and must continue to be an important segment in the New England timber economy. Research on the management of this species including genetics studies on weevil resistance, will produce benefits of lasting importance.

There are a few questions I would like to have answered. As I have understood the practice of the Forest Service over the years, the planning is immediately followed by the request for construction funds. This would seem to be an orderly and economical procedure. I am wondering whether, in the preparation of your budget for 1968, you requested money for the laboratory?

Answer. Planning for our Forest Sciences Laboratory at Durham, New Hampshire, is moving right along. General Services Administration expects the contractor for the architectural work to complete the plans and specifications for construction early in 1968. We did request construction funds for fiscal year 1968 but the overall budgetary situation did not permit including this item in the budget which was sent to Congress.

Question. Assuming funds were provided, how much could you effectively use in 1968?

Answer. If funds were appropriated for fiscal year 1968, we would need the full amount of $955,000 to award a construction contract.

Question. If construction money is provided for fiscal year 1968, what would be the anticipated completion date of this facility?

Answer. Planning is well advanced so construction could start as soon as weather permits in the spring of 1968.

Question. Will failure to appropriate this amount result in delay of research on programs critically affecting New England forestry?

Answer. As you remarked, the University of New Hampshire is very crowded for space. As a result, we have moved our people out into a hardware store that we converted into temporary quarters. The inadequate facilities and cramped quarters prevent our scientists from doing their best work. In addition, it is impossible for us to move other projects to Durham that would benefit from closer association with the people we already have on the ground. Progress is being delayed. In short, the situation is far from ideal, and we are looking forward to having the new Forestry Sciences Laboratory now being planned.

RESPONSES TO QUESTIONS BY SENATOR MOSS

BROWSE IMPROVEMENT RESEARCH, PROVO, UTAH

Question. What progress has been made in browse improvement research by scientists at Provo, Utah? How far along is this work now?

Answer. The one scientist, with the assistance of two technicians from the Utah Fish and Game Department, has screened a number of species adapted to deteriorated deer winter ranges of the Great Basin; developed practical seeding and juniper control methods. To date, more than 70,000 acres of deer range in Utah have been successfully restored. Promising leads as to superior and more productive browse species and strains that are better adapted to more difficult environments have been uncovered, but research on genetic improvement has been nil.

Question. Are laboratory facilities now adequate for the program? If not, what is needed in the immediate future?

Answer. Forest Service Scientists at Provo have office space in rented quarters. No laboratories or other specialized facilities are available. Only makeshift facilities are available, at Ephraim, Utah, about 76 miles away. Funds are needed to construct a modern office laboratory on land leased to the Forest Service by Brigham Young University. Estimated cost of construction is $460,000 for the office laboratory and developing the site, plus $100,000 for a headhouse-greenhouse and storage facility. The total need at this time is for $560,000.

Question. What could be done at Provo with additional funds for the research program?

Answer. Additional funds would advance: (1) rapid screening, selection and controlled breeding of promising native and exotic shrub species for wildlife, erosion control, campground screening, roadside beautification and other uses; (2) techniques of seed storage and plantings for seed increase of selected strains; (3) extension of the present restoration work to a broader spectrum of sites; (4) seeding and planting economies; (5) basic studies into germination, growth, food and cover values, disease, insect, fire and drought resistance qualities. Findings would be generally applicable throughout the west.

FOREST SERVICE BUDGET

Chairman HAYDEN. I have received a number of communications relating to the Forest Service budget. These will appear at this point in the record.

(The communications follow:)

FEDERAL-STATE COOPERATIVE FIRE CONTROL

LETTER FROM SENATOR HOLLAND

U. S. SENATE,
COMMITTEE ON APPROPRIATIONS,
March 10, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U. S. Senate, Washington, D.C.

MY DEAR SENATOR: I have been contacted by the State Forester of Florida with reference to the need for increased CM-2 matching funds for the next fiscal year.

It is my understanding that for the last nine years, Florida has received about the same Federal matching funds for cooperative forest fire control under CM-2. During this same time, Florida has increased its State and private expenditures due to rising costs and to greatly increased area under protection.

As an example, in 1956, State, County and local funds totaled $1.9 million spent for fire control. That year, $554,000 of federal funds were received under the CM-2 program. In 1965, nine years later, $4.8 million in State and private funds was spent while the Federal allotment was only $561,000. This is only a $7,000 increase in federal allotment while State and private expenditures were increased by $2.9 million.

The Florida Board of Forestry is faced with increasing labor, and wages, materials, supplies, fire fighting equipment and all items of necessity in connection with the program have increased over the years. For this reason and because the Board is including additional land in order to bring about statewide protection, additional Federal funds are sorely needed.

I will appreciate any action that can be taken by the Committee to increase CM-2 funds by $3 million nationwide.

With kind regards, I remain,

Yours faithfully,

SPESSARD L. HOLLAND.

STATEMENT BY PENNSYLVANIA DEPARTMENT OF FORESTS AND WATERS

The Pennsylvania Department of Forests and Waters respectfully requests favorable consideration by the Subcommittee on the request pending before the subcommittee to increase the Clarke-NcNary Law appropriation for fiscal year 1968 from $12,800,000 to $15,800,000.

Our reasons for requesting this increase are based on the following factors relating to the forest fire control and prevention program as conducted in the Commonwealth of Pennsylvania.

Fire control expenditures for Pennsylvania

Fiscal year	State expenditures	Federal expenditures	Total	Federal share (percent)
1963	$1,110,009	$247,300	$1,357,309	18
1964	1,228,567	255,700	1,484,267	17
1965	1,173,722	273,200	1,446,922	19
1966	1,312,249	305,700	1,617,949	19
1967	1,539,125	295,000	1,834,125	16

NOTE.—1963 through 1966 figures are actual expenditures, 1967 figures are actual for Forest Service, programed for State.

Forested areas of Pennsylvania, 1965 Forest Service survey

	Acres
Total land area (100 percent)	28,804,480
Total forested area (59 percent)	17,072,100
Nonforested area (41 percent)	11,732,380

As can be seen from this data, the level of federal contributions to this State's program has begun to decline. This at a time when the State's expenditures for the program are increasing steadily.

Unless the Federal appropriation is increased, the Federal contribution to Pennsylvania will experience a further decline, due to increased demands against the appropriation by all of the States.

FOREST SERVICE CONSTRUCTION

WILDLIFE HABITAT AND SILVICULTURE LABORATORY, NACOGDOCHES, TEXAS

LETTER FROM SENATOR YARBOROUGH

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,

March 15, 1967.

HON. CARL HAYDEN,
Chairman, Interior Appropriations Subcommittee, Committee on Appropriations, United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I request favorable consideration by your Subcommittee of an additional appropriation for construction of the U.S. Forest Service's Wildlife Habitat and Silviculture Laboratory at Nacogdoches, Texas. This research facility, for which $335,000 for construction costs is now needed, received a $25,000 appropriation last year for architectural design and planning.

The importance of this research laboratory lies in the fact that it is the regional headquarters for all wildlife habitat research of the U.S. Forest Service's Southern Forest Experiment Station, an area which includes 108 million acres of commercial forest. Research conducted at this center is not only necessary for preservation of wildlife, but is essential for providing the forest industry with sound management information.

For more than 20 years Stephen F. Austin State College has provided facilities for this research center on its campus at no expense to the government. Providing the Federal Government all facilities, utilities, and custodial services has been a type of private subsidy whose burden the College is no longer able to bear. The problem has become most acute in that the buildings now occupied by the Laboratory—antiquated World War II State-owned barracks—must be demolished in 1968 to make space for sorely needed college buildings.

The importance of the research conducted at Nacogdoches during the last 20 years has been well known throughout industry and the academic community. Much of this research has been continuous and cumulative. Failure to provide funds for replacement of this facility at this time would no doubt jeopardize years of fruitful progress and a most fruitful relationship between the Forest Service and the State College.

I hope your Subcommittee can provide the requested appropriation for this urgently needed construction in the Interior Appropriations bill.

With best wishes,

Sincerely yours,

RALPH W. YARBOROUGH.

FOREST SCIENCES LABORATORY, MOSCOW, IDAHO

STATEMENT OF SENATOR CHURCH

Mr. Chairman, many of the people in Idaho make their living from the forests or forest-based industries. In the northern and central parts of my state, forests are the principal resource. A threat to these forests is a threat to the local economy.

Most people immediately think of fire as the worst danger to a forest. Everyone has now heard the exhortions of Smokey Bear and knows the threat of fire in a living forest. Foresters have made spectacular technical advances in fire fighting, but acres of forest still go up in smoke.

Yet the biggest threat to the forests of my state today is not fire, Mr. Chairman. It is the threat from insects and disease. For while fire still kills some 75-million feet of sawtimber annually in the Northern Rocky Mountain Region, losses from insects and disease are averaging 1.9-billion feet. This loss is many times that caused by fire, and it is rising.

Foresters in my state tell me that nearly every tree species is now under attack by one or more destructive pests. The most destructive are the defoliators and the bark beetles. The tussock moth is causing great loss in the fir species, budworm is destroying spruce and the larch casebearer is attacking larch. Bark beetles are causing heavy loss in Ponderosa pine, lodgepole pine, Douglas fir, grand fir and spruce. These are only some of the present threats. No one knows those of the future.

Work has been proceeding for some years toward a better understanding of the way these pests and diseases multiply and behave. It has not been enough. The problems are multiplying faster than our knowledge of how to combat them. Our forests are being destroyed while we watch.

Mr. Chairman, I submit this statement to offer my support for funds for the second-stage of the Forestry Sciences Laboratory at Moscow, Idaho. Funds for planning the facility are in this Forest Service budget; construction funds will be in the next one. I want to underscore the necessity of expanded research on forest insect and disease infestations in my state, and urge the rapid construction and staffing of this laboratory.

Mr. Chairman, some 70 percent of the sawtimber volume in north and central Idaho is in federal ownership. Idahoans depend on it for a livelihood, and it is in danger. The concept of conservation calls for a sustained yield from these forests, and economics dictates it. The need for more research is unquestionable. The Moscow Forestry Sciences Laboratory is required.

SILVICULTURE AND SUGARBUSH LABORATORY, BURLINGTON, VT.

LETTER FROM SENATOR AIKEN

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
March 4, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Appropriations Subcommittee,
Senate Office Building, Washington, D.C.

DEAR CARL: As you recall, I have appeared before your Subcommittee several times in recent years urging support for funds leading up to the construction of a maple production laboratory for the Forest Service at the University of Vermont in Burlington. You and the Members of your Subcommittee have been most generous in honoring these requests, and have also granted program funds absolutely vital to this research.

I understand the design phase has virtually been completed, and there is an urgent need for this facility in order to speed up vital research work that is of value to farmers producing maple syrup in Vermont, New York, Ohio, Pennsylvania, Wisconsin, Michigan, Massachusetts, New Hampshire, Maryland, Maine, Minnesota, Indiana and West Virginia.

As you will see from the enclosed report prepared for me by the Forest Service, $675,000 is needed for the construction of the laboratory and the related head-house-greenhouse and storage facility. Not only Vermont, but all of the States in the Maple Belt need this research to reverse the present decline in Maple production.

In view of the need for this work, and the sums already invested by the Federal Government, I request that the necessary construction funds be provided for Fiscal 1968 so that the Forest Service may move ahead in this work that is so important for improving the annual cash income of farmers who also harvest maple.

In questioning the Forest Service witnesses, I suggest that it would be helpful to have a detailed report for the record on the size of the present operation, the accomplishments to date, and the potential gains this research may produce. I am confident this record will show that it is important to proceed with construction in the next fiscal year.

Sincerely yours,

GEORGE D. AIKEN.

DEPARTMENTAL STATEMENT

This increase ($675,000) will provide for construction of an urgently needed laboratory-office building and a headhouse-greenhouse on a site leased to the Forest Service by the University of Vermont. The estimated cost for the laboratory-office is $575,000 and for the headhouse-greenhouse and storage facility, $100,000. These facilities will provide modern research laboratories for scientists studying the genetics and physiology of maple sap production. Present quarters in the Federal Building at Burlington are not suitable for laboratory research. At these quarters it is not possible to do the basic biological research needed to improve the production techniques and to develop superior strains of sugarbush trees.

The maple sugar industry adds to the economy and provides added income for many rural people in the northern states. In 1965 more than 8 million dollars worth of maple syrup were produced; mostly by people working during a part of the year when other farm work was low.

The new laboratory and headhouse-greenhouse would provide facilities for accelerating research. Scientists could speed studies of sap extraction and sap flow, hybridization and breeding of sugarbush trees, irrigation and fertilization of sugarbushes, and propagation of superior strains.

WOOD PRODUCTS MARKETING AND APPLIED UTILIZATION LABORATORY, DULUTH, MINN.

LETTER FROM SENATORS M'CARTHY AND MONDALE

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
March 8, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
1235 New Senate Office Building.

DEAR SENATOR HAYDEN: In letters to you and members of the Committee in 1965, and again last year, we discussed the need for establishing a facility for a Federal Wood Products Marketing and Applied Utilization Laboratory on the Duluth campus of the University of Minnesota.

We appreciate the response given by the Committee to those letters. As you know, $39,000 was included in the Senate Appropriations bill for the Interior Department and related agencies for preparation of design and specifications for this important facility. We regret that it was not possible to retain this item in the conference report.

There is, in our judgment, little need to recount here the value of such a facility. It is sufficient to say that its creation would assist in the development of new markets, the expansion of existing ones, and provide for the more efficient utilization of the vast timber resources of this region.

The proposed facility does not involve duplication of existing laboratories and it is not in conflict with their objectives. The appropriation of $39,000 needed to develop design and specifications for the proposed facility is not a large amount of money, and would cause no substantial budgetary increase. We are most hopeful that the Committee will again find it possible to include this important item in its report.

With all good wishes.

Sincerely,

EUGENE J. MCCARTHY.
WALTER F. MONDALE

FOREST PRODUCTS LABORATORY, MADISON, WISCONSIN

STATEMENT BY SENATOR NELSON

Few people are aware of the economic significance of wood in the national economy of this country. For example, few people know that:

1. The wood-based industries rank among the top five in gross national product.
2. One person in every 20 earns his living in a wood-based industry.
3. Wood, unlike metal or petroleum, is a renewable resource.
4. Wood-based industries can offer large scale non-urban employment throughout the country.
5. Wood-based industries offer the potential for the most promising employment opportunities in depressed areas.
6. The U.S. Forest Service alone is custodian of 186,000,000 acres of forest land in the U.S. which carries a definite obligation for it to find wise and economic uses for this tremendous resource.

Few people recognize that according to the National Science Foundation data:

1. The average American industry employs 27 scientists per 1,000 employees—with some industries approaching 100 scientists per 1,000 employees.
2. The pulp and paper industry averages 7 scientists per 1,000 employees.
3. The lumber and wood industry has but 3 to 4 scientists per 1,000 employees.

So, while billions are spent annually for research on aerospace, electrical, chemical, petroleum, machinery transport equipment, and similar fields only a few million are spent on wood, including pulp and paper.

Few people know what a remarkable yet complex material wood really is. Nor do they know the real potential of this renewable raw material, available at such a relatively low cost. Even the pulp and paper industry which is technically far ahead of other wood-based industries, depends primarily on a process established in its basic form by empirical means in 1889.

The wood-based industries are largely composed of many thousands of relatively small companies scattered throughout the Nation. It is not an organized industry that can wield strong pressures for attention. Yet it is a potential for economic development in every state of the Union and its major resources lie in predominantly depressed and relatively underdeveloped rural areas.

With these facts in mind I want to speak in behalf of the Forest Products Laboratory. I do this not because it happens to be located in Madison, Wisconsin, but because I personally know how its work continues, year after year, to draw thousands of technical people from every state in the Union and from all over the world for consultation and advice on potential developments from our vast timber resources.

I know that the semichemical pulp process developed years ago at the Forest Products Laboratory is today used in 40 pulpmills throughout the country with a market value of $300 million annually.

I know that this Laboratory has found uses for little-used species, especially hardwoods, with highly productive yields in paper products, in the rapidly growing pallet industry, in chemicals and many other byproducts.

I also know that investigations in the Laboratory's research program are aimed at reducing waste and pollution of our waters and our air. Such efforts deserve the highest priority if we are to give the attention we should to the preservation and improved utilization of our most valuable natural resources.

This work takes time and skill and modern facilities and money for those scientists who are willing to work for the good of us all—now and for the generations to come. Last year the Senate went on record urging priority attention to the further development of the chemical research facilities at the national Laboratory in Madison, Wisconsin. I am gratified that the Bureau of the Budget has understood the need for this item and has this year included funds for the wood chemistry unit with which to complete the chemical and fiber research complex there. By further implementing this research we can expect vast improvements in the more complete utilization of our timber resources, much of which is now wasted. The stream and air pollution that results from the disposal of these wastes is of great concern to all of us.

It is with deep conviction that I urge you to approve the $1,300,000 item which is included in the budget along with a very modest increase in research program funding.

FOREST INSECT AND DISEASE LABORATORY, DELAWARE, OHIO

STATEMENT OF BOARD OF TRUSTEES, OHIO FORESTRY ASSOCIATION, INC.

The Board of Trustees of the Ohio Forestry Association, Inc. by official action, makes the following statement for the committee records: in behalf of the program to expand the much needed addition to the Forest Insect and Disease Laboratory at Delaware, Ohio.

This regional Forest Service Laboratory is ideally located to serve the midwestern and northeastern states, including Ohio. Last year, our Executive Director Emeritus Robert R. Paton, appeared before your committee to recommend passage of an item of $72,000 to prepare the design and engineering specifications for an additional building for this facility. Congress wisely made this appropriation and the planning phase for this project is proceeding on schedule.

It is our purpose at this time, to recommend that an item of $950,000 be added to the current appropriation for constructing this planned addition. Because of the pressing need for expanding insect and disease research in this region, Congress authorized necessary program increases which have resulted in serious overcrowding at the Delaware laboratory. Originally designed for 35 scientists and supporting personnel, some 58 people are now located there. This increase of nearly 60 percent in personnel has caused inefficiency in the use of scientific manpower and a shortage in laboratory space for modern scientic equipment and apparatus.

The new laboratory addition would, therefore, not only relieve cramped conditions, but provide the kind of modern and highly specialized facility essential to rapid progress toward the discovery of improved pest control methods. Laboratories are needed that can be isolated for fundamental investigations with dangerous and toxic chemicals, including radioisotopes, chemosterilants, and other materials.

The forests in Ohio and other northeastern states are noted for their variety and diversity. Some 50 commercially important and almost as many non-commercial tree species grow east of the Mississippi River. The oak-hickory and maple-beech-birch forests are certainly the most important and widespread, but other forest types, such as the elm-ash-cottonwood type and aspen-birch type, are also economically important.

All of these hardwood forests are attacked by insect and disease pests. Losses from insects and diseases equal nearly 42 percent of the total volume removed. Some of our most catastrophic disease epidemics, including chestnut blight, Dutch elm disease, and defoliators such as gypsy moth and fall cankerworm have occurred among the hardwoods.

Many other tree disease and insect pests are less spectacular but, collectively, cause serious losses in the forest resource. Thus, the annual loss to heartrots and borers alone, exceeds the annual increase in volume in many of our most important hardwoods. Oak mortality, ash and birch diebacks, maple decline, sweetgum blight, and black cherry decline are serious problems that appear to be triggered by subtle changes in the environment and are complicated by the invasion of secondary insects and fungi.

Scientists at the Delaware laboratory are giving particular attention to oak wilt, hardwood decays and cankers, and plantation diseases, including root decline and air pollution damage of white pine plantings.

Also, several serious insect problems are being studied to find new or better methods for their control. Among these are the black locust borer, vectors of oak wilt, tulip poplar scale, and the elm bark beetle, which carries the Dutch elm disease fungus.

In fact, this is the only federal installation where research on controlling the insect transmission of the Dutch elm disease is being investigated. There is an immediate need to evaluate less hazardous insecticides for controlling this disease. The use of DDT sprays, while effective when applied under proper conditions, can no longer be tolerated because of the long residual properties of this insecticide. However, new research on this and other serious pest problems cannot be undertaken with the limited facilities now available.

Thus, we believe an addition to the Delaware laboratory is a most urgent and pressing need. This proposed addition to the laboratory is designed to meet the needs of forest industries in Ohio and other northeastern states.

The Ohio Forestry Association, now in its 64th year, has worked closely with the U.S. Forest Service in Ohio over the years. We are sincerely proud of this fine organization, its program, and the caliber of its staff.

We wish to thank your committee for the privilege of presenting this statement to you in behalf of this proposal.

STATEMENT OF TOLEDO METROPOLITAN PARK DISTRICT

Mr. Chairman and members of the Senate Subcommittee on Appropriations for Interior and Related Agencies, I am Robert R. Metz, Assistant Director-Secretary of the Toledo Metropolitan Park District.

I am writing on behalf of the urgently needed expansion of the Forest Service laboratory facilities at Delaware, Ohio. I also wish to commend the committee for its awareness of this need when it approved funds for planning an addition to the Delaware laboratory in 1966. As you know, the 89th Congress appropriated $72,000 for this purpose last year. My appearance before the Senate Appropriations Subcommittee on behalf of this item is evidence of my conviction that enlargement of the present facilities is essential to the development of adequate control programs for shade and forest tree pests.

My primary purpose in writing is to recommend that the committee approve $950,000 for construction of an addition to the present laboratory facilities at Delaware, Ohio.

This planned expansion of laboratory facilities at Delaware was included in the National Forestry Research Program presented to the Congress by the Secretary of Agriculture in 1964.

Insects and diseases ruin untold numbers of trees used to improve our environment—trees planted in our parks and along our streets for shade, landscaping, and general beautification. On a national scale, the value of shade trees alone is estimated to $30 billion, and $37 million is spent each year to protect them from insect pests. Because of the enormous values at stake, the need to protect these values and the responsibility of research to discover practical methods of control, the Forest Service established a laboratory at Delaware, Ohio in 1959 with funds appropriated by the 85th Congress to develop and recommend control measures for shade and forest tree pests. Located on 137 acres of federal land, it is ideally located to serve Ohio and the northeastern states.

Following its occupancy, research was started promptly and is continuing on control methods for such serious pests as: (1) Dutch elm disease, which has already devastated the beauty of many of our eastern cities and parks; (2) Oak wilt, potentially the most serious disease of oaks in the East; (3) Air pollution damage of white pine, a critical problem limiting the value of this widely planted tree for ornamental and timber purposes; (4) Maple scale, an insect pest of major importance on maple trees planted for their beauty throughout our towns and cities; and (5) Heartrots and borers that destroy and degrade many of our most valuable hardwood timber species.

The most urgent need now at the Delaware Laboratory is enlargement of the physical plant. Since 1960, the research programs authorized by the Congress have caused serious congestion and overcrowding. I have observed some scientists currently doing research in trailers, greenhouses, and temporary storage buildings. As you can imagine, such facilities do not permit the best use of our scientific manpower, nor are they conducive to recruiting the additional scientists needed to launch a more vigorous attack on the many shade tree problems yet unsolved.

The proposed new addition to the Delaware laboratory would be designed and equipped to take advantage of the latest advances in technology, thus providing scientists with up-to-date techniques for solving the more difficult problems in pest control. Such research cannot now be conducted with the limited facilities currently available. These specialized research techniques require special laboratory construction with provisions for the safe handling of dangerous and toxic chemicals and radioisotopes.

If we hope to make rapid progress toward the solution of our serious tree pests, immediate consideration should be given to the construction of new facilities which can take advantage of these recent advances.

In my position I am responsible for the planting, maintenance and care of thousands of acres of metropolitan parks in northwest Ohio. For example, right now we have more than 5,000 acres in our park system which have been set aside for recreational and outdoor educational purposes. No one can estimate the aesthetic value of the natural beauty of this area to the general public, but we do know that as urban populations explode and tensions multiply, the need for open space environment becomes immediate and real. It has been only in the last few years, however, that we have become fully aware of the importance of these values.

The need to protect and restore the natural beauty of our land was fully recognized by the President in his Congressional Message on Natural Beauty last year and reemphasized in his State of the Union message in January of this year.

One of the major aspects of this message is to beautify outdoor America, to enhance its aesthetic value, to improve its utility for camp sites, parks, and recreation, and at the same time increase its overall worth to every American citizen.

Hardwood forests cover about one-tenth of the land area and over one-half of the total forest area of our nation. They are the dominant feature of our eastern forests which encompass the most heavily populated sections of the country. To millions of people, hardwood forests and outdoors are synonymous.

Hardwoods comprise a complex and diverse group of several hundred species of trees, each having its own characteristics in size, coloration, shape, durability, and utility. Unfortunately, the forest stands that now remain in our parks, recreational areas, vistas, overlooks, and camp sites are the result of mismanagement of forest stands harvested for timber many years ago. Only the poorer specimens remain. They have suffered from abuse and misuse. Losses due to such catastrophic diseases as chestnut blight, Dutch elm disease, and several widespread but less spectacular diebacks and declines have made their impact for all to see and regret. The net result of the action and interaction of these forces is that our forested woodlands and recreational areas are highly susceptible to disease and insect attack.

Dead, dying and yellowed trees are an eyesore on many rural and forest landscapes today. Scarred and broken trees are a blot on our highways. Overmature trees and trees weakened by decay are a serious hazard to recreational developments. There are numerous instances on record of serious injury and death from such causes, as well as extensive property loss.

The challenge and the opportunity is to restore these forested recreational areas to their full potential for outdoor beauty, recreation, and sports activity. We, the park administrators cannot do this alone. We need the help of scientists who have the advantages of adequately equipped laboratories and equipment to provide the fundamental information for the development of reliable and safe methods of insect and disease control.

The protection of shade and ornamental trees from insect and disease attack constitutes the largest single threat to tree maintenance. More than fifty percent, representing more than $37 million, of public and private shade tree maintenance costs is for protection of damaging pests. Reliable figures show that more than $37 million is spent annually for this purpose. With the 120 million shade trees now present in urban areas, specialists estimate their value conservatively at $30 billion. About 70 percent of this valuable resource is located in the northeastern United States.

The natural resources of America are a great American heritage. The need for protecting trees from insect and disease damage in urban communities, forested parks, and public recreational areas is the challenge our generation now faces.

With the investment that we already have in one of our greatest natural resources, there can be little question as to the need for enlarging the relatively modest research facility at Delaware, Ohio. This is especially true when we realize that the Delaware facility is the only federal laboratory in the nation which has primary responsibility for the protection of trees in metropolitan centers, parks, along highways, and in recreational areas.

Therefore, I want to recommend that your committee approve $950,000 for construction of an addition to the present facility at Delaware, Ohio.

Thank you for your consideration of my statement on behalf of the urgently needed enlargement of the Forest Service facilities.

Forest Range Management Laboratory, Fort Myers, Florida

LETTER FROM REPRESENTATIVE ROGERS (FLORIDA)

Congress of the United States,
House of Representatives,
Washington, D.C., February 28, 1967.

Hon. Spessard L. Holland,
Senate Office Building.

Dear Senator: I am very anxious to get money appropriated for the Forest Service Laboratory. It is my understanding that $220,000 is needed for planning and construction and as you may recall, the approval of Congress was needed to appropriate funds for these costs. This has been done and the property upon which the laboratory is to be located will be donated, but there is a time element involved, which is August of this year. Therefore, it would be very helpful if we could get the funds or assurance of funds by August.

As the enclosed letter will show, the Forest Service puts high priority on this project and any help you could give will be very much appreciated.

Sincerely yours,

Paul G. Rogers.

LETTER FROM FOREST SERVICE

February 14, 1967.

Hon. Paul G. Rogers,
House of Representatives.

Dear Mr. Rogers: I am sorry that my letter of January 31, 1967, did not clear up the situation of funding for construction of the Fort Myers Laboratory. Construction of this laboratory did and still does have high priority on our list of construction needs. However, the budget for fiscal year 1968 only provided for two of several high priority needs in the Forest Service research budget.

Because an Administrative Agency is not permitted to disclose any details of preliminary budget review, we could not be fully communicative during the budget formulation process. Neither are we allowed to reveal the contents of the next year's budget prior to its submission to the Congress.

Funds for each laboratory project are designated by name in the President's budget already submitted and are passed on by the Congress individually. Thus, we know of no way to provide funds for the Fort Myers project during fiscal year 1968, without the approval of the Congress through Appropriation Committee action.

We, too, are desirous that construction of this laboratory at Fort Myers proceed as soon as feasible. We hope that a more favorable overall fiscal situation will enable us to provide for construction of this laboratory soon.

Sincerely yours,

George M. Jemison, *Deputy Chief.*

DEPARTMENTAL STATEMENT

A modern office-laboratory facility is needed for research scientists working on wild land problems in southern Florida. Forest Service scientists are striving to achieve maximum benefits from cattle grazing, timber production, wildlife habitat management and recreation use of the slash pine-wiregrass areas of the Southeast. Planning funds for a laboratory were included in the fiscal year 1965 budget. Architectural design and specifications are complete, and construction can proceed as soon as funds are appropriated. A building site has been donated with the provision that funds for construction be appropriated prior to August 1, 1967.

Cattle grazing and timber growing are major uses for millions of acres of slash pine-wiregrass lands, also capable of sustaining large wildlife populations. Research at Fort Myers has indicated possibilities of harmonizing uses effectively and managing these lands profitably for multiple use purposes. The research program is focused on problems of reducing grazing impacts on young slash pine, using prescribed fire, regenerating and managing tree stands, controlling palmetto and other undesirable plants, and increasing the output of quality forage and game food. Cooperative support from private and public sources is excellent. But the research has now reached a stage where a modern office-laboratory is critically needed.

Construction of an office-laboratory estimated to cost $220,000 would provide space and equipment for controlled studies and analyses of plant and soil materials from field tests and other phases of the program. The Fort Myers staff at present has no laboratories of any kind, and the entire unit is headquartered in rented rooms in two converted school buildings. No other laboratory is available or planned that can serve this problem area.

Mammoth Visitor Center, Inyo National Forest, Calif.

LETTER TO SENATOR KUCHEL

March 17, 1967.

Hon. Thomas H. Kuchel,
United States Senate

Dear Senator Kuchel: This is in reply to your March 14, 1967, letter requesting answers to specific questions relative to the status of the Mammoth Visitor Information Center in the Inyo National Forest.

1. What portion of the $25,000 appropriated for planning in FY 1967 has been spent?

Answer: Of the $25,000, the present obligation is $17,215, leaving a remainder of $7,785, which will be expended before June 1, 1967.

2. Have plans been developed for the construction of the Mammoth Visitor Center?

Answer: Planning has been completed on the amphitheatre and related structures; the Visitor Center building, utilities, roads, and parking areas are in working drawings. Final plans for these will be complete by June 1, 1967.

3. If so, can you supply me with a breakdown of the estimated costs of the Mammoth Visitors' Center as planned?

Answer: A breakdown of the estimates is as follows:

MAMMOTH VISITOR INFORMATION CENTER

VIS Building:	
Audio-visual room, reception, and display	$184, 100
District Ranger office	66, 400
Total	250, 500
Amphitheatre and related structures	66, 000
Walks, landscaping, and sprinkler system	40, 000
Electrical distribution, sewage and water	35, 000
Inspection and contract administration	20, 000
Contingency	8, 500
Forest Land Management Appropriation, subtotal	420, 000
Roads and Trails Appropriation,[1] subtotal	60, 000
Grand total	480, 000

[1] Proposed for construction from Road and Trail Appropriation over 2 fiscal years.

4. How much money is requested by the Department in the FY 1968 budget for the Mammoth Visitors' Center?

Answer: There are no funds provided in the FY 1968 budget for the construction of this facility.

5. If funds were provided for the Mammoth Visitors' Center in FY 1968 would the Department be in a position to proceed with the construction of the Center?

Answer: The Forest Service would have the capability to construct this facility if funds were provided.

Sincerely yours,

A. W. GREELEY,
Associate Chief.

ADMINISTRATIVE HEADQUARTERS, ELY, MINN.

LETTER FROM SENATORS M'CARTHY AND MONDALE

UNITED STATES SENATE,
COMMITTEE ON FINANCE,
March 14, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate.

DEAR MR. CHAIRMAN: A wide variety of vital Forest Service programs are headquartered in the Superior National Forest in Ely, Minnesota. The Forest Service recognizes the key location of these facilities. It also recognizes the inadequacy of present facilities if the public is to be served appropriately.

Accordingly, we are writing to bring to the attention of the Committee the urgent need which exists for the inclusion of an item in the Forest Service appropriations for FY 1968 with which to initiate work on engineering specification and architectural design for the new facilities required at Ely.

Enclosed with this letter are communications from the Forest Service documenting the importance and urgency of this project, as well as a brochure prepared by interested local parties in order to provide the Committee with a single source of relevant information.

An item in the amount of $50,000 is needed in order that work on this important new administrative facility at Ely may begin. The amount of this request is small, and would represent no substantial budgetary increase. We are, therefore, most hopeful that the Committee will be able to include this item in the Forest Service appropriations for FY 1968.

Your generous attention to this matter is appreciated.

Sincerely,

EUGENE J. MCCARTHY.
WALTER F. MONDALE.

LETTER TO SENATOR MONDALE

UNITED STATES DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., March 6, 1967.

Hon. WALTER F. MONDALE,
U.S. Senate, Washington, D.C.

DEAR SENATOR MONDALE: This is in reply to your inquiry of February 27 and Dr. Grahek's February 21 letter concerning the need for a new Forest Service administrative headquarters at Ely, Minnesota.

We appreciate the interest that the citizens of Ely have in getting modern and expanded facilities for all of the Forest Service programs with headquarters at this location. We know this is a key location and that to serve the public adequately new buildings are needed.

In analyzing the total Service-wide building construction needs for fiscal year 1968, it was necessary to eliminate most of the costly major projects in order to concentrate the available dollars in badly needed employee housing, particularly in those areas under 3,000 population, where suitable rental property for housing and office space is not available.

We are aware of the urgent needs at Ely and these needs will again be considered, along with all other administrative improvement needs, when we prepare our fiscal year 1969 building program. If possible, we may be able to begin the planning for this facility at that time.

We wish to thank you for your interest in our Forest Service program.

Sincerely yours,

CLAIRE HENDEE,
Deputy Chief.

RECREATION FACILITIES, LAKE MONROE, IND.

LETTER FROM LAKE MONROE ASSOCIATION

BLOOMINGTON, IND.

SENATOR CARL HAYDEN,
Chairman, Senate Appropriations Committee:

Congress has been most helpful in encouraging the devolpment of Lake Monroe in Southern Indiana as a multi-purpose reservoir. We are truly grateful for the interest and assistance which you have given to this and other similar projects. Lake Monroe has improved area flood control and opened a new economic potential in this region. The new 10,500 acre lake will soon be providing additional water supply for the City of Bloomington, Indiana University and hundreds of miles of new rural water lines as well as our own City of Bedford. Hundreds of acres for recreation and wildlife have been set aside by the federal and state governments and the tourism is having a dramatic impact on the area's six counties. Recently, for example, a St. Louis developer announced plans to invest $20,000,000 in a resort and housing complex near the lake. In addition, two power plants have been constructed downstream at Petersburg (Indianapolis Power and Light Co., and REMC) and we anticipate at least one major pulp mill in this area as a result of the increased guaranteed flow in White River. All this in what was a "poverty" area.

The above results confirm the fact that reservoir funds are really an investment in the future. They pay for themselves very quickly. But it still takes facilities to make the recreational benefits available to large numbers of people. So, in addition to thanking you for your past interest and support, I want to enlist your continued help.

Specifically, the U.S. Forest Service is developing a great public recreation area—easily accessible to over 2,000,000 people—at Hardin Ridge on Lake Monroe. Their current agency request for approximately $300,000 would provide funds for completion of a sanitation system and public sanitary facilities. We would hope that this can be approved—and augmented—to include a visitor information center, and amphitheatre, more camping units, a trail system, and a beach retaining wall. An Indiana University study, financed by ARA, indicated that well over 1,000,000 persons per year would be using these facilities. Actually, over 790,000 visited the lake area last year (Corps of Engineers count) even before beaches and other facilities were open. Obviously, the recreation potential is even greater than anticipated. We believe the accelerated development of facilities for these people will be a sound investment and urge your favorable consideration of funding requests for the Hoosier National Forest, particularly in the Lake Monroe area.

Cordially,

HAROLD GOSSMAN, *President.*

RECREATION FACILITIES, COUNCIL BLUFF LAKE, MISSOURI

STATEMENT OF MERAMEC BASIN ASSOCIATION

TO: THE CHAIRMAN, INTERIOR AND RELATED AGENCIES SUB-COMMITTEE OF THE SENATE APPROPRIATIONS COMMITTEE OF THE CONGRESS OF THE UNITED STATES:

The Meramec Basin Association is a not-for-profit Missouri corporation organized to represent the people of the Meramec Basin of Missouri and to work with them in securing sound use and preservation of the resources of the Basin and the closely adjacent localities having geographic, political, economic and social ties with the Basin area. The Association has 900 members and a board of 58 directors representing a cross section of interests and localities in the region.

In addition to the justification of the H–25 project provided by reports of both the U.S. Engineers and U. S. Dept. of Agriculture, and the social and economic changes which call for projects of this nature in the area, there is a strong, additional reason for moving H–25 reservoir to completion as part of this most unusual and wide scope of water resources development that is underway in our Basin.

The Basin development program embraces a 3,980 square miles drainage system of Ozark terrain. The combination of 5 U.S. Engineer mainstream reservoirs and 60 Department of Agriculture upland reservoirs called for in the planning will provide a water control and use system that has been much needed for flood control, recreation, water supply and related land treatment programs.

A very serious problem in connection with the H–25 project is the fact that the upland reservoir program of the U.S.D.A. is overshadowed in the minds of many people in the area by the large mainstream reservoir projects. Yet the upland program is designed to work with the mainstream program—both programs to operate as a system. And to achieve a great portion of the upland program—as well as some phases of the mainstream program, the participation of non-federal interests is required in financing, sponsorship, and operation.

Completion of H–25 (Council Bluff Lake is the name which has been selected for it) will not only meet pressing needs in its general locality but will give us the prime example needed in terms of encouragement and enlightenment, and a leadership project that will expedite the arrangements which are being shaped up at this time at state, regional and local levels for assuming responsibility for their share of financing and management.

The development called for in the entire cooperative effort based on the federal Basin plan will have—with no exaggeration—really gigantic economic, resource, and social values. The mainstream program is getting underway, thanks to the interest and financing provided by the Congress. There is an absolute minimum of opposition to any of the entire plan. Our people see the need for it. But seeing the need, and getting in gear for action, are two different matters.

Our Basin is largely Ozark hills and valleys—with, up to now, a rather static and lightly constituted population base. The development of new mines, the actualities of the water resource program—are all new to our people. With respect to the water program, construction of H–25 reservoir will aid us both materially and in building our peoples' confidence to move ahead.

Plans on paper are nice and create hope in many people. But—as we hope you will agree—we feel that incentive for action in such new programs comes strongest and most soundly from a good example of what can be done with a paper plan. Nothing could serve the cause more of advancing the needed program of the Department of Agriculture than completion of this Forest Service reservoir.

We respectfully request that the Appropriation Committee provide the necessary funds needed to build and develop H–25 reservoir by the U. S. Forest Service.

Respectfully submitted,

JAMES F. GAMBLE,
Executive Director.

LAND MANAGEMENT AND RESEARCH

LETTER FROM SENATOR MAGNUSON

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
March 13, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Washington, D.C.

DEAR MR. CHAIRMAN: The Forest Service 1968 budget request for thinnings and salvage funds is, I understand, $1.4 million. This will provide enough money for 280 million feet of sales involving thinnings and salvage.

The Forest Service has informed me that the maximum volume of salvage and thinning material considered marketable without additional road construction is 423 million board feet. I have recently received word that the marketing of this maximum volume could be realized if an additional $700,000 were expended. This would bring the total appropriation to $2.1 million, but the increase in marketable material would be substantial.

The benefits of the salvage and thinning program are numerous. It allows for salvage of insect-disease killed or infested trees, advance salvage of small trees that otherwise would be broken during a normal logging operation, salvage of broken chunks and pieces after a normal logging operation, salvage of low value species requiring special markets, and commercial thinnings in immature stands. The benefits of this program, I understand, are in direct proportion to the volume of the thinnings and salvage operation.

I respectfully urge you to give every possible consideration to the above request for increased funding.

Sincerely yours,

WARREN G. MAGNUSON.

LETTER FROM SENATOR FULBRIGHT

UNITED STATES SENATE,
Washington, D.C., March 14, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
1235 New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed for your consideration is a letter dated March 9 addressed to me by Mr. S. V. Sihvonen, Manager of the Georgia-Pacific Corporation Division Office in Crossett, Arkansas. This letter points out the need for appropriations to support the Southern Hardwoods Laboratory in Stoneville, Mississippi, and to construct a Seed Research Laboratory at Mississippi State University. Both these activities are important to the timber industry in Arkansas, and I hope that the necessary funds may be provided.

With best wishes, I am,

Sincerely yours,

J. W. FULBRIGHT.

LETTER FROM GEORGIA-PACIFIC CORPORATION

MARCH 9, 1967.

Hon. J. W. FULBRIGHT,
Senate Office Building,
Washington 25, D.C.

DEAR SENATOR FULBRIGHT: The wood-using industries in the lower South rely a great deal on the knowledge of growing and using hardwood resources that the Southern Hardwoods Laboratory at Stoneville, Mississippi, has developed in recent years. This important research facility has performed a vital service to industry by furthering this knowledge and if it is to continue this much needed research, additional support is required to adequately staff and operate the Laboratory. Last year, the Senate approved $250,000 in support of this program, but the amount was reduced to $125,000 by the Joint-conference Committee.

Significant progress of great value has been made at Stoneville but increased demands for quality sawlogs and pulpwood warrants an acceleration in this basic research. An increase of $125,000, the amount of the reduction for last year, is urgently needed if the research program is to reach an adequate, more useful level.

In addition to this need, there is a requirement for construction of a Seed Research Laboratory at Mississippi State University to facilitate research into technology and physiology of seed production of Eastern tree species. The U.S. Forest Service established this program in 1966 on the campus of Mississippi State University under the administration of the Southern Forest Experiment Station. It is fitting that immediate research will concentrate on the valuable Southern hardwoods where present knowledge is limited. This project was located at State College to utilize valuable assistance from Mississippi State University scientists. At present the work is being conducted in borrowed and rented facilities of the University and the research effort is limited by this arrangement. To facilitate the program, preliminary plans for construction have been completed and $290,000 will be required for construction of this much needed facility in fiscal year 1968.

The Georgia-Pacific Corporation is highly interested in its hardwood resources in Arkansas, Louisiana, Mississippi and the Appalachians. One-seventh of our extensive land holdings are in permanent hardwood sites and approximately one-fifth of our raw material is hardwood.

Loss of hardwood forest land to agriculture and other uses has amounted to more than a million acres in the last four years. This dictates that we must learn how to grow more hardwood on less and less area in the future. Also, development of methods and means for preventing and controlling value damaging insects and disease, as well as learning new uses for all species of varying grades, are imperative if we are to progress in the hardwood business.

Finding answers to the problems facing us today through the type of research carried on by these facilities will, no doubt, lead to expansion of the hardwood-using industries of the South. This will have a highly desirable economic effect on our State as well as the South as a whole.

For these reasons we wish to urge that you strongly consider the $125,000 additional support for the Southern Hardwoods Laboratory and the $290,000 for construction of a Seed Research Laboratory when this matter is presented before the House Subcommittee on Appropriations on March 16.

Sincerely,

S. V. Sihvonen, *Manager.*

STATEMENT OF C. H. LEWIS TIMBER COMPANY

I am Charles H. Lewis, Jr., owner and operator of the C. H. Lewis Timber Company, Zachary, La. In previous appearances before this body, I was serving in the capacity of Executive Director of The Louisiana Forestry Association and only academically familiar with the subject on which I will speak today. In my present position, I am daily faced with the problems of hardwood management and am directly concerned with the ever-growing need for greater production of higher quality species while sites for hardwood culture are rapidly being lost to impoundments and agricultural clearing.

Forty-five percent of the national production of hardwood sawtimber is produced on the 45 million acres of hardwood forests in the Mississippi River Delta and similar sites in the South. Answers are urgently needed for a number of serious problems facing southern hardwood timber growers.

Studies of soil and site requirements and the strengthening of tree-improvement research are necessary. Research on basic water relationships in southern bottomland forests needs to be strengthened. Flooding, drainage, and other water-regulation measures to favor timber growth should be perfected so that they can be prescribed for different bottomland conditions.

In the lower Mississippi Delta region and in the lower reaches of the other main rivers crossing the Coastal Plain, stands of tupelo and cypress occupy extensive swampland areas. Tupelo, the most widely occurring and fastest growing species in the swamp forest, is valuable for pulp and container veneer. It grows in previously unmanaged stands, however, and little is known about methods for regenerating a new crop to insure future supplies. Research will concentrate on determination of the soil and site requirements favoring continuous management for tupelo, and on effective techniques for planting the species.

Animal damage, which is on the increase in southern bottomland hardwoods, is most severe in planted stands but is also serious in extensive natural forests of cottonwood, sweetgum, and other important species. Deer are the primary cause, but nutria and beaver cause serious losses, as well. Animal damage control may be possible through providing alternate food supplies, the use of repellents, the use of less palatable species or strains of trees, or other measures. These areas are in urgent need of exploration by research.

Insect losses in these forests are heavy. In the past decade, defoliators have killed trees and reduced the growth rate on over 3 million acres. Borers attack living trees and degrade the wood.

The development of preventive and control measures for hardwood borers, defoliators, and insects damaging hardwood regeneration and young stands, will be permitted by increased hardwood insect research. The factors influencing insect attack in the tension zones adjacent to the Great Plains, particularly in Texas, where even slight reductions in rainfall are followed by excessive dying of species such as the live oaks, are in immediate and urgent need of increased study.

Facilities for this increased research are available at Stoneville. A $250,000 annual increase was requested for fiscal year 1967. The $125,000 granted permitted a good start on research in several of the listed problem areas. A further increase of $125,000 for fiscal year 1968 would permit an increase research effort as a badly needed next step in intensifying work on southern hardwood production and protection.

Your Subcommittee, we are sure, recognizes the enormity of the problems facing the southern hardwood industry. The Louisiana Forestry Association strongly urges the members of this Subcommittee and the Congress to seriously consider an orderly progression of increased research in bottomland hardwood production and protection at Stoneville, and including research on hardwood seed technology and physiology at State College, Mississippi. To meet the hardwood needs of the South and the Nation within the initial years ahead, a total expansion of research of $500,000 merits your most serious consideration. This increase should be made in a series of orderly increments over the next four to five years and as justified to your Subcommittee for the program areas we have described.

STATEMENT OF LOUISIANA FORESTRY ASSOCIATION

Ladies and gentlemen, I am William Matthews, Executive Director of The Louisiana Forestry Association, which consists of 2,000 Tree Farmers, forest landowners, and other citizens interested in the welfare of forestry. The organization I represent has testified for research several times in the past, and with your help we have an excellent, modern Forest Research Center at Alexandria, Louisiana. I thought you'd like to know this Center is highly productive and we are pleased with the work of all Projects located there. So I'd like to thank you for your support in the past.

I am here today on behalf of Forest Insect Research, which is one of the units at our Alexandria Research Center. This unit has a team of scientists concentrating research on the southern pine beetle, which has reached the epidemic stage in many parts of the South today.

This tiny insect is a major killer of southern pines. Tunnels made by parent beetles beneath the bark quickly kill the trees and destroy vast stands of timber. In the past decade, explosive epidemics from Virginia to Texas have claimed enough timber to build 100,000 houses.

Severe outbreaks are still going on throughout most southern states today, and losses resulting from them are greater than those caused by wildfire, diseases, and all other pests combined.

Pathetically, there is no known practical method of control available to landowners. Millions of dollars being spent in attempts to suppress the beetle have completely failed. New epidemics continue to reappear, often in the same stands.

We now realize that we must tackle the problem in a different way. And this new approach is to improvise effective and economical chemical control methods, and to develop *indirect* measures that will prevent future outbreaks. This latter objective is determining methods of managing stands so that they will be inhospitable to the beetle, and how to destroy the beetle by using natural enemies, such as parasites, predators, and disease, as a form of biological warfare. The possibilities of creating more vigorous stands by management practices, and of mass rearing, timely release, and encouragement of natural enemies, hold considerable promise as more economical, longer lasting, and safer controls than are possible by chemical means.

(There are many natural enemies of the southern pine beetle and here is an example of one predator known as the checkered beetle. The parent beetle is much larger than its prey, and pounces upon and devours hundreds of bark beetles as they attempt to bore into the tree.)

Here is a photograph of an immature checkered beetle feeding upon a bark beetle grub. Unlike the adult, it lives within the bark beetle tunnels and destroys young broods in all stages of development.)

Although practical and money-saving results are anticipated from the fundamental and complex research underway, the work is seriously hampered by a lack of funds for supporting personnel and travel. New outbreaks, which are constantly springing up all over the South, are compounding Project efforts by throwing a heavier load upon the scientists and the facilities with which they have to work.

So, what I am asking today is just enough money to strengthen the Project sufficiently to carry out its important mission: that of solving the southern pine beetle problem. We feel that an increase of $100,000 in Project funds will be sufficient for the scientists to carry out their assigned responsibility throughout some 80 million acres of pineywoods in 10 southern states. This increase will enable the unit to employ one biochemist and additional technicians to support the research staff. These additions will relieve the scientists from routine field and laboratory duties, and thus enable them to meet new and challenging leads that have already developed from their findings. We urge your serious consideration of the complexity of the beetle problem and the rewards that most certainly will result from the proposed staff strengthening.

LETTER FROM SENATOR LONG (MO.)

UNITED STATES SENATE,
COMMITTEE ON BANKING AND CURRENCY,
March 20, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior Department and Related Agencies,
Senate Committee on Appropriations, Washington, D.C.

DEAR MR. CHAIRMAN: The purpose of this letter is to request that your Subcommittee consider an appropriation increase of $160,000 to the Forest Service, Department of Agriculture, for forest wildlife habitat research in Missouri. This amount would be consistent with the "National Forestry Research Program" presented to the Congress in 1964 and the U.S. Department of Agriculture's "A National Program of Research for Agriculture," presented to the Congress in October of 1966.

The need for wildlife habitat management research in Missouri has been presented to your Subcommittee previously. Personal testimony and correspondence from officials of the Missouri Department of Conservation, the University of Missouri, and others were delivered in the years 1963, 1964, and 1965.

Tremendous changes are being made in the living conditions of wild animals due to the conversion of timber to range. The average acreage of woodland converted through spraying to range in Missouri, Arkansas, Oklahoma, and Kansas is now 250,000 acres per year. It is estimated that over 1.5 million acres have been treated in the past 10 years.

Research is needed to find out how to make this new land use practice improve the habitat for fish and game, or to prevent its deterioration. In addition to the practice of spraying timber to convert it to range, forest management practices are changing from "selective cutting" to clearcutting. Research is needed to find out how this system can be handled for the maximum production and maintenance of wildlife habitat.

The opportunity for productive, cooperative research in Missouri is excellent. The State Conservation Department, the University of Missouri, and the Bureau of Sport Fisheries and Wildlife in the U. S. Department of the Interior all are prepared to cooperate with the Forest Service in such a study.

An appropriation of $160,000 would provide for the salaries of five scientists, student trainees, technical assistance, clerical staff, scientific equipment, costs of conducting laboratory and field research and other essential services. It is estimated that approximately one-fourth of the funds would be used in habitat evaluation research, one-half on habitat improvement research, and one-fourth on research dealing with management of the habitat.

I would certainly appreciate your Subcommittee giving every possible consideration to this matter.

Sincerely,

EDWARD V. LONG.

STATEMENT OF FOREST COMMISSIONER OF MAINE

It is a privilege and a pleasure to submit by letter to your Committee a statement about the need for an increase in the Forest Service appropriation for Forest Survey and particularly about the need for an increase to the Northeastern Forest Experiment Station for Surveys in our area. I understand that the current authorization for Forest Survey is 2½ million dollars and that the 1967 appropriation was $2,055,000. I strongly recommend that the $445,000 authorized additional funds be appropriated this year. Immediate consideration should also be given to legislative action necessary to increase the authorization limit to allow for the expanding demands for current and comprehensive Forest Surveys. It is my understanding that Senator Ellender has submitted Senate Bill #1136 with the provision to increase the present authorization of $2.5 million. I support this proposed amendment to Section 9 of the Forest Survey Act of 1928.

I am requesting the 1968 increase because the survey in our area, and I'm sure in other areas too, provides invaluable state-by-state forest resource information on a recurrent basis. Our industries depend on up-to-date knowledge of the immediate availability and changing trends in timber supplies to guide their decisions regarding land acquisition and procurement programs, and the feasibility of and locations for new or expanded wood using plants. Our State Forestry program depends on the Survey to provide basic data for program direction. The Survey provides much of the essential information needed for special programs to build up the local economy in under developed areas. Further, Forest Survey information guides management decisions on industrial forests and other private woodlands. However, because of insufficient funds resurveys are being made too infrequently and with inadequate detail.

The Forest Service has a goal in our area of making resurveys on a 10-year interval. However, they have not been able to reach this goal. The Northeast Forest Experiment Station which does the Survey in the Northeast, now has crews in New York and Ohio. In these states the previous surveys were made 13 to 17 years ago. The forests of Maine are one of the few remaining scheduled for survey when these States are completed. However, the last survey in Maine was conducted in the period 1954 to 1958. The State of Maine and the Maine Forest Industries are anxious to get the resurvey underway as soon as possible. We urgently need this information because of the millions of dollars of expansion now underway and planned by the wood-using industries in our State. As cooperators we plan to assist the Forest Service in this Survey.

During recent years the costs of conducting Survey work has increased considerably. Along with this, increased demands on Forest Survey, particularly for information and data needed in line with modern resource decisions and action programs have greatly added to the cost of the program. Thus, even with substantial cooperation from states, industries, and other agencies, increased costs and demands have made it impossible to provide adequate timber inventories at the scheduled intervals within the appropriations provided by Congressional action.

In the "Pine Tree State" of Maine, forests are truly important. They cover 17 million acres or 86 percent of our land area. Our pulp and paper industry, fourth largest in the country, is the most important single industry in the State. It accounts for 27 percent of the value of all products manufactured in Maine. To keep this going, pulpwood flows in a steady stream from the forests to the mill. The lumber industry accounts for another 8 percent of the value of all products harvested. What happens to the timber industries in Maine will have major effect on our State's economy.

It is for these reasons that I urge you to give thoughtful consideration to $445,000 increase in Forest Survey funds. Of this increase at least one-third is needed in the Northeast to achieve a 10-year cycle for resurveys and to provide the answer we urgently need to guide the development of our forest based economy.

STATEMENT OF WESTERN FORESTRY AND CONSERVATION ASSOCIATION

The Forest Survey

Up-to-date and complete information on the acreage, volume, growth, use and loss of the nation's forests is necessary for planning the best utilization and management of these vital resources. Timber supply problems have increasingly plagued Western forest land owners and forest users during the past few years. The success of joint private and public efforts to solve these problems is dependent upon an understanding of forest resources and forest industry conditions.

Timber mortality is currently of great concern to this Association. It is estimated at almost 7 billion board feet annually in Oregon and Washington alone, which is equal to about two-fifths of the volume of timber harvested each year in these two leading forestry states.

To help cope with the problem of timber mortality and growth loss, our membership resolved at our last annual meeting that surveys should be accelerated and kept up-to-date as a basis for prompt utilization and marketing of mortality salvage and thinnings, and as a basis for joint public-private action programs aimed at controlling the natural agents so destructive of valuable timber.

"Western Forestry and Conservation Association is greatly concerned about the continuing mortality of timber and loss of growth from natural destructive agents. If the losses to mortality and growth from insects, disease, and animals can be recovered, they will add greatly to the volume that can be harvested for useful purposes.

"The Association recommends that the Forest Survey and other related surveys be directed toward prompt marketing and utilization of salvage, including mortality, thinnings, and other forest products which can increase forest yields on a profitable basis.

"The Association recognizes the progress accomplished through the cooperative efforts of public agencies and the forest products industries in the past several decades and urges continued effort be directed towards improvement of forest yields."

The nationwide Forest Survey is responsible for collecting and analyzing this kind of information. The Forest Survey should work jointly with forest economics research in timber supply analyses concerned with how much of the physical volume of the timber inventories are currently and prospectively available for economic use. For example, the lodgepole pine resources of the West are barely being utilized, yet there is over 53 billion board feet of sawtimber size. Logging residues are another problem in economic utilization of wood material needed to meet future demands. Special studies should be made to determine how much of this unused wood material is economically available and what problems prevent its current use. Several harvesting equipment manufacturers have expressed a need of this information from Forest Survey as a basis for their equipment development programs.

A major problem which the Forest Survey faces, and which is getting little or no attention at the present, is the problem of the relationships between the units of measure used in reporting inventory, timber harvest, mortality, growth and product output. This, and similar problems of Survey techniques, need to be solved by Forest Survey techniques research in order to make future reports and analyses more meaningful to the public. The Forest Survey techniques research project in Portland which serves all the West on these problems needs to be at least doubled in strength. Techniques developed in this project are also the basis for improvements in timber management planning inventories on the important federal lands in the West.

The remaining difference of $400,000 between the Forest Survey appropriation ceiling and the present appropriation is much needed. It could all be used effectively in the Western Forest Survey projects at Portland, Odgen, and Juneau. Since similar strengthening is needed through the nation, the ceiling should also be increased to permit increased appropriations.

The $103,000 proposed in the fiscal year 1968 budget is a small step in the right direction. The Association urges its support and early further increase.

Forest Engineering Research

The Forest Service has demonstrated and documented the large gains to be made from the development of aerial logging methods by forest engineering research. This project, located in Seattle, has a well-planned program of research to develop the needed aerial systems with the cooperation and assistance of the timber and logging equipment industries. All forest land users are vitally concerned with the need for logging systems that can efficiently harvest timber from areas that have special watershed, recreation and landscape values. The many benefits to be gained are related in detail in the record of the hearings last year. The Association supports the increase of $215,000 proposed in the national budget for fiscal year 1968 and urges further strengthening of this work as rapidly as orderly development permits.

Forest Genetics Research

The proposed increase for forest genetics research in the Administration's budget for the Forest Service is heartening to members of our Association. Scientific forest tree breeding offers a most promising and practical avenue for boosting timber yields and for minimizing timber losses caused by insects, disease, and animals.

The Douglas fir region of the Pacific Northwest affords especially bright prospects for rapid progress in tree improvement research and development. This region's large and diverse timber industry is dependent upon a continuing and increasing supply of raw material. The Northwest contains large areas of forest land suitable primarily for timber production. Its tree species exhibit a wide degree of genetic variation. And finally, it is a region where reforestation is accomplished to a large extent through field planting of nursery stock, which thus affords readymade avenues for rapidly introducing superior tree germ plasm into forest production. Timber production gains as high as 50 percent appear realizable for some Douglas fir forests within 20 years if a strong program of genetics research can be provided and carried forward aggressively. We strongly support this budget item of $560,000 for the Nation, and urge that the Douglas fir genetics research project at Corvallis be strengthened as rapidly as possible to its planned level.

Cooperative Forest Fire Research

Our Association is vitally concerned about the protection of forests from fire, and we are pleased to support the item in the Forest Service budget for fiscal year 1968 which calls for an increase of $200,000 for forest fire research. We understand that part of this increase will be used to establish a new cooperative forest fire research project at the University of Washington in Seattle. This unit will help to fill an urgent national need by stimulating cooperative fire research by graduate students, and by providing a much needed graduate training program for specialists in forest fire control science. We strongly favor the establishment of this cooperative project.

Modern Laboratories Essential for Efficient Research

The Western Forestry and Conservation Association commends the Congress for progress made last year toward providing more adequate laboratory facilities for forestry research programs in the Pacific Northwest. Planning funds were made available for the Range and Wildlife Habitat Laboratory at LaGrande, Oregon, and for the Forestry Sciences Laboratory at Corvallis, Oregon. These two planning jobs are moving along efficiently on schedule and will be completed before July 1, 1967. We recommend that construction funds for these two critically needed research facilities now be provided promptly. Construction funds were appropriated last year for the Silviculture and Animal Problems Laboratory at Olympia, Washington. This building is now well under way and it will materially help research progress on the Olympia, Washington projects for animal damage control and Douglas fir silviculture when it is occupied next fall. The Association recognized the gravity of the animal damage situation by passage of the following resolution in Portland, Oregon, at its annual meeting in December, 1966:

"Western Forestry and Conservation Association is concerned that long used rodenticides and repellents are being suppressed by regulatory agencies. In many areas, successful forest regeneration is dependent on rodent control.

"The Association recommends that research be expanded to find alternative materials and techniques for protecting seeds from rodents. Until such new materials and methods are available, reevaluation of the existing materials is needed in regard to proper dosages and application methods."

Bend Silviculture Research

Our Association members are disappointed to learn that the Forest Service budget for fiscal year 1968 does not include an increase for the research program of the Silviculture Laboratory at Bend, Oregon, even though this need was recognized by positive action in the Senate last year. We strongly reaffirm our recommendation of a year ago that the program of the Bend Laboratory be strengthened by providing sufficient funds to bring staffing up to the planned level. This Forest Service project carries the Federal responsibility for timber-growing research for all forest types in eastern Oregon and eastern Washington—a commercial forest empire aggregating 20 million acres. The difference between the value of current timber production in this area and the potential production that could be captured with the help of accelerated research is estimated at $50 million a year in stumpage value alone. We urge your continued efforts to get this research project operating at capacity.

Forest Recreation Research

Western forestry is increasingly concerned with the mounting pressures of outdoor recreation on the private and public forests of this nation. We note that the President shares this concern and proposes a $332,000 increase in forest recreation research for the Forest Service.

Recreation and tourism are growing rapidly. Both private and public lands are under increased pressure from people who want to use forests for purposes other than timber production.

We must understand the impact of recreation demands on our basic industry resource—the forests. Research should be directed toward learning how to integrate recreation use into sound, overall management of the forest resource. Recreation should be regarded as a forest product for which the user must pay his appropriate share, and it must be carefully coordinated with other types of forest use.

For these reasons, the Association urges strengthened Forest Service programs of forest recreation research, both biological and sociological. Full staffing of this important research would require an additional $200,000. This vital research program should be strengthened promptly and progressively to provide knowledge upon which to base full use of our forest potential without critical conflict.

STATEMENT OF NATIONAL FOREST PRODUCTS ASSOCIATION

I am Ralph D. Hodges, Jr., Vice President, Government Relations for the National Forest Products Association. NFPA, with headquarters in Washington, D.C., is a federation of seventeen regional, product and species associations representing the forest products industry from coast to coast.

Approximately one-third of our nation's timber supply comes from lands administered by federal agencies. While the Forest Service in the Department of Agriculture is the principal agency, several agencies in the Department of the Interior, principally the Bureau of Land Management and the Bureau of Indian Affairs, contribute substantially to our nation's wood supply. Consequently there are several items we would like to discuss with you.

National Forest Development Roads and Trails.—These funds are vitally needed to open up and make productive vast areas of national forest. This is extremely important in maintaining and improving the economies of hundreds of rural and timber areas. The productivity of these locked up federal lands can contribute much to the stability and the attractiveness of rural life. The timber that will be made accessible is also needed in our economy. It must be made accessible if the national forests are to contribute a share to our national economy.

Industry representatives worked successfully with the Forest Service and the Congress on legislation to facilitate cooperative road construction and road use agreements that help on management of intermingled federal and private lands.

Road construction and maintenance costs are shared on the basis of planned use. This undertaking has been highly successful. The Road and Trail funds need to be appropriated, however, in order for the national forests to bear a proper share.

Our industry also worked with the Public Works Committees in securing a substantial increase in the authorization level for forest development roads and trails—$170 million annually for 1968 and 1969. This is the amount necessary in order for the federal forest lands to be put under management on an orderly basis.

The budget request for 1968 is considerably below the authorization level, but is an increase of more than $9 million over 1967. This seems to be an intelligent step up toward the goal of about $170 million annually and will help the Forest Service to gear up to the authorized level.

Since funds are necessarily limited it is important that the maximum benefit be obtained from each dollar spent. The return to the local and regional economy is usually greatest when initial road construction is to a standard that will: (1) permit forest management including fire and insect protection; (2) provide economical log hauling; and (3) meet other anticipated uses in the immediate future. The emphasis should be on opening up new areas for forest management rather than upgrading existing roads. This will make a maximum contribution to our national wealth and sustenance of rural economies. We hope these funds won't be dissipated building or rebuilding roads to unnecessarily high standards.

Thinning and Salvage.—An increasing volume of our nation's wood supply will be coming from thinnings and salvage in our immature and young growth timber stands. We are developing techniques, machinery, and markets for the complete use of these thinnings. This gives us an over-all increase of about 40 percent in timber production over the rotation period.

Both the Forest Service and the Bureau of Land Management did a magnificent job in salvaging much of the 1962 Columbus Day blowdown in Oregon. This held insect infestations to a minimum and removed much material that was a serious fire danger. Our industry has also become more sophisticated in the utilization of this salvage material and in many instances is making an economic return from material that was wasted a few years ago. All this means added returns to the federal treasury from federal timber sales.

The Forest Service budget request for 1968 includes $1.4 million for thinning and salvage of about 280 million board feet. It is estimated that about 140 million board feet more could be harvested annually if an additional $700,000 were available. These sales are apparently more costly to administer, but as experience is gained efficiency should improve.

Hardwood Improvement Project.—This year's proposed Forest Service budget includes $300,000 for the so-called "Hardwood Improvement Project," an increase of $100,000 over the supplemental funds approved in October, 1966. This project was developed by the Forest Service and presented for your approval and funding in the supplemental appropriation bill in the closing days of the last Congress. There was no time, apparently, for consultation with the forest products industry which was the intended beneficiary of the project. The State Foresters in the intended areas also had no knowledge of the program.

We received several versions of what the project was supposed to do and why. The consensus among Forest Service people is that it is an intensified application of existing programs of Cooperative Forest Management and Utilization and Marketing. It was presented to this Subcommittee as the vehicle necessary to reduce hardwood lumber prices, which took a sharp upswing for a few weeks last spring, but then moderated sharply ever since.

The Forest Service has changed directions and locations several times with this program since the hearing last October. This points up the desirability of developing programs cooperatively with all those concerned. We suggest that on such programs this Subcommittee request that the Administrative branch consult with the landowners, industry and the State and local governments that will be affected.

We do want to publicly express the fact that the people in our industry are deeply conscious of the high degree of professional competence represented on this Subcommittee. It is heartening to know that these grave matters concerning the forest industries and our relationship to federal agencies are considered and dealt with by Members of the Senate whose expertise, exhaustive research, and dedication to these responsibilities are universally respected.

When we differ, as indeed we occasionally must, we do so with the confidence that this Subcommittee will finally act on the basis of sound information, clear understanding, and highly qualified judgment.

It is always a genuine pleasure to work with this Subcommittee, Mr. Chairman. Please accept the sincere appreciation of our industry.

STATEMENT OF THE AMERICAN FORESTRY ASSOCIATION

I am Kenneth B. Pomeroy, Chief Forester of The American Forestry Association.

In a sense the members of this organization served as mid-wives at the birth of the Forest Service. Ever since that memorable date six decades ago these people have kept in close touch with its development.

They noted with pleasure the tremendous strides in protecting the forests from fires. They applauded the achievements in timber management. And they eagerly awaited each new finding of research scientists.

In recent years Association members have been staunch supporters of the 1961 Development Program for the National Forests and the 1964 National Forest Research Program. Unfortunately, these well-conceived plans are only being funded at two-thirds of the projected rate for National Forest development of one-third the planned rate for forestry research.

We recognize the exigencies now facing the Nation and we urge Congress to do whatever is necessary to bring hostilities in Vietnam to a successful conclusion. When this emergency is past, we shall urge Congress to fully fund both the National Forest and the Forest Research programs.

Meanwhile, we commend the Bureau of the Budget for presenting a well-conceived financial plan for the Forest Service for Fiscal Year 1968. We urge its implementation by the Congress.

FORESTRY RESEARCH IN WASHINGTON

LETTER FROM SENATOR MAGNUSON

MARCH 10, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
1235 Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: The Forest Service, in cooperation with industry, other government agencies, the states, and universities, has undertaken various research projects designed to increase man's general knowledge of the forest and to assure his efficient utilization and allocation of all its resources. Several projects are of particular interest to me.

An increase of funds for forest recreation research of $332,000 is needed if this program is to fulfill its purpose. Included in this program would be the establishment of a Forest Recreation unit in cooperation with the University of Washington at Seattle.

The Forest Hydrology Laboratory at Wenatchee, Washington, will need an increase of $75,000 in fiscal year 1968.

At Olympia, Washington, a Silviculture and Animal Problems Laboratory is in the process of being constructed and will soon be ready for use. One of the projects located there, the Douglas fir silviculture project, will require an increase of $160,000 to bring the staff complement up to the planned level.

The Forest Service fiscal year 1968 budget includes the establishment of a cooperative forest fire research unit at the University of Washington. I understand that $30,000 of the budget increase will go toward this project.

One of the most intriguing of the Forest Service Research programs is the Forest Engineering Research project in Seattle where, among other things, studies are being made to determine the utility of employing helicopters and balloons in logging. The President's budget proposal of $215,000 nationally is necessary to continue these kinds of efforts in forest engineering.

Nationally insects and diseases cause 2,400,000,000 cubic feet mortality loss every year. Additionally revenues are needed to obtain results from pest control research.

On March 6, 1967, I sent you a copy of a statement by the Washington State Commissioner of Public Lands, Bert L. Cole, which provides justification for the above budget increases. James S. Bethel, Dean of the College of Forestry at the University of Washington, has provided me with another very succinct statement of justification. Dean Bethel's statement is enclosed, and I request that his statement be inserted in the Hearing Record. Also enclosed is a statement of justification for the Wenatchee, Washington Forest Hydrology Laboratory prepared by the Laboratory and provided me by Mr. Sam Boddy of the Chelan County Industrial Development Council, Inc. I request that this statement also be made a part of the record.

I respectfully urge you to give every possible consideration to the above requests for increased funding of these very vital Forest Service Research programs.

Sincerely yours,

WARREN G. MAGNUSON.

STATEMENT OF DEAN JAMES S. BETHEL

In these days of rapidly changing technologies and accelerating demands of our natural resources, it is increasingly clear that we must strive to use those resources more efficiently. It is highly urgent that we provide now for improving the efficiency in utilizing our forest resources. Forestry research has great potential for contributing to that efficiency. I want to commend the Administration's budget proposal for providing greatly needed added strength to the Forest Service research program.

Forest Recreation Research

We need to be concerned not only with the commodity products from the forest but also with the social values involved. This will require more research related to those social values and recreational uses of the forest.

Recreation and tourism are growing quite rapidly in the Pacific Northwest and will become much more significant in the regional economy. A recent study predicts that demand for outdoor recreation will be four times greater in the year 2000 than it was in 1960 in the Pacific Northwest.

Recreation depends in large part upon the scenic quality of the region. The Pacific Northwest is noted for the high quality of the natural environment and its relatively undeveloped status. Where recreation was once an incidental use of the forest, it is in some instances the major use today. The whole forest, both public and private, is involved.

Recreation demands are not only increasing in quantity. They are also becoming much more varied, more complex, and often more sophisticated. A multitude of new problems are created in integrating forest recreation with other uses of the forest.

Many factors influencing the administration of wildland recreation are not clearly understood at this time. This was evident in the North Cascades Study Report and subsequent hearings. There is only a limited base of scientific knowledge derived from recreation research upon which to make recreation decisions. As a result, many decisions involving recreation are still made upon the basis of a good deal of emotion. We need to know what people want when they seek forest recreation. We also need to develop reliable procedures for predicting trends and future needs for recreation and the impact upon the forest resource.

These issues will require the involvement of social scientists as well as biological specialists. There is presently a deficiency of competent recreational research personnel to carry out the necessary research. We need to increase the graduate training in the applied aspects of a wide variety of disciplines involved in wildland recreation.

We have been making some progress in meeting this demand at the University of Washington. We have increased our staff in forest recreation and are in the process of strengthening the curricula for recreation students at both the graduate and undergraduate level. The University faculty has demonstrated outstanding talent and leadership in recreation policy in the areas of forestry, sociology, economics and fishery resources. In 1965, for example, the College of Forestry sponsored a Wildland Recreation Management Seminar which featured the interdisciplinary approach necessary for recreational management.

I also urge accelerated research effort on the management of wilderness and related recreation areas currently underway by the Forest Service.

The University of Washington has been working closely with the Forest Service on studies to determine the attitudes and preferences of recreationists who use wilderness and campground areas in national forests and national parks. Other studies have included the physical impact on the wilderness environment and the interpretation of the forest environment and natural resource management for the recreationist.

Forest Service plans call for the establishment of a Forest Recreation Research unit in cooperation with the University of Washington. The establishment of such a cooperative recreation unit at the University of Washington is urgently needed now. The current research effort of the Forest Service in recreation in the Northwest is severely limited by an annual budget of only $35,000. An additional $200,000 is needed to launch a full-scale recreation research program by the Forest Service in the Pacific Northwest. I strongly urge the strengthening of this work as rapidly as possible. The proposal to increase the funds for recreation research in the Forest Service by $332,000 is long overdue and urgently needed.

Forest Hydrology Laboratory, Wenatchee, Washington

Five scientists and their assistants are presently employed at the Forest Hydrology Laboratory. They are measuring streamflow under natural conditions to determine the relationships between vegetation and water runoff. They are determining the amounts of soil erosion that result from logging, road building and other management practices, as well as the amount of water that is used by trees. All of these studies are important to us in the Pacific Northwest where distribution and timing of watershed runoff is particularly important to the farm and fruit crops of eastern Washington as well as for the production of hydroelectric power.

The University of Washington staff members work closely with the Forest Service scientists at the Hydrology Laboratory. Undergraduate and graduate students participate in the studies at the Laboratory during the summer season. The Forest Service staff, in turn, stimulates the application of research results by participating in teaching and seminars at the University. An additional $75,000 is needed to operate the Wenatchee Laboratory at its optimum level.

Olympia, Washington Laboratory

Last year the Congress provided funds for building the much needed Silviculture and Animal Problems Laboratory at Olympia. Construction has moved ahead rapidly and at the present rate of progress, the building will be finished and ready for occupancy by scientists from both the Forest Service and the Bureau of Sports Fisheries and Wildlife by September, 1967. These facilities will help to stimulate research progress in the control of animal damage to forest trees and the intensive culture of young Douglas-fir forests.

I am concerned, however, about building up our knowledge of how to grow Douglas-fir more intensively as a crop. The Douglas-fir silviculture project, with three scientists, is only half-staffed. This project is supposed to fulfill the Federal responsibility for the development and refinement of cultural practices to increase timber yields on some 20 million acres of Douglas-fir timberland. A program increase of $150,000, needed to correst this deficiency, can be justified many times over by the critical West Coast timber supply situation.

Cooperation in Forest Fire Research

After more than 60 years of organized forest fire protection in the United States, we still burn some 2 to 4 million acres every year on lands protected by all agencies. We spend some $100 million annually in our efforts to prevent fires and to extinguish those that do occur. In making further progress, two major requirements must be met. First, there is a need to train more specialists in the advanced techniques of forest fire control. Second, we must involve the university scientific community more fully in forest fire research.

We are developing a strong program in forest fire science at the University of Washington, and will offer special graduate courses in this field starting next fall. Although this program will be centered in the College of Forestry, it will involve strong participation by other departments at the University, including meteorology, engineering, and the physical sciences.

We are pleased to learn that the Forest Service budget for fiscal year 1968 will include the establishment of a cooperative forest fire research unit on our campus in Seattle. This move will help to improve the quality of our graduate training program and will, at the same time, greatly accelerate progress in cooperative forest fire research. It will further help to orient our fire training and research efforts more closely to forest fire protection problems that are of regional and national significance. We strongly endorse the establishment of this cooperative unit.

Forest Engineering

The Forest Engineering Research project in Seattle has been operating at less than one-quarter of the level indicated as necessary in the "National Forestry Research Program."

Even so, valuable progress has been made in cooperation with the University of Washington with the timber, logging equipment, and other industries. A handbook of wire rope tensions and deflections has been developed to provide engineers with the basic knowledge needed to lay out logging skylines more effectively. The potential efficiencies of improved skylines yet to be developed by further research have been shown to be impressive. The improved capabilities of wide single tires as replacements for dual tires on logging trucks have been clarified. Preliminary tests of helicopters in logging have been completed and summarized. Initial studies of balloon logging indicate that economic applications could be developed through intensified research.

The problems being investigated are much too complex and too important in relation to the current low level of research effort. Much greater emphasis is needed on these projects if we are to take full advantage of the potential benefits from the development of advanced aerial logging systems. The appropriation hearings last year indicated that the Seattle project alone could effectively utilize considerably more than the entire increase of $215,000 proposed for this work nationally in the budget for fiscal year 1968.

Summary

In summary, the proposed increase in the Forest Service budget for forestry research is vital to meeting the research needs of the nation. In addition to the above specific areas, we in the Northwest are vitally interested in the projected increases for research in the areas of genetics, pathology, and economics. This additional support is critically needed to expand current research programs and to undertake new aspects of forestry research.

The Forestry Research Task Force has indicated that approximately $41 million will be needed for forestry research by 1972. This amounts to an annual increase of about $5 million over current research levels. Obviously, this increase must come from combined Federal, state and local efforts. However, the requested increases in Forest Service research is vitally needed if we are to reach the minimum total level indicated.

STATEMENT OF SAM BODDY

The Forest Hydrology Laboratory in Wenatchee, Washington, is a recent addition to research installations operated by the Forest Service, U.S. Department of Agriculture, in the Pacific Northwest. The main purpose of this unit is to provide facilities for basic forest soil and water research. It also functions as a base for applied watershed management research in the forests and associated ranges of the Mid-Columbia Basin in Washington and Oregon.

The forests and ranges of Washington and Oregon supply primary raw products for the region and occupy the source areas for dependable supplies of water so vital to economic development. For example, in Central Washington, seven major tributaries of the Columbia River flowing from the east side of the Cascade Range produce approximately 8 million acre-feet per year. Seven million acre-feet of water are produced from mountain watersheds in eastern Oregon. These water supplies are the basis for a billion-dollar economy in agriculture, wood utilization, metal processing, and recreation. The value of farm and fruit crops made possible through irrigation average $160 million annually and provide employment for 100,000 people in five eastern Washington counties. Clean streams and lakes are the basis of a recreation industry which brings $50–80 million to the area each year, and ample hydro-electric power supplies have created an incentive for an industrial growth that is just beginning to develop.

Land managing agencies and owners have the responsibility for seeing that timber in water-source areas is harvested properly, that the ranges are not overgrazed, and that recreation potentialities are fully developed. All these uses affect water supply, and they must be geared to the requirements for clean rivers and regulated flows.

In 1956, the Pacific Northwest Forest and Range Experiment Station, the research arm of the Forest Service in Washington and Oregon, began a program of watershed management research in Wenatchee. It started with one scientist and has gradually increased to five. At the outset it was recognized that there were many problems on the forest-range watersheds that needed solution. With the manpower and facilities available, it has been possible to attack a few of the important ones with the plan that the project will be strengthened at the earliest opportunity to permit attention to the others. At present, work is centered on two high-priority problems, water yield improvement and erosion reduction.

Improvement of water yield

Much of the irrigated land in eastern Washington and Oregon suffers a loss in production because of dwindling water supply during the last half of the growing season. This poses many questions about possibilities of managing forest lands to increase waterflow.

Facilities provided by the Forest Hydrology Laboratory permit study of the water cycle, a key to understanding water yield. It has been possible, for example, to measure how much water is consumed by different species of forest trees. These studies are providing clues to possible measures for salvaging water for downstream use. The climatic environment in forests is also being studied to determine how changes in cover will affect local temperature, humidity, and wind movement. Water losses by evaporation and transpiration are influenced by these environmental factors, and reduction of such losses, where feasible, can increase the supply of usable water for human needs.

Erosion reduction

Certain uses of forest and rangelands—construction of roads, timber harvesting, grazing, and recreational use—disturb the soil. A frequent result is accelerated loss of soil by erosion. Eroded soil fills streambeds, irrigation ditches, and reservoirs with silt, adds to the cost of maintaining water control structures, and makes water unfit for many uses. Times of greatest damage are during spring flood periods when rain combines with snowmelt and during summer months when highly localized rainstorms hit the eastern Cascade Range, the Okanogan Highlands, and the Blue and Ochoco Mountains. Maintenance, cleanup, and repair of roads, irrigation ditches, impoundments and stream channels cost millions of dollars annually in Oregon and Washington. Coupled with this is a reduction in productive capacity on land from which topsoil has been removed by erosion.

To solve the complicated problems of erosion, it is necessary to learn more about forest soils. Basic information is being uncovered by intensive examination in the Forest Hydrology Laboratory. Results, translated into usable guides for the land manager, will enable him to predict and avoid areas where serious erosion is likely to occur. Concurrently, methods designed to minimize erosion from road construction, logging, and grazing are being tested and improved. The ultimate objective is not to restrict legitimate uses of forest and rangelands but to devise efficient guidelines, adapted to special requirements of forest soils, that will achieve all potential multiple benefits of wildland culture.

Coupled with the problem of reducing erosion is the equally important task of rebuilding land which has deteriorated from past abuse. There are more than 2 million acres of seriously eroding land in eastern Washington and Oregon that need to be restored to a pleasing and productive landscape. In their present condition, they are a constant threat to downstream values. On these flood-source areas, topsoil is generally absent and moisture storage is seriously reduced. Water runs rapidly off the surface of these lands causing erratic streamflow and still more erosion and loss in production.

Known species and methods of planting usually fail on these problem lands. Experiments with fertilizer have shown some promise where native vegetation still remains to respond. Other methods to slow down surface runoff and stabilize soil are being explored. Among them are contour trenches, diversions, water spreaders, and gulley plugs.

The objective of this research is to develop techniques and plant materials which will be most efficient in reclaiming depleted sites. The need is urgent in view of the increasing recreation use, particularly in the fragile, high altitude areas where much of the land needing rehabilitation is found.

The Forest Hydrology Laboratory

A focal point for watershed research in eastern Washington and Oregon is provided by the Forest Hydrology Laboratory in Wenatchee. Construction of the first stage was authorized by Congress in fiscal year 1962, with an appropriation of $300,000. A subsequent allotment of $36,000 in Accelerated Public Works funds provided for construction of a small greenhouse and for site improvement.

The Laboratory serves as a base of operations for watershed research in the outdoor laboratory of eastern Washington and Oregon. It also provides a place for research under carefully controlled environmental conditions not possible in field experiments.

This intensive research effort is using the combined skills of specialists who are highly trained in several disciplines. Modern equpment gives them capability in the latest research techniques. Only through this fundamental team approach can progress be made on some of the difficult watershed management problems facing us today. Trial-and-error or "applied" research on which we have relied in the past has not been adequate to provide a valid basis for intelligent watershed management decisions.

The Laboratory is presently staffed with five scientists and six supporting personnel. Five additional scientists with their supporting personnel will be needed to carry out the long-range research program. By FY 1977, this level of operation will require a budget of approximately $350,000 to cover salaries, equipment, and other operating costs.

The outlook

A key factor in developing the long-range program is the need for orderly growth in staffing and planned expansion of workable units throughout subsequent stages of laboratory construction. Since its organization in 1956, watershed research at Wenatchee has developed a broadly based comprehensive attack upon the problem of water yield improvement. There is now need for increasing research activity in watershed rehabilitation. Thousands of acres of lands once destructively grazed remain in poor hydrologic condition. Action programs of the national forests within the region are annually applying interim methods having minimum research bases to 40–50,000 acres of critical erosion seeding and revegetation projects.

Strengthening the research program in watershed rehabilitation will require addition of a Soil Physicist and a Range Ecologist to the present research team of five scientists. Seven full-time scientists and their support personnel will fully utilize the Hydrology Laboratory facility at its present stage of development.

Foregoing soils research has established relationships between soil characteristics inherent from parent materials, and soil erosion hazard or potential. It is now necessary to relate these soil characteristics to hydrologic behavior, i.e., soil-water reception, storage, and drainage. These relationships involve consideration of porosity, pore size, texture or particle size distribution, and structure as they relate to water-film forces. There is also need to investigate the ways in which the pronounced effects of vegetation upon water storage and drainage are exerted in restoring permeability and porosity.

Production of the greatest quantity of high quality water requires maintenance and/or improvement of the soil-protective properties of vegetation. A great deal of research effort has been expended in certain areas to discover and propagate exotic plants which may have outstanding features for erosion control, particularly in lower elevations. Few of these species have proved to be adaptable to the severe, droughty conditions commonly encountered in the high altitude problem areas of eastern Oregon and Washington. Yet, within this area there are numerous examples of clearcut evidence of the beneficial effects of adapted, fibrous-rooted indigenous species. Native browse, grass, grasslike, legume, and other herbaceous plants that provide dense, permanent soil cover should be screened for their erosion-controlling potential and ease of establishment. There are indications that while a complete herbaceous cover controls erosion, it does not strongly control runoff. Therefore, criteria are needed to establish minimum amounts of herbaceous cover needed to protect against soil movement, yet enhance establishment of ultimate vegetation cover.

LETTER FROM WASHINGTON COMMISSIONER OF PUBLIC LANDS

March 2, 1967.

Hon. Warren G. Magnuson,
U.S. Senator,
Room 127, Senate Office Building,
Washington, D.C.

Dear Warren: In reviewing the Administration's budget for fiscal year 1968, I am encouraged to note that some modest strengthening is recommended for the forestry research program of the U.S. Forest Service.

Our expanding population and our increasing commitments—both domestic and overseas—are accelerating the pressures on our forests for more timber products, more opportunity for constructive outdoor recreation, and for more pure water for our communities, our irrigation agriculture and hydroelectric power. Intensifying the management of forests to meet the needs will require better technologies than present knowledge can provide.

I know you understand well the importance of organized research in dealing with this situation. For this reason I am reporting to you on several Forest Service research activities with which I am personally familiar, and which need to be strengthened at the earliest opportunity.

Please include this letter and my enclosed statement in the record of the hearings. I know you are acquainted with much of this work, and I deeply appreciate your careful consideration of projects so important to the continued progress of our State and Nation.

Very sincerely yours,

Bert L. Cole,
Commissioner of Public Lands.

STATEMENT OF WASHINGTON COMMISSIONER OF PUBLIC LANDS

The timber products industries are of vital importance to the Pacific Northwest and to the Nation. Currently in Washington and Oregon, these industries are annually adding some $3.8 billion to our gross two-state product value, and a total of more than $7.5 billion to our gross national production of goods and services.

The rising demand for wood products, both for domestic use and for export, sharpens the need to increase timber yields. At the same time, the demands for the non-timber products and services of the forest—outdoor recreation, wildlife, range forage and water—have increased even more sharply and promise to continue upward.

The pressures for managing, protecting and using our forests more efficiently were never greater.

Olympia Research Laboratory

In efforts to help meet this need, the Washington State Department of Natural Resources and the U. S. Forest Service are active partners in two cooperative forestry research projects at Olympia, Washington.

One project, seeks to increase the yield of Douglas-fir forests through the development of more efficient cultural practices such as thinning, fertilizing, and the prompt start of a new tree crop after mature trees have been harvested. As the most important timber tree in Oregon, Washington, and Northern California, Douglas-fir is the primary source of raw material for the wood product industries in these areas.

The second project at Olympia is developing effective, economical and safe controls for the troublesome losses that animals—rodents, rabbits, porcupine, bear, deer and elk—are causing in our Nation's forests. In Oregon and Washington alone, the total damage caused by animals to forest trees, seeds and seedlings is estimated at $15 million annually. The U.S. Bureau of Sports Fisheries and Wildlife is also participating actively in this animal damage control research.

Last year Congress provided funds for the Silviculture and Animal Problems Laboratory at Olympia. The contract for this $45,000 facility was awarded last November; construction was 40 percent complete on February 1, and the laboratory will be ready for occupancy by early fall. This building will speed research progress and will, in addition, be an example of the efficient use of wood construction in modern laboratory design.

With completion of the Olympia Laboratory in prospect, it is timely to take a close look at the staffing needed to get full value from the projects located there. I am especially concerned about the Douglas-fir Silviculture Project which is now staffed at only 50 percent of the planned six scientist level. We look to this project for leadership in the development and refinement of cultural practices for young stands of Douglas-fir and associated conifer species. Indications are that current yields might be increased up to two or more times their present levels through measures such as thinning, weeding and fertilizing. But a multitude of questions must be answered through research before these practices can be widely applied with confidence. The continuing demand for ever-increasing timber supplies, which is causing so much concern in the Douglas-fir region, underlines the urgency of this need. The Douglas-fir Silviculture Project should now be brought to its planned strength as soon as financing can be provided. This would require an additional $160,000 of program funds.

Engineering Research at Seattle

Last year I called attention to the urgent need for accelerated forest engineering research on balloon and skyline logging systems.

It has been estimated that an additional 500 million board feet of timber could be harvested every year from areas of difficult access in western Washington and western Oregon alone if the efficiency of aerial logging systems were improved through research.

Another year has passed and, although the small research group in Seattle has worked diligently and productively, the major potential for increasing the efficiency of timber harvest on difficult terrain still lies ahead. It cannot be achieved without greater effort. Last year's hearings brought out that $400,000 could be effectively applied on this project. Now the President's budget for fiscal year 1968 proposes an increase of $215,000 nationally in forest engineering research. I strongly urge you to support this, and to increase it when opportune, so that the necessary progress can be made with as little further delay as possible.

Cooperative Forest Fire Research at Seattle

I understand that some $30,000 of the budget increase for Forest Service research will be used to staff a cooperative forest fire research project at the University of Washington in Seattle. The critical need for a greater number of professionally trained forest fire control specialists has been recognized nationally by private, state and Federal forest protection agencies.

Establishment of this unit will help to develop a strong graduate program in the field of forest-fire control science. It will stimulate progress in cooperative fire research through more effective use of graduate students, the University's skills in meteorology and engineering, and in its strengthened forest-fire science staff in the College of Forestry.

Watershed Research at Wenatchee, Washington

Studies at the Wenatchee Forest Hydrology Laboratory are showing how much water is used by forest trees. On the slopes of Mission Ridge, hydrologists are finding out how much snow tree crowns intercept, and how much evaporates. If trees decrease the accumulation of snow for water runoff, then the water supply as well as the amounts of wood and forage might be increased by careful thinnings. All of these studies are providing clues for obtaining more high-quality water for downstream use.

Information is urgently needed on how to minimize erosion from road construction and logging and on how to recognize and avoid areas where serious erosion is likely to occur. Over 500,000 acres of critical forest and range watershed lands in eastern Washington are seriously eroding and need to be restored to a productive, attractive landscape. Rehabilitation of flood source areas requires additional research on soils and plant materials to do the job efficiently.

The Administration's proposal to increase watershed research in the Forest Service nationally by $211,000 recognizes an important water resource need.

An increase in Forest Service research at Wenatchee of $75,000 annually would permit using the Laboratory more efficiently and speed the developing of improved forest soil and water management practices.

Recreational Research

Additional research in forest recreation is extremely urgent in our State. The President's proposed budget increase of $332,000 for the entire nation will help to strengthen an area of serious deficiency. Outdoor recreation facilities must be greatly increased on State, county, Federal and private forest lands. But sound recreation investments should be based on sound research.

The Forest Service has a promising start on this work in the State of Washington with one full-time and one part-time scientist assigned. Coordinated plans call for a seven-scientist recreation research task force in Seattle, which would require an additional $200,000 for efficient operation. I urge that increased funds for recreation research by the Forest Service, in cooperation with the University of Washington, be provided at the earliest opportunity to accelerate the strengthening of this project until it is fully activated.

Insect and Disease Research

Currently insects and diseases are destroying eight times the wood volume consumed by forest fires. Most of the research undertaken to reduce these losses is being done by the U.S. Forest Service Experiment Stations, but expenditures are not in proportion to the damage sustained.

Since 1959, when the European pine shoot moth was discovered in Seattle, the Department of Natural Resources has cooperated with the Forest Service in successful efforts to prevent spread of the insect to ponderosa and lodgepole pine forests of eastern Washington. Currently the Forest Service is contracting with Washington State University to develop techniques for mass rearing of the insect and sterilization of the males. Both projects are essential to the primary objective of determining the feasibility of eradicating the insect in the Puget Sound area by using the sterile male technique.

To maintain this and other pest control projects will require increasing Federal appropriations. Additional revenues that you can obtain for pest control will shorten the time needed to reduce the national annual 2,400,000,000 cubic feet mortality loss caused by insects and diseases to an acceptable level.

DEPARTMENTAL STATEMENT

1. Olympia, Washington

a. *Douglas-fir Silviculture.*—The timber produced in the Northwest formerly came almost entirely from old-growth stands. The supply of such timber is diminishing and industry is increasingly dependent on second-growth. The silviculture program at Olympia is intended to develop intensive cultural practices for growing Douglas-fir.

The management of natural stands needs to be studied further to develop cultural systems that produce maximum timber yields, that can be harmonized with other forest uses including provision for aesthetics, and that will be compatible with systems requiring a minimum of slash burning. To make the most of the increasing acreage of young stands, initial spacing, pre-commercial thinning, and growth in stands of regulated density need study. The importance and value of the species may justify soil management practices, such as fertilization and manipulation of understory vegetation. Such information will also be needed with genetically improved strains, which can now be definitely foreseen.

b. *Prevention and Control of Animal Damage to Forests.*—Some $15 million of forest production is estimated to be lost annually in the Pacific Northwest because of animal damage. The problem is worse in areas where a high investment has been made in seeding or planting a new forest, only to have it destroyed by rodents, deer, bears, and porcupines.

A cooperative research program was initiated in animal damage prevention and control in 1964. The research staff consists of four scientists. Work has been devoted to use and effectiveness of synthetic chemicals to repel animals from planted seedlings, initiating and coordinating a regional animal damage survey, effects of damage on individual seedlings, and natural environmental effects on animal feeding habits. An effective treatment to repel rabbits from planted seedlings was developed. A search has been started for naturally occurring chemicals with repellent properties, and the systematic effects of the rabbit repellent are being investigated.

c. *Facilities.*—Congress provided $450,000 in fiscal year 1967 to build the Silviculture and Animal Problems Laboratory at Olympia. Construction began late in 1966 and the new Laboratory is expected to be ready for occupancy this year.

d. *Funding.*—The Douglas-fir silviculture and animal damage research at Olympia is currently funded at $202,000. The budget for fiscal year 1968 provides for no increase in this effort. With the completion of the new Laboratory, increased staffing could be effectively used to move ahead toward the solutions of the important problems being studied. An increase of $160,000 could be used efficiently to strengthen the Douglas-fir silviculture research.

2. Seattle, Washington

a. *Forest engineering* research at Seattle is aimed at developing aerial logging systems to harvest timber economically from difficult access areas while protecting other values of the forest. The limited research already underway has shown that aerial logging can possibly reduce by 50 percent the mileage of roads now required for timber harvest. This means considerably less investment in forest roads and substantial reduction in soil disturbance, erosion, and damage to growing stock and scenic values. Such advanced aerial logging systems could increase timber harvest in the Douglas-fir region by over 500 million board feet annually from areas now considered inaccessible.

Forest engineering research at Seattle is financed at a level of $68,000 in fiscal year 1967. The fiscal year 1968 budget provides for an increase of $90,000 in that appropriation. To fully implement engineering research on aerial logging methods and bring aerial logging into full operational use within a reasonable time will require an increase of about $400,000 in the level of funding.

b. *Forest Recreation.*—One of the most critical problems in the field of forest-outdoor recreation is to better understand the motivations, the preferences, and the requirements of the steadily increasing numbers of people who visit the forests for recreational purposes. The Forest Service is now making a small start toward meeting this need through its cooperative research program with the University of Washington. Present funding provides for one scientist part time in this effort. Plans call for substantially strengthening this work. In 1968 approximately $50,000 additional is budgeted for this research. To achieve the necessary staffing and level of operation for this project will require an appropriation increase of $200,000.

c. *Forest Fire Research.*—The Forest Service established a forest fire science project at Seattle, Washington, in cooperation with the University of Washington.

Graduate students work under the joint leadership of faculty members and Forest Service forest fire scientists on research to develop new knowledge and technology for the prevention and control of forest fires. This program provides essential research information and develops the highly qualified professional personnel urgently needed in both forest fire control and research activities. The high stakes that we have in protecting American forests from fire and the complexities of the job require that we give it the best possible scientific input. The cooperative forest fire science project at Seattle is designed to do this.

Forest fire research at Seattle is currently funded at $86,000. The budget for fiscal year 1968 includes an additional $30,000 to strengthen this work. This increase can be used effectively to move the work ahead toward meeting the urgent needs for improved control of forest fires.

3. Wenatchee, Washington

Watershed Management Research.—The Forest Hydrology Laboratory at Wenatchee provides facilities for basic soil and water research and serves as a focal point for field studies aimed at improving yields of water and reducing loss of soil from forests and associated ranges in the Columbia Basin.

The urgency and significance of the watershed management research at Wenatchee is based on the strong dependence of the economy on adequate water supplies. Dependable supplies of good water are vital for irrigation of farm and fruit crops, for recreation, and for hydroelectric power.

The research program is operating on an annual budget of $165,000 in fiscal year 1967. Space and facilities available at the Laboratory could accommodate a research program funded at the level of $240,000 annually. Thus, an increase of $75,000 over the present level of funding could be used to strengthen and accelerate the research. An increase of $30,000 proposed for Wenatchee in the fiscal year 1968 budget will partially meet this need.

4. Corvallis, Oregon

Insect and Disease Research.—Nearly 6 billion board feet of timber are destroyed annually by insects and diseases in Oregon and Washington. These are serious losses which cannot be replaced quickly.

Forest insect and disease research that applies to pest problems of the State of Washington is headquartered in Corvallis, Oregon. Insect research is aimed at acquiring sufficient knowledge of biology, behavior, and ecological requirements of forest insects to make possible the development of effective, safe, and practical control measures. For example, one project aims at learning how to use insect pathogens against major forest pests. Some of the research is done cooperatively by Washington State University.

Disease research is aimed at reducing forest disease damage by determining (1) optimum harvest ages for major tree species on various sites, (2) measures to favor biological control of root rots, and (3) where to apply dwarfmistletoe sanitation operations most effectively.

Forest insect research at Corvallis is currently funded at $352,000 annually and forest disease research at $190,000 annually. The fiscal year 1968 budget provides for a small increase in this program. The insect and disease research could use effectively a total increase of $150,000. Such funding would make it possible to resolve some of the difficult problems confronting forest managers.

Last year $170,000 was appropriated for planning an addition to the Corvallis Forest Science Laboratory. This planning is progressing so that construction could be initiated in 1968. The estimated cost of the structure now being planned at $2,500,000.

LETTER FROM SENATOR JACKSON

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
February 24, 1967.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I have learned that the 1968 Budget Request for the Forest Service includes an increase of $30,000 over the 1967 Budget for staffing at the Forest Hydrology Laboratory in Wenatchee, Washington. While this increase is gratifying, the immediate needs are for an increase of $75,000 instead of $30,000.

The increase would allow the addition of two scientists and their supporting technical assistants at Wenatchee. These scientists would be engaged in projects relating to the rehabilitation of critically eroded watersheds and improving the water yields, both in quantity and quality, along the eastern slopes of the Cascades.

The Hydrology Laboratory is already built, so this increase would be entirely devoted to initiating research projects which would be of benefit to my state and the Nation.

I respectively ask that an additional $45,000 be allowed for staffing this laboratory.

Sincerely yours,

HENRY M. JACKSON, *Chairman.*

SHAWNEE NATIONAL FOREST, ILL.

STATEMENT OF SALINE VALLEY CONSERVANCY DISTRICT

Chairman Hayden, members of the Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies: I am George M. Scherrer, Manager of the Saline Valley Conservancy District, businessman, member of the Executive Committee of the Shawnee Resource Conservation and Development Project, and citizen of Shawneetown, Illinois.

It is my purpose in this statement to support the continued development of several key projects of the U.S. Forest Service in the Shawnee National Forest. I have great interest in the projects since some are within the Saline Valley Conservancy District and all are within the Shawnee Resource Conservation and Development Project Area.

The continued orderly development of these key projects will contribute much to the economic growth of Southern Illinois. Statistics from the Saline Valley Conservancy District's report, "Poverty in a Section of Egypt, U.S.A." show that the average family income in the area is well below the state average. The improvement of the economy of the area would increase the economic well being of each family. I will point out the economic contribution of each project later in this presentation.

The Shawnee National Forest is within 150 miles of approximately 5,600,000 people and within a day's drive of nearly 50,000,000 people. The development of the outdoor recreational facilities will give those people an opportunity to spend leisure time in the outdoors with a modest expenditure of money.

A study, "The Future of Tourism and Recreation in Southern Illinois," was made by Checchi and Company under contract to the Department of Business and Economic Development of the State of Illinois and the Economic Development Administration of the U.S. Department of Commerce. This study gives high priority to the development of the U.S. Forest Service projects in Southern Illinois as a contribution to the economy of the area.

Specific projects for continued development and needed for the economic growth of the area are:

1. *George Rogers Clark Recreation Way, $260,000.*—Checchi and Company in the study "The Economic Potentials of Tourism and Recreation in Southern Illinois" stated that "Potentially we feel that this 'corridor' (combined with associated projects) would be the area's greatest tourism-recreation attraction."

The funds are for engineering and design of the Recreation Way and recreation development planning for the corridor.

It is expected that the project will produce annual expenditures of $8,500,000 from recreational visits.

Checchi and Company estimate that 6,000 jobs will result from the project.

2. *Lusk Creek Lake, $100,000.*—These funds are requested for final engineering design of the structure for this lake.

Geological feasibility studies were contracted during Fiscal Year 1967. Structure design is needed as the next step toward completion of the project. A cost-benefit study of the project shows that for each dollar expended on the project $2.45 will be returned by recreational visits. It is estimated that recreational visits will produce annual expenditures of $2,250,000 when development is completed.

3. *Lake of Egypt Recreation Area, $250,000.*—1,700 acres were purchased on the south side of this lake by the Forest Service with Land and Water Conservation Funds in Fiscal Year 1966. Development was started in Fiscal Year 1967. 4.2 miles of access road, 42 camping units, and 31 picnic sites have been established. The $250,000 is needed to construct a beach, a bathhouse, a water and sewage system, and additional campsites. These added facilities are needed to complement and improve those already established. These developments are on the only large body of water available at the present time.

It is estimated that recreational visits to this area will produce annual expenditures of nearly $1,000,000 when development is completed.

4. *Week's Law Funds for Land Purchase, $500,000.*—Land and Water Conservation Funds may be used only for land purchases within the proclaimed boundaries of the Shawnee National Forest as they existed on January 1, 1965. Certain key tracts vital to the completion of special projects lie outside these boundaries as they existed on January 1, 1965. Therefore, land needed for them cannot be purchased with Land and Water Conservation Funds.

These projects and amounts needed are:

a. Kinkaid Lake	$100,000
b. Little Cache Lake	50,000
c. Tower Rock Recreation Area	50,000
d. George Rogers Clark Recreation Way	100,000

Other key tracts are needed for public access to present National Forest lands or to block in present National Forest ownership within the proclaimed boundaries. These tracts are not eligible for purchase with Land and Water Conservation Funds. The projects and amounts needed are:

a. Kinkaid Lake	$50,000
b. Shawnee "Gap"	50,000
c. General Forest Area	100,000

It is estimated that the Kinkaid Lake project will produce an annual expenditure of $2,700,000 from recreational visits.

The Little Cache project will produce an annual expenditure of $200,000.

The economic gains from completion of these projects will greatly aid the economy of Southern Illinois and improve the average annual income of each family in the area.

Thank you for this opportunity to present a statement in behalf of the U.S. Forest Service. The Saline Valley Conservancy District, the Shawnee Resource Conservation and Development Project, and Southern Illinois, Incorporated will continue to cooperate with the Forest Service in matters of mutual interest and benefit to Southern Illinois.

LETTER FROM SALINE COUNTY BOARD OF SUPERVISORS

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR SIR: Saline County is located in Southern Illinois—a spacious and picturesque region of the Midwest. The recreation resource of our county is great and with proper development, it could become of tremendous economic value to the people here. A portion of the proposed George Rogers Clark Recreation Way would pass through Saline County. We believe that this scenic highway across the Shawnee Hills, by connecting all of the many recreation attractions of our area, will create an area of outstanding recreational opportunity and thus contribute bountifully to the economy of our County.

As a first step in assuring that the George Rogers Clark Recreation Way becomes a reality, we request that $260,000 be added to the Forest Service budget for fiscal year 1968. We give wholehearted support to Senate Bill 353 as introduced by Senators Dirksen and Percy, authorizing the Secretary of Agriculture to make a preliminary survey of the proposed George Rogers Clark Receation Way. It is our understanding that this money would be used to obtain the necessary engineering and recreational services required to locate and design this scenic highway and its recreation corridor on the Shawnee National Forest.

We also request that $500,000 in land acquisition funds be added to the Forest Service budget for fiscal year 1968. Such funds made available through the Weeks Law would enable the Forest Service to purchase much needed tracts of land in areas of high public use and not eligible for purchase from Land and Water Fund.

The careful and favorable consideration of these requests by your subcommittee will be appreciated. We are grateful for the opportunity to present this statement.

Yours very truly,

C. L. BLACKMAN,
Chairman, Saline County Board of Supervisors.
MAYNARD CANNON,
Saline County Clerk.

LETTER FROM KINKAID-REEDS CREEK CONSERVANCY DISTRICT

MARCH, 10, 1967.

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for Interior and Related Agencies, U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: We wish to take this means of informing you and your subcommittee of our views concerning two very important projects in Jackson County. We would be grateful if our comments were made part of the hearing records when you consider the Forest Service budget requests for fiscal year 1968.

Kinkaid Lake is to be constructed on the upper portion of Kinkaid Creek in northwest Jackson County. This lake will be a multipurpose structure and when all of the planned developments are completed, it will be an outstanding recreation attraction. The lake will be within the Shawnee National Forest. We propose that $500,000 in Weeks Law funds be added to the Forest Service budget for the purpose of acquiring lands needed for the National Forest development for this and other similar projects.

We also wish to express our support for the recently introduced Senate Bill 353, authorizing the Secretary of Agriculture to make a preliminary survey of the proposed George Rogers Clark Recreation Way within the Shawnee National Forest in Southern Illinois. The George Rogers Clark Recreation Way will be a scenic recreation road across Southern Illinois. This road will bring an estimated 3.5 million additional visitors to Southern Illinois. Local jobs and income will greatly multiply as a result. We sincerely hope that your committee will find it possible to add $260,000 to the Forest Service budget for this project. These funds would be used for engineering and recreation surveys necessary to design and locate the George Rogers Clark Recreation Way.

It is respectfully requested that you and your subcommittee give favorable attention to our requests.

Sincerely yours,

CLAUDE THOMPSON, *President.*

LETTER FROM SHAWNEE RESOURCE CONSERVATION AND DEVELOPMENT PROJECT

MARCH 3, 1967.

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies, Washington, D.C.

DEAR SENATOR HAYDEN: The Executive Committee guides the activities of the Shawnee Resource Conservation and Development Project toward obtaining the project's objective: Improvement, development and conservation of Southern Illinois' Natural resources to provide employment and other economic opportunities to the local people. As such, we are naturally very interested in the multiple use management being practiced on the Shawnee National Forest which is within our project area.

We know that your subcommittee will be holding hearings very soon concerning the fiscal year 1968 budget for the Forest Service. We sincerely and urgently recommend that the following projects be funded:

Senate Bill 353 as introduced by Senators Dirksen and Percy—$260,000 to obtain preliminary surveys for the scenic George Rogers Clark Recreation Way which lies within the area adjacent to the Shawnee National Forest.

Lake of Egypt—$250,000 to continue development of camping, picnicking, hiking and swimming areas on 1,700 acres of the Shawnee National Forest on the south side of the lake in Johnson County.

Lusk Creek—$100,000 to obtain the final design plans for this structure which will create a 2,300 acre lake in Pope County for recreation as well as for soil and water conservation purposes.

Purchase of high value public use tracts—$500,000 to be made available through the Weeks Law for the purchase of lands necessary for the development of Southern Illinois' natural resources.

All of these projects, when completed, will greatly aid in obtaining our project's objectives. We urge your sympathetic study of our requests.

Sincerely yours,

L. E. GARD,
Chairman, Executive Committee, Shawnee RC&D Project.

LETTER FROM BAY CREEK WATERSHED CONSERVANCY DISTRICT

MARCH 6, 1967.

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for Interior and Related Agencies, Washington, D.C.

Dear SENATOR HAYDEN: The Bay Creek Conservancy District is acutely aware of the social and economic need of conservation and recreation activities in our area of Southern Illinois. Thus, we are interested in the activities of the Forest Service in managing the Shawnee National Forest. We wish to make two recommendations to your sub-committee in regard to the budget of this agency for fiscal year 1968.

First, we recommend that $500,000 be added to the Forest Service budget through the Weeks Law for the purpose of land purchases in areas of major public use. These lands are needed for important National Forest development, including recreational development. These developments will increase tourism and strengthen our economy.

Second, we fully endorse the proposed George Rogers Clark Recreation Way across Southern Illinois via the Beautiful Shawnee Hills. The initial step in the development of this scenic road has been initiated by Senators Dirksen and Percy in the form of Senate Bill 353. We fully support this bill which authorizes the Secretary of Agriculture to make a preliminary survey of the George Rogers Clark Recreation Way. We request that $260,000 be granted to the Forest Service for the purpose of obtaining recreation and engineering surveys and plans for the design and location of the road.

All of these requests are made sincerely and with the hope that you and your sub-committee will give them favorable attention.

Yours very truly,

B. F. ANDERSON, *President.*

LETTER FROM VIENNA (ILLINOIS) KIWANIS CLUB

Senator CARL HAYDEN,
Chairman, Senate Subcommittee on Appropriations for Interior and Related Agencies, Washington, D.C.

DEAR SENATOR HAYDEN: We believe that the development of the recreation potential in Johnson County and Southern Illinois is vital to the economy of this area. We understand that your committee will hold hearings soon on budget requests for the Forest Service.

The Shawnee National Forest traverses the scenic Shawnee Hills from the Mississippi to the Ohio River. Within these scenic hills are many developed recreation sites and a great many more potential recreation areas. In order to tie these areas into one recreation complex that will create a recreation attraction, we urge the construction of the George Rogers Clark Recreation Way. The scenic and historical highway would be of great economic benefit to our area. We wish to fully support Senate Bill 353 introduced by Senators Dirksen and Percy. This bill authorizes the Secretary of Agriculture to prepare a preliminary recreation and engineering survey of the proposed route.

In addition to this project, the Lake of Egypt Recreation Area is very important. This 1,700 acre Forest Service area is in the process of being developed for recreation. This effort must be continued during the coming year. We request that $250,000 be added to the Forest Service budget to add a swimming area, additional camping and picnic facilities, and a Visitor Information Center.

The continuing recreation development in Southern Illinois requires additional land purchase. The purchase of land in areas of major public use will greatly benefit Southern Illinois. We urge that $500,000 be allocated through the Weeks Law for Forest Service purchase of the areas which are not eligible for Land and Water Conservation Funds.

We would be grateful if your sub-committee will consider these matters carefully.

Sincerely yours,

WILBURN WOOD,
President, Vienna Kiwanis Club.

SUBCOMMITTEE RECESS

Chairman HAYDEN. Do you have anything further? If not, we have enjoyed what you had to say.

Today's hearing is concluded. Tomorrow at 10 a.m., we will hear the Commission of Fine Arts and the National Foundation on the Arts and the Humanities.

Thank you.

Mr. BAKER. Mr. Chairman, it has been a pleasure to have you here.

(Whereupon, at 12:40 p.m., Monday, March 13, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 14, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

TUESDAY, MARCH 14, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senator Bartlett.

COMMISSION OF FINE ARTS

STATEMENT OF CHARLES H. ATHERTON, SECRETARY; ACCOMPANIED BY DONALD B. MYER, ASSISTANT SECRETARY; JOSEPH M. BREEN, BUDGET OFFICER; AND SIDNEY D. LARSON, DIRECTOR OF BUDGET, OFFICE OF THE SECRETARY OF INTERIOR

BUDGET REQUEST

Chairman HAYDEN. Good morning, gentlemen.

There will be placed in the record the statement in justification of the appropriation request for the Commission of Fine Arts for fiscal year 1968. This request is $115,000, the same amount as was appropriated for the past year.

(The justification follows:)

SALARIES AND EXPENSES

Analysis by activities

Activity	Fiscal year 1966 amount available	Fiscal year 1967 amount available	Fiscal year 1968 estimate
Administration	$111,051	$115,000	$115,000
Unobligated balance lapsing	11,949		
Total	123,000	115,000	115,000

JUSTIFICATION

The estimate of funds needed to operate the Commission of Fine Arts during Fiscal Year 1968 is $115,000, which is the same amount available for Fiscal Year 1967. Despite rising travel costs this estimate of operating expenses is based on savings realized through cost reduction and management improvement

programs instituted during Fiscal Year 1967. The estimate provides for the staff of the Commission (which is comprised of an Executive Secretary (GS–15), an Assistant Secretary for Fine Arts matters (GS–13), a Writer-Editor, Fine Arts (GS–12), a Writer-Editor, Legislative Affairs (GS–11), a Historical Research Assistant (GS–9) and two secretaries (Stenography) (GS–8), together with the necessary operating expenses including travel costs of the members of the Commission. The estimate also provides for proposed consulting services in Fiscal Year 1968.

1. The Commission of Fine Arts was established in 1910 to fill the need for a permanent advisory agency whose members would be qualified to make available to the Government the authority of expert opinion upon questions of art arising in the course of administration. As an independent agency, it was intended to serve a two-fold purpose; first, to give free advice concerning aesthetic standards and matters of civic design involved in the orderly development of the City of Washington; and, second, to furnish expert opinion on questions of art to the President, to the Congress and its committees, and to the heads of various departments and agencies of the Federal and District Governments.

The seven members of the Commission are appointed by the President and serve without pay. They give freely of their time, meeting for one or two days each month as required, with compensation only for actual expenses of travel and subsistence incurred in attending meetings. The technical and professional problems that come to the Commission fall primarily into the fields of architecture, general site planning, landscape architecture, sculpture and painting, but, in recent years, an increasing amount of time has been devoted to critical review and report of proposed legislation, whose aim is to foster production and appreciation of the Fine Arts.

The authorized scope of the Commission's activity covers not only Federal and District Government projects in the City of Washington and its environs, but also certain designated private and semi-public construction projects under authority as noted hereafter; and its scope often includes Federal projects outside the District of Columbia and abroad, such as the World War I and World War II memorials and cemeteries, the designs for which come before the Commission by authority of Public Law 534–67th Congress (42 Stat. 1509) as amended. During the 56 years of the Commission's existence, the seventy-one members who have served on it, have steadfastly insisted on the maintenance of the highest aesthetic standards in the design of the Federal and semi-public projects that are referred to it by law.

2. Specific functions of the Commission comprise the following:

(a) Under the provisions of its Enabling Act, Public Law 181–61st Congress, approved May 17, 1910, the Commission of Fine Arts advises generally upon questions of art when required to do so by the President, or by any committee or member of either House of Congress.

It advises specifically on all plans for parks and public buildings, constructed by the executive departments or the District of Columbia, which in any essential way affect the appearance of the City of Washington and its environs. Authorization has been given or is pending for the design of many new Federal and District buildings, most of which are planned for erection in the central area of the City of Washington, as part of the expansion of the Federal or District Governments.

It also advises upon location and design of statues, fountains, and monuments in public squares, streets and parks in the District of Columbia and upon the selection of models for the statues, fountains, and monuments erected under the authority of the United States and upon the selection of artists for the execution of the same.

Rendering an opinion on the merit of designs for medals, insignia, coins, or other art projects created and produced by the executive department is also a phase of the Commission's duties.

(b) The Commission carries out the provisions of the Shipstead-Luce Act, Public Law 231–71st Congress (46 Stat. 366) approved May 16, 1930, an Act to regulate the height, exterior design, and construction of private and semi-public buildings in certain areas of the National Capital. In this function the Commission reports its findings on the above features to the Commissioners of the District of Columbia before building permits are issued at the Permit Branch of the Department of Licenses and Inspections.

(c) The Commission also carries out the provisions of the Old Georgetown Act, Public Law 808–81st Congress (64 Stat. 903, Chap. 984), approved September 22, 1950, an act to regulate the height, exterior design and construction of private and semi-public buildings in the Georgetown area of the National Capital. This action also requires review and recommendations to the Commissioners of the District of Columbia on the merits of designs submitted for building permits.

Itemization of estimate

	Actual 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease (−)
Program and Financing:				
Total obligations	$111,051	$115,000	$115,000	----------
Unobligated balance lapsing	11,949	----------	----------	----------
New obligational authority (appropriation)	123,000	115,000	115,000	----------
Object classification:				
11 Personnel compensation	60,849	73,000	78,000	+$5,000
12 Personnel benefits	4,120	6,000	6,000	----------
21 Travel and transportation of persons	5,411	7,000	7,000	----------
23 Rent, communications, and utilities	2,092	2,000	2,000	----------
24 Printing and reproduction	5,383	6,000	6,000	----------
25.1 Other services	29,078	13,000	8,000	−5,000
25.2 Services of other agencies	1,301	5,000	5,000	----------
26 Supplies and materials	2,065	2,000	2,000	----------
31 Equipment	752	1,000	1,000	----------
Total obligations	111,051	115,000	115,000	----------

Chairman HAYDEN. Will you please summarize your statement for the committee?

Mr. ATHERTON. Mr. Chairman, I am Charles Atherton. Mr. Walton, the chairman, regrets that he is unable to be here this morning, but he has asked me to stand in for him, and perhaps answer any questions you have. We have a short statement here that I think you already have. We would request that it be inserted in the record.

Chairman HAYDEN. That will be done.

(The statement follows:)

The Commission of Fine Arts is requesting an appropriation of $115,000, which is the same as the amount appropriated for Fiscal Year 1967. No major changes are planned in our programs for the coming fiscal year.

During Fiscal Year 1966, the Commission acted upon 573 formal submissions, carrying an estimated cost of many millions of dollars. A tabular listing is attached hereto showing the number of applications for the past three fiscal years. In addition to the increased complexity of formal submissions, there has also been a corresponding increase in the number of informal reviews and daily requests for information about Washington. With the administration's current programs proposed for the development of the Capital, I expect this trend will continue to accelerate in the coming year.

The appropriations for the Commission have remained relatively small throughout its 57 year history. I therefore hope the Committee will favorably consider our request for the amount needed for the next fiscal year.

The members of the Commission are appointed by the President and serve without compensation, receiving only actual travel expenses incurred in attending meetings. Since the Commission was established in 1910 more than 60 distinguished architects, landscape architects, painters, sculptors, and laymen in the field of fine arts have given freely to their Government the benefit of their experience and professional skills in advising the President, the Congress and government agencies on matters involving the fine arts.

Number of submissions presented to the Commission of Fine Arts during the past 3 fiscal years

	1964	1965	1966
Shipstead-Luce Act (approved May 16, 1930)	150	145	115
Old Georgetown Act (approved Sept. 22, 1950)	359	356	311
Commission of Fine Arts Act (approved May 17, 1910)	162	165	147

Item	Cases received	Approved	Disapproved
Fiscal year 1964:			
Shipstead-Luce Act	150	114	36
Old Georgetown Act	359	303	56
Commission of Fine Arts Act	162	----------	----------
Fiscal year 1965:			
Shipstead-Luce Act	145	124	21
Old Georgetown Act	356	297	59
Commission of Fine Arts Act	165	----------	----------
Fiscal year 1966:			
Shipstead-Luce Act	115	94	21
Old Georgetown Act	311	242	69
Commission of Fine Arts Act	147	----------	----------

LEVEL OF ACTIVITIES

Chairman HAYDEN. I judge from the justification statement and from your statement that your activities in the coming year will be essentially the same as those of fiscal year 1967. Is that correct?

Mr. ATHERTON. That is correct, Senator.

Chairman HAYDEN. Summarize your statement.

Mr. ATHERTON. All right. Our summary can be very brief. As you point out, our program remains at pretty much the same level from year to year. We don't plan any new programs. We don't plan any expansion. The work level, I think, will probably be about the same in the coming year as it has been in the past year, so we hope we present no problem to you.

Chairman HAYDEN. Thank you very much.

Mr. ATHERTON. Thank you, sir.

TUESDAY, MARCH 14, 1967.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

OFFICE OF EDUCATION

ARTS AND HUMANITIES EDUCATIONAL ACTIVITIES

STATEMENT OF MISS KATHRYN BLOOM, DIRECTOR, ARTS AND HUMANITIES PROGRAM; ACCOMPANIED BY JAMES M. SPILLANE, CHIEF, ARTS AND HUMANITIES INSTITUTES BRANCH; MELVIN E. ENGELHARDT, ACTING CHIEF, INSTRUCTIONAL PROGRAM SECTION; HARLAN HOFFA, ART EDUCATION SPECIALIST; MRS. SALLY H. BOND, BUDGET ANALYST; THOMAS McNAMARA, BUDGET ANALYST; AND FREDERICK PFLUGER, BUDGET EXAMINER, OFFICE OF EDUCATION, DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PROPOSED BUDGET

Chairman HAYDEN. For the arts and humanities educational activities of the Office of Education, there is a proposed budget of $1 million. The justification statement for this budget will be entered into the record.

(The justification follows:)

AUTHORIZING LEGISLATION

ARTS AND HUMANITIES

P.L. 89-209

FINANCIAL ASSISTANCE FOR STRENGTHENING INSTRUCTION IN THE HUMANITIES AND THE ARTS

SEC. 12. (a) There is authorized to be appropriated to the Commissioner of Education for the fiscal year ending June 30, 1966, and each of the two succeeding years the sum of $500,000; but for the fiscal year ending on June 30, 1969, and each subsequent fiscal year, only such sums may be appropriated as the Congress may hereafter authorize by law. Such sums shall be used for (1) making payments to State educational agencies under this section for the acquisition of equipment (suitable for use in providing education in the humanities and the arts) and for minor remodeling described in subsection (c)(1) of this section, and (2) making loans authorized in subsection (f) of this section.

(b) Sums appropriated pursuant to subsection (a) shall be allotted in the same manner as provided in subsections (a) and (c) of section 302 of the National Defense Education Act of 1958, as amended (72 Stat. 1588; 20 U.S.C 442).

TEACHER TRAINING INSTITUTES

SEC. 13. (a) There is authorized to be appropriated to the Commissioner of Education for the fiscal year ending June 30, 1966, and each of the two succeeding years the sum of $500,000; but for the fiscal year ending on June 30, 1969, and each subsequent fiscal year, only such sums may be appropriated as the Congress may hereafter authorize by law. Such sums shall be used to enable the Commissioner of Education to arrange, through grants or contracts, with institutions of higher education for the operation by them within the United States of short term or regular session institutes for advanced study, including study in the use of new materials, to improve the qualification of individuals who are engaged in or preparing to engage in the teaching or supervising or training of teachers, of such subjects as will, in the judgment of the Commissioner, after consultation with the Chairman of the National Endowment for the Humanities, strengthen the teaching of the humanities and the arts in elementary and secondary schools.

(b) Each individual who attends an institute operated under the provisions of this part shall be eligible (after application therefor) to receive a stipend at the rate of $75 per week for the period of his attendance at such institute, and each such individual with one or more dependents shall receive an additional stipend at the rate of $15 per week for each such dependent.

Arts and humanities educational activities

	Estimate to Bureau of Budget	Budget estimate to Congress	House allowance	Senate allowance	Appropriation
1966	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
1967	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
1968	1,000,000				

Arts and humanities educational activities, Office of Education

	1967 estimate	1968 estimate	Increase or decrease
1. Instructional assistance to schools:			
(a) Grants to States	$440,000	$440,000	
(b) Loans to nonprofit private schools	60,000	60,000	
Total	500,000	500,000	

JUSTIFICATION OF ESTIMATE

Section 12 of the National Foundation on the Arts and Humanities Act of 1965 authorizes $500,000 annually for fiscal years 1966 through 1968 for matching grants to States and loans to nonprofit private schools for equipment and minor remodeling suitable for education in the arts and humanities. Twelve percent is reserved for loans and is allotted by States on the basis of nonpublic school enrollments. The balance for public schools is allotted by State on the basis of school-age population and income per school-age child.

There exists a need not only to encourage students to major in the arts and humanities, but also to provide this instructional component for pupils in the sciences so that they may have a well-rounded education. Teaching today in the fields of the arts, as in science, requires modern equipment and materials. Some examples of items that can be acquired by schools under the program are brushes, easels, mechanical drawing instruments, tools for modeling and carving, kilns, looms, cameras, darkroom equipment, musical instruments and accessories, stage equipment, books (other than textbooks), films, music documents, and art objects. The subject fields involved are the visual arts (painting, drawing, graphics, sculpture, crafts, photography, and film production), music, theater, the dance, and the humanities (literature, languages, history, anthropology, philosophy, etc.).

The fiscal year 1968 request of $500,000, the same level as the 1967 appropriation, will continue to assist States in improving instructional programs in this important but neglected area.

	1967 estimate	1968 estimate	Increase or decrease
2. Teacher training	$500,000	$500,000	

JUSTIFICATION OF ESTIMATE

Section 13 of the Act authorizes an amount of $500,000 for grants or contracts with institutions of higher education for the operation of short-term or regular session institutes for advanced study to strengthen the teaching of and knowledge about the arts and humanities in public and private nonprofit elementary and secondary schools. Participants in such institutes may be teachers, supervisors or trainers of teachers and are eligible upon acceptance to receive stipends of $75 per week for the duration of the institute, plus an allowance of $15 per week for each dependent.

More than one-fifth of our secondary schools desiring to offer art courses cannot do so for lack of qualified teachers. Classroom teachers in 70 to 80 percent of our elementary schools are expected to teach music and art in their classrooms without any help from a specialist; yet few have had any music training or background in art appreciation and discrimination. More and more schools are introducing interdisciplinary courses in the arts and humanities, but very few teachers have the requisite broad background to teach such programs. Elementary and secondary education is woefully unprepared to remedy this situation and, therefore, this program is intended to help find ways, and to establish models, which will up-grade arts and humanities *generally* as well as specifically. Meanwhile, qualified teachers are lacking in all basic art, music and humanity courses (the classics, etc.), and it is appropriate to provide whatever direct assistance, in whatever appropriate programs can be solicited.

In the summer of 1966 a total of eleven institutes were held which 431 participants, out of 2,400 applicants, attended. Instructional costs amounted to $230,000 and stipends to participants totaled $225,476. These institutes included one in Latin, three in music, three in the humanities, two in art, and one each in theater and film appreciation.

Plans for 1967 call for approximately the same number of institutes and participants with a wide spread among the various fields. In order to achieve the greatest possible impact with available funds, it is planned to include one or two institutes for trainers of teachers and for supervisors of in-service training programs for teachers of the arts and humanities. Where feasible, priority will be given to proposals which could not be funded by other Federal programs.

The 1968 estimate of $500,000 will again support a similar set of 10–11 institutes and will continue to reinforce the Federal commitment in this badly neglected area.

INSTRUCTIONAL ASSISTANCE TO SCHOOLS

Fiscal year 1966 obligations

State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]	State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]
Total	$439,884	$11,797	Nevada	$713	----------
Alabama	----------	----------	New Hampshire	1,506	----------
Alaska	536	----------	New Jersey	9,918	----------
Arizona	5,506	----------	New Mexico	4,359	----------
Arkansas	----------	----------	New York	30,337	$6,577
California	28,609	----------	North Carolina	15,561	----------
Colorado	5,674	----------	North Dakota	2,521	----------
Connecticut	3,931	----------	Ohio	29,125	----------
Delaware	952	----------	Oklahoma	----------	----------
Florida	16,083	----------	Oregon	----------	----------
Georgia	17,022	----------	Pennsylvania	29,459	----------
Hawaii	1,803	----------	Rhode Island	1,736	----------
Idaho	2,208	----------	South Carolina	8,725	----------
Illinois	21,120	----------	South Dakota	----------	----------
Indiana	14,445	----------	Tennessee	11,474	----------
Iowa	6,823	----------	Texas	36,595	----------
Kansas	5,367	----------	Utah	4,079	----------
Kentucky	9,800	----------	Vermont	----------	----------
Louisiana	11,562	----------	Virginia	----------	----------
Maine	----------	----------	Washington	8,402	----------
Maryland	7,120	----------	West Virginia	7,164	----------
Massachusetts	10,636	5,220	Wisconsin	12,614	----------
Michigan	25,149	----------	Wyoming	1,108	----------
Minnesota	9,114	----------	District of Columbia	1,217	----------
Mississippi	7,935	----------	American Samoa	----------	----------
Missouri	----------	----------	Canal Zone	----------	----------
Montana	1,992	----------	Guam	220	----------
Nebraska	----------	----------	Puerto Rico	9,571	----------
			Virgin Islands	93	----------

Fiscal year 1967

State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]	State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]
Total	$440,000	$60,000	Nevada	$610	$39
			New Hampshire	1,526	342
Alabama	11,140	294	New Jersey	9,997	2,920
Alaska	543	23	New Mexico	3,507	266
Arizona	4,418	317	New York	24,182	8,304
Arkansas	5,913	117	North Carolina	15,369	193
California	29,204	3,855	North Dakota	1,992	201
Colorado	4,506	425	Ohio	23,362	3,862
Connecticut	4,001	1,100	Oklahoma	6,293	198
Delaware	783	187	Oregon	4,333	335
Florida	12,942	874	Pennsylvania	23,333	5,943
Georgia	13,488	258	Rhode Island	1,701	520
Hawaii	1,787	292	South Carolina	8,527	149
Idaho	2,176	90	South Dakota	2,094	232
Illinois	16,980	5,234	Tennessee	11,387	311
Indiana	11,513	1,303	Texas	29,169	1,471
Iowa	6,744	965	Utah	3,207	59
Kansas	5,329	506	Vermont	1,055	174
Kentucky	9,683	881	Virginia	11,822	547
Louisiana	11,628	1,401	Washington	6,586	554
Maine	2,629	343	West Virginia	5,570	170
Maryland	7,227	1,331	Wisconsin	10,051	2,513
Massachusetts	8,410	2,541	Wyoming	866	38
Michigan	20,162	3,266	District of Columbia	976	237
Minnesota	9,112	1,625	American Samoa	93	13
Mississippi	7,818	183	Canal Zone	----------	----------
Missouri	8,947	1,656	Guam	220	40
Montana	1,974	204	Puerto Rico	9,571	510
Nebraska	3,428	560	Virgin Islands	116	28

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[1] Distribution of $430,000; to the 50 States and District of Columbia, on the basis of the State products of (1) the NDEA fiscal year 1966 and 1967 allotment ratios and (2) the estimated 5-to-17 population, July 1, 1964. Distribution of $10,000 to the outlying areas, excluding Canal Zone, on the basis of 5-to-17 population, Apr. 1, 1960, except Puerto Rico, Apr. 1, 1962.

[2] Distribution of $60,000 on the basis of estimated nonpublic school enrollment, fall 1965 for the 50 States, District of Columbia, and outlying areas, excluding Canal Zone.

Fiscal year 1968

State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]	State and outlying area	Grants to States [1]	Loans to nonprofit private schools [2]
Total	$440,000	$60,000	Nevada	$666	$39
			New Hampshire	1,515	340
Alabama	11,080	294	New Jersey	10,351	2,923
Alaska	608	22	New Mexico	3,455	266
Arizona	4,475	317	New York	24,280	8,310
Arkansas	5,776	117	North Carolina	14,894	193
California	30,458	3,855	North Dakota	1,971	200
Colorado	4,694	425	Ohio	23,567	3,858
Connecticut	4,152	1,093	Oklahoma	5,997	199
Delaware	944	187	Oregon	4,304	335
Florida	13,092	875	Pennsylvania	23,314	5,945
Georgia	13,013	256	Rhode Island	1,657	520
Hawaii	1,725	291	South Carolina	8,399	149
Idaho	2,083	90	South Dakota	2,087	231
Illinois	17,654	5,237	Tennessee	11,045	309
Indiana	11,242	1,303	Texas	29,301	1,476
Iowa	6,530	963	Utah	3,240	59
Kansas	5,192	506	Vermont	1,073	172
Kentucky	9,302	880	Virginia	11,402	544
Louisiana	11,605	1,401	Washington	6,358	554
Maine	2,582	340	West Virginia	5,361	169
Maryland	7,536	1,334	Wisconsin	9,991	2,523
Massachusetts	8,975	2,535	Wyoming	872	39
Michigan	19,580	3,267	District of Columbia	995	235
Minnesota	9,070	1,630	American Samoa	91	13
Mississippi	7,686	184	Canal Zone	------	------
Missouri	9,472	1,656	Guam	286	40
Montana	1,962	204	Puerto Rico	9,474	509
Nebraska	3,417	560	Virgin Islands	149	28

[1] Distribution of $430,000; to the 50 States and the District of Columbia, on the basis of the State products of (1) the NDEA fiscal year 1968–69 allotment ratios and (2) the estimated 5–17 population, July 1, 1964. Distribution of $10,000 to the outlying areas, excluding Canal Zone, on the basis of 5–17 population, July 1, 1965.

[2] Distribution of $60,000 on the basis of estimated nonpublic school enrollment, fall 1966 for the 50 States, District of Columbia, and outlying areas, excluding Canal Zone.

Amounts available for obligation

	1967	1968
Appropriation	$1,000,000	$1,000,000

Obligations by activity

	1967 estimate	1968 estimate	Increase or decrease
Instructional assistance to schools	$500,000	$500,000	------
Teacher training	500,000	500,000	------
Total obligations	1,000,000	1,000,000	------

Obligations by object

	1967 estimate	1968 estimate	Increase or decrease
Other services	$500,000	$500,000	------
Investments and loans	60,000	60,000	------
Grants, subsidies, and contributions	440,000	440,000	------
Total obligations by object	1,000,000	1,000,000	------

PREPARED STATEMENT

Chairman HAYDEN. Will you please enter your written statement in the record, in full, and then highlight it for the committee?

Miss BLOOM. Thank you, Mr. Chairman.

(The statement follows:)

Mr. Chairman and members of the committee, the request of $1,000,000 for this program is the same amount that was appropriated in 1967. One half of the appropriation is for Section 12 of the National Foundation on the Arts and Humanities Act and provides grants to States and loans to nonprofit, private schools for equipment, materials, and minor remodeling to improve education in the arts and humanities. Twelve percent of the authorization is reserved for loans to private schools. Few schools today are properly prepared to teach subjects in the arts and humanities because of the great variety of expensive equipment and materials needed for up-to-date instruction, particularly in the arts. This request will continue limited support in this long neglected area of education.

Section 13 of the Act provides for institutes for advanced study. An appropriation of $500,000 for this section allows for about 12 institutes a year. These institutes serve best by providing information about the different types of programs which might best help to improve the qualifications of school teachers for whom the legislation is intended.

I will be happy to answer any questions you may have.

APPROPRIATION REQUEST

Miss BLOOM. The Commissioner of Education, Mr. Howe, asked me to say that he was sorry he could not be present this morning, and he asked me to come in his place.

We are here to request $1 million for the third year of a program which has two parts. One part is teacher-training institutes in the arts and humanities for elementary grade teachers, high school teachers, and supervisors in these fields.

The second part of the program deals with the purchase of equipment to be used in the elementary and secondary schools, to improve instruction in all of the fields of the arts, and in the humanities. We have a brief statement which summarizes the fact that during the past year, a half million dollars have been spent in each of these two areas for equipment and for the teacher-training institutes. Last summer, there were 11 institutes, with 431 teachers present. Those were teachers that teach at all levels of education, and in all of the arts and in all of the humanities.

We feel that both of these programs asked for a minimum amount of money. It is the first time that this kind of assistance could be given to the schools in the arts and in the humanities, and we feel that this minimum investment has been very, very important during the brief time it has been in existence.

EXTENSION OF AUTHORIZATION

Chairman HAYDEN. The statute under which this appropriation is made expires with this fiscal year. Do you have any plans for seeking an extension of the authorization act?

Miss BLOOM. Tentative plans call for seeking extension under the National Defense Education Act, which already has authorization in the Office of Education to provide both kinds of assistance, teacher-training institutes in many other fields, and the provision of equipment and materials in many other fields.

And this would simply round out the kind of support of this type which would be available to the schools of the Nation.

TEACHER INSTITUTES

Chairman HAYDEN. With regard to the attendance of individuals at your teacher institutes, is there a time limit on their attendance?

Miss BLOOM. The authorization provides that teacher training institutes can either be short-term; that is, for instance, just during the summer, or that they could be all through the year. However, with a half million dollars, we haven't been able to have any institutes that go a whole year in length, and so last year, there were 11 institutes for the summer only, and for this coming summer, there are 12 institutes, just for the summer only.

In other words, there is no statutory limitation, but the limitations of funds make it necessary to have just the short-term ones.

Chairman HAYDEN. Can a teacher who has participated in one of these institutes this year come back again next year?

Mr. SPILLANE. No, not this year.

Miss BLOOM. Not the second year.

ACCOMPLISHMENTS

Chairman HAYDEN. Would you please review your accomplishments for the past year?

Miss BLOOM. I would say one of the most important accomplishments is that the schools recognize the fact that the Federal Government really cares about the arts and humanities. I think the element of recognition has been very important, that teachers for the first time can have these institutes, and I think for the first time, that the States can buy equipment has been extremely important.

Then, second, the fact that many, many teachers in the schools have very little training, very little specialized training in the arts and in the humanities, but, nevertheless, they are expected to do a good job of teaching them. I think the fact that they can come back and have refresher courses, learn new kinds of techniques and learn new approaches, has been very, very important to all of our students in the schools.

Chairman HAYDEN. With regard to the grants made to the various States, what reports do you receive on the accomplishments?

Miss BLOOM. The chief accomplishment there has been the fact that using funds which would range from around $600 or $700 for some of the States with smaller school populations to up around $25,000 or $30,000, the schools have not been able to do very extensive things about equipping classrooms, but they have been able to purchase equipment and materials like visual aids, and films, slides, reproductions, various kinds of resources that can be circulated around the States so that as many children as possible can have the benefit of the teaching that can be done with them.

LOANS TO SCHOOLS

Chairman **Hayden**. For loans to nonprofit private schools, $60,000 has been made available. How long do these schools have to repay these loans, and what is done with the moneys received in repayment?

Miss **Bloom**. I would like to ask Dr. Engelhardt, from the Office of Education, to speak to the point on the loans.

Mr. **Engelhardt**. The loan period is 10 years. They have this long to repay the loan, after it has been granted. There is sometimes a difference in time there. A loan may be applied for, but the actual transaction of the loan may not take place until several months later, until the nonprofit school is ready for it, so from the time the loan is given, the school has 10 years to repay.

Moneys received in repayment are deposited in the United States Treasury.

Chairman **Hayden**. Well, we thank you for your appearance.

Miss **Bloom**. Thank you very much, Mr. Chairman.

TUESDAY, MARCH 14, 1967.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

STATEMENT OF ROGER L. STEVENS, CHAIRMAN, NATIONAL ENDOWMENT FOR THE ARTS; ACCOMPANIED BY LIVINGSTON BIDDLE, DEPUTY CHAIRMAN; CHARLES MARK, DIRECTOR OF STATE AND COMMUNITY OPERATIONS; DAVID STEWART, DIRECTOR OF EDUCATIONAL AND PUBLIC MEDIA PROGRAMS; PAUL SPREIREGEN, DIRECTOR OF ARCHITECTURAL AND DESIGN PROGRAMS; BARNABY C. KEENEY, CHAIRMAN, NATIONAL ENDOWMENT FOR THE HUMANITIES, ACCOMPANIED BY WALLACE B. EDGERTON, DEPUTY CHAIRMAN; GLADYS K. HARDY, DIRECTOR, OFFICE OF PLANNING AND ANALYSIS; ROBERT H. WALKER, DIRECTOR, DIVISION OF EDUCATIONAL AND SPECIAL PROJECTS; J. SAUNDERS REDDING, DIRECTOR, DIVISION OF RESEARCH AND PUBLICATION; AND JAMES H. BLESSING, DIRECTOR, DIVISION OF FELLOWSHIPS AND STIPENDS; AND CHARLES B. RUTTENBERG, GENERAL COUNSEL, AND ROBERT W. COX, DIRECTOR OF ADMINISTRATION, NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

INTRODUCTION OF ASSOCIATES

Chairman HAYDEN. The next item is the National Foundation on the Arts and Humanities.

Mr. STEVENS. I would like to introduce Mr. Mark, head of our State operations, and Mr. Biddle, our deputy; Mr. Ruttenberg, the general counsel; and David Stewart, who is head of the educational and public media projects, and Paul Spreiregen, who is director of architectural and design programs, and Mr. Keeney, who is head of the National Endowment for the Humanities.

BUDGET REQUEST

Chairman HAYDEN. There will be placed in the record the justification statements for an appropriation of $14,370,000 for the National Foundation on the Arts and the Humanities. Of this amount, $7,750,000 is for the National Endowment of the Arts; $5 million is for the National Endowment for the Humanities; and $1,620,000 is for administration of the program through a shared staff. In addition, $2 million will be available, $1 million to each endowment, if matched by unrestricted donations.

(The justification follows:)

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

GENERAL INTRODUCTION

The National Foundation on the Arts and Humanities was established by Congress as the first Federal agency specifically concerned with all aspects of the cultural and human quality of the lives of Americans. The Law accurately recognized the arts and humanism as a public necessity. It gave hope to an important segment of our people who, while clearly recognizing the need for technological progress, had been growing increasingly concerned by the predominant emphasis placed on technology in government and education. They saw in the new Foundation the same vision President Johnson captured when he said: "The quality of our life must become as much a national issue as the quality of our goods and services."

The Chairmen of the two Endowments of the Foundation, and the members of both the National Council on the Arts and the National Council on the Humanities, are well aware that the hopes of artists and scholars rest on the decisions they render. Everyone concerned shares the knowledge that these are pioneering days in fields which are traditionally individualistic and devoted to particular methods for improving the quality of life.

How best to face these challenges and responsibilities has been the constant question confronting the two Councils appointed by the President to advise the Chairmen. Many alternatives were obvious, and many given serious considerations, as study began to bring the national needs into focus.

The Humanities Endowment could have spent all, and indeed three times more than its total authorization on fellowships alone. It could have spent all of its funds this year for the support of research alone, or for support of educational experimentation and development of better teaching at the college level only. It would not have been difficult to spend much more than the total of $4.5 million appropriated in 1966 and 1967 on the public programs, particularly on educational television and radio. Alternatively, it could have selected a number of universities and colleges known for their excellence and for their innovative capacity and made them institutional grants for the support of the humanities. However, if it had attempted to divide its resources equally among the some 2,000 colleges in the country, the grants would have been of the virtually useless sum of $2,500 per institution.

Like the Humanities, the Arts Endowment studied the national needs and rejected the obvious courses of action, such as, dividing the $4 million appropriated to carry out the purposes of Section 5(c) of the Act, among symphony orchestras, museums, and arts councils.

Instead, the Endowments have elected to be as imaginative as possible. Innovative programs were undertaken which were designed to stimulate additional support from other sources, projects to have a dramatic impact on the nation were developed, and above all, grants were carefully distributed so that the major problems in almost every sort of scholarship and art form were highlighted. The result of this diversified program along a broad spectrum has resulted in a favorable acceptance from both the public and professional world.

The Endowments are now in a position to proceed with programs and objectives based on the national needs and the experience gained during the first full year of operation. These are discussed in detail on the following pages.

However, the impression should not be given that a year's experience was necessary before the national needs were known. The problems in the arts and humanities have been quite definitely known for several years. The Commission on the Humanities and the Rockefeller Brothers Panel Report had called the nation's attention to the inadequacy of support from corporations, government, and individuals and the necessity for bold new approaches. Sixty to eighty million dollars per year was cited as the amount of new funds necessary on an emergency basis if the performing arts alone merely were to maintain the present level of excellence. The recent volume published by the Twentieth Century Fund, entitled "The Performing Arts: The Economic Dilemma," focuses sharply on the needs in this area of the arts. The Humanities Commission, in its comprehensive report published in 1964, and highly pertinent to the enabling legislation, cited the need for massive aid to advanced students if highly intelligent people were to be attracted to humanistic subjects in order to offset the imbalance created by aid to the sciences.

When the Ford Foundation granted $82 million to the larger of the professional symphony orchestras in 1965, a major crisis in the music world was avoided temporarily. This action was fortunate for the new Federal Foundation because it alleviated one of the many chronic problems, but the size of the grant again pointed out the scope of aid required if we are even to maintain our cultural life. These problems are also discussed later in this budget.

One other extremely important aspect of the Foundation should be pointed out. Although the enabling Act provides for the support of the arts and humanities in the United States, the ramifications of these activities throughout the world should not be overlooked. Our nation has a deep commitment in the world-wide battle for man's intellect. There can be no stronger weapon for our defense and offense than concerted programs encouraging truth and enlightenment.

Governments which give support to free thought and free expression receive the confidence of other nations and the appreciation of their own talented citizens. In 1964, the Congress declared "that the growth and flourishing of the arts depend upon freedom, imagination, and individual initiative." The same words describe humanistic scholarship, the foundations of our democratic society, and the goals the Endowments and their Councils of private citizens seek to achieve.

UNRESTRICTED GIFTS

(Matching Federal Funds)

Arts Endowment and Humanities Endowment (for 1968) $2,000,000

Both the Arts Endowment and the Humanities Endowment are making concerted efforts to encourage private donors to make unrestricted gifts to the Endowments, so that these can be matched for program purposes by Federal funds.

The present ceiling on Federal sums to match such gifts is $2 million for the Arts Endowment and $3 million for the Humanities Endowment.

At this time, the Arts Endowment has received approximately $365,500 in unrestricted gifts. These funds, with the equivalent Federal sum available, or a total of $731,000 are being used to support projects in the field of educational television as has been reported to the Subcommittee Chairmen. Specifically, a grant of $625,000 has been made to the Educational Broadcasting Corporation, to support programs of high quality covering a wide spectrum of the arts, and to enable these programs to be distributed free of charge to educational television stations throughout the country; a grant of $75,000 has been made to the National Educational Television (NET) to support an expanded program in drama; and the remaining funds are being used to initiate a program sponsored by Educational Television Stations (ETS, based in Indiana) to encourage local education television stations throughout the country to develop their own programs involving local arts groups.

By far the largest unrestricted gift received to date by the Arts Endowment was donated by the Bristol-Meyers Corporation (December, 1966). The Arts Endowment believes that this gift sets a highly significant precedent with respect to the enabling legislation, and represents a substantial step forward in the Endowment's efforts to establish a developing partnership with American industry and private philanthropic sources. It may well lead to a further increase of unrestricted gifts, although it is, of course, too early to forecast additional funding of this kind with any preciseness.

In this regard, the Arts Endowment believes it is essential that the full amount requested in the President's Budget be made available for 1968. Any lower ceiling, the Arts Endowment believes, would seriously discourage potential private donors and fundamentally impede the Endowment's efforts in this regard.

As stated in the Senate report on the enabling legislation, a very important objective of the Arts and Humanities Act is to encourage private philanthropy to support the arts and the humanities. It was specifically for this reason that Section 11(b) was written into Public Law.

The Arts Endowment requests an opportunity to explore fully the potentials of this provision in the law, which in effect means that one Federal dollar helps stimulate three private dollars for programs in the arts. One dollar in an unrestricted gift releases one Federal dollar, and these two dollars must be matched again by the particular arts organization receiving assistance.

The National Council on the Arts has approved a number of priority projects, each requiring a level of funding above current abilities, should unrestricted gifts enable expansion of the Endowment's activities.

Examples: immediate aid to educational television in 1967, which the gifts to date make possible; funds for the development of an American Film Institute, and the preservation of important American film collections from total deterioration and loss forever to the public; and preparation of a special major slide collection of outstanding examples of the visual arts, painting, sculpture and architecture, contemporary and historic.

As in the case of the Arts Endowment, major foundations are being contacted with respect to their willingness to make unrestricted gifts to the Humanities Endowment. It is too early to forecast the amount of these gifts precisely; but it is necessary that adequate federal funding be available for these purposes.

The current ceiling on federal funding to match unrestricted gifts to the Humanities Endowment is $3 million. It is requested that the full amount recommended in the President's budget be appropriated.

The National Council on the Humanities has recommended a number of priority projects which would strengthen and expand our educational programs if unrestricted gifts were donated to the Endowment. Examples of these are a study of the status of the humanities in the schools, an experimental program in the uses of cartridge tapes as an instructional and educational device, the creation of a visiting scholars program for secondary school teachers, and programs to provide colleges with new sources of manpower for teaching.

Because both Endowments are convinced that funds well beyond present budgetary limitations could be utilized for most beneficial and priority purposes, it would seem of great importance that the full amount requested in the President's Budget, with respect to Federal funds to match unrestricted gifts, be approved.

It should be pointed out that the authorized sums in this regard are as follows:

For the Arts Endowment a total of $6.75 million for 1966, 1967 and 1968.

For the Humanities Endowment a total of $15 million for these three fiscal years.

The amounts requested are far below the total authorized allowances and are considered by both Endowments as being of essential value to their operations.

NATIONAL ENDOWMENT FOR THE ARTS

The National Endowment for the Arts has statutory responsibility for developing a broad national policy and program for support of the arts * in the United States. The Endowment proposes for Fiscal Year 1968 a budget totaling $8.750 million in Federal funding for its program activities.

The budget is in accord with the funding recommended in the President's budget for fiscal 1968 as follows: $5 million for programs and projects, exclusive of state aid; $2.750 million for assistance to state arts agencies; and $1 million as an equal share of the $2 million to match unrestricted gifts.

NEEDS IN THE ARTS

The budget is based upon the study and experience of the Endowment's activities since enactment of the enabling legislation in September, 1965. This first period of time, including five meetings of the National Council on the Arts, the development of a competent staff and increasing numbers of requests for assistance, has pointed up conditions and needs which, in the opinion of the Chairman and the 26 private citizen members of the Council, are basic to the reasons why the Congress supported passage of the National Foundation on the Arts and the Humanities Act of 1965 (P.L. 89-209).

Over the past 20 years, this country has witnessed a steadily increasing desire among our citizens to share in the accomplishments of the mind and spirit.

Though this phenomenon hardly needs repetitious documentation, it is true that during this period the number of symphony orchestras has more than

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*The arts are defined in the enabling legislation to include music (instrumental and vocal), dance, drama, folk art, creative writing, architecture and allied fields, painting, sculpture, photography, graphic and craft arts, industrial design, costume and fashion design, motion pictures, television, radio, tape and sound recording, and the arts related to the presentation, performance, execution and exhibition of such major art forms.

doubled, museums of various types are being established at the rate of one every three and one-half days, and we have seen the development of some 30 professional resident theatre companies outside the New York area. In 1950, there were eight local arts councils seeking to serve community needs and almost no State activity. Today there are more than 300 local councils, and 54 of the 55 States, as defined in the Public Law, have established arts agencies which are now receiving Endowment support. (The 55th, American Samoa, has indicated it will apply for assistance next year.)

The phrase "cultural explosion" has sometimes been used to describe this rapid development of the arts, but by and large it has not been a boon to the individual artist or arts organization; for it has created acute economic problems. These have become more and more critical during the past five years.

Essentially this is the problem:

While the demand for the arts has been growing in every part of the country, the traditional institutions responsible for satisfying much of the demand have been unable to keep pace with it.

> The Ford Foundation, after an extensive study on the state-of-the-arts in the mid-1950's, concluded that the major problem facing the Arts in the future would involve generating sufficient revenues to meet the accelerating demand for artistic services of all types.
>
> The Rockefeller Brothers Panel Report, published in 1965, stated that $60 million in additional support was needed *annually* for the performing arts alone.

This rapid expansion has taken place largely at the expense of the artists themselves. Because traditional resources of financial support have not been able to keep pace with the growth, it is the artist who has worked longer hours without increased income. Post-war wage-price spirals passed by the performing artist with such alacrity that he stands today with labor contracts which would be completely unacceptable to other working groups. The last 10 years have seen a series of strikes and management-labor negotiations among orchestra, ballet, and opera companies which can only be called desperate attempts to solve an impossible situation. Directors of arts institutions are frank to admit that resources to meet contractual commitments two or three years from today are not in sight. The 1960's are a crisis time in the development of the American arts, and it is the artist who has become the victim of increasing demands upon his talent while traditional sources of support are actually decreasing, or too slowly increasing to meet current responsibilities. Despite enormous dedication on the part of trustees and patrons, the economic situation within the art world remains desperate.

Examples:

> Despite recent improvements, fully 80 per cent of our professional symphony orchestra musicians still average less than $5,000 for their year's work, according to the American Symphony Orchestra League.
>
> Actors' Equity states that 75 per cent of the professionally qualified actors and actresses earn less than $2,500 per year from theatrical employment.
>
> Less than eight serious composers have income from royalties on their works which allow them the luxury of full-time composition; and they are envy of the large number of other composers who find it necessary to teach or orchestrate, to earn enough for part-time work in their chosen field.
>
> According to the American Guild of Musical Artists, professional ballet dancers average less than $3,600 per year.
>
> We have no full-time poets.
>
> Despite over 1,300 organized concert audiences, which are generally fully subscribed, the artists fees produced through these thousands of performance opportunities are so low that only 60 recitalists are fully employed as concert artists, according to leading concert management sources.
>
> Quality in the arts suffers considerably because of these factors.

The obvious question is why artists continue to earn subsistence incomes while there is a constantly growing interest in the arts in all parts of the nation.

Even economists find the economics of the arts difficult to understand. They find it difficult because comparisons are too frequently made between the arts and business, or at least entertainment. If the comparison is made to schools—which is proper because the arts are essential to education and the educated person—then the economics come into sharper focus.

Like schools, health and welfare programs, and other services, the arts cannot be priced out of reach of the average citizen, or they will shrink and fail to serve their function—to bring enlightenment and spiritual growth to all.

In simplified terms, the arts have suffered in our expanding economy in the same way that our schools and hospitals have suffered: the cost of service has exceeded the ability of the society to pay the full budget by traditional means.

When this happens in any field of endeavor, it sets off a number of reactions.

1. The practitioners (nurses, teachers, artists) tend to move toward the places where conditions are most prosperous and offer the greatest opportunities.
2. A number of practitioners are forced out of their fields because of low income or an inability to move.
3. Institutions expand their services until they are in financial crisis, or find the quality of service deteriorating.
4. Research programs and innovative ideas which could bring progress toward solving problems and expanding services are curtailed because available funds are needed for basic services.

All these reactions began in the arts when the demand for services increased simultaneously with the expansion of the national economy. Artists in all fields began to move to the larger cities during the thirties, but in larger numbers shortly after World War II as traditional sources of support proved inadequate in other parts of the country.

Opera singers, for example, discovered they could find employment opportunities only in the opera houses of Europe. Over 600 trained American singers are employed as featured performers in Europe at the present time.

A large number of trained and talented artists, particularly musicians and dancers, have abandoned their careers and now work at other employment where wages are keeping pace with increased living costs.

Organizations, straining to meet the increased demand, have found funds to be inadequate and the supply of high-quality artists diminishing. These organizations either lowered their quality of service, or ceased to exist.

As examples, the American Ballet Theatre, representing a $10 million investment over a 25-year period, was rescued from being disbanded only by the timely formation of the National Endowment for the Arts and an emergency grant. . . . The Actors Workshop of San Francisco recently was dissolved for lack of funds despite its substantial reputation . . . Virtually every symphony orchestra exists in the chronic state of financial crisis today. The St. Louis, Chicago, and Indianapolis symphonies are among the well publicized examples of the tremendous efforts required by public and private resources to find even temporary, short-lived solutions . . . Even the Metropolitan Opera, playing to 98 per cent capacity every season, suffers from increasing financial deficits; the new contract with the Metropolitan Opera orchestra will raise the total annual deficit close to $2. million annually.

The underlying erosions in any depressed situation are most destructive when left uncorrected.

Young people with talent are not becoming performers and creators because they witness the disadvantages of such a career as opposed to others.

The private foundations over the years have invested only three-to-four per cent of their philanthropic funds for the arts, and they tend to support established patterns of giving, rather than to innovate new ones.

Corporate and private individual giving offer little encouragement at present. The National Industrial Council Board found in 1964 that less than five per cent of corporate contribution funds went to the arts.

Cities with highly organized federated annual campaigns for the arts receive contributions from only 1.5 per cent of the population, according to a management consulting firm study finished in 1964.

The recent massive Ford grants totaling $82 million to aid symphony orchestras were of great importance; but they apply only to 61 professional orchestras, extend over a 10-year period, and $60 million of this support must be matched by other financial resources.

Bold new programs which can accelerate box office and contributory income and build new audiences for the arts have not been possible because of the lack of investment capital. This latter condition is particularly disturbing, coming as it does when demands for services are so overwhelming.

With enactment of legislation establishing the National Endowment for the Arts, this attitude of pessimism has begun to change. Even before passage, urgent appeals for assistance were received daily at the offices of the National Council on the Arts, established late in 1964.

After enactment and the attendant press coverage, requests began to multiply substantially and an increasing number of artists and arts leaders visited the Endowment's offices. It was finally necessary for the Chairman to publicly discourage applications for projects involving large sums of money due to the limited funds appropriated. Despite these public statements of policies and priorities, the applications and inquiries continue to flow. Every State has contributed to a correspondence load which averages 380 inquiries and requests per month. This figure includes only *new* inquiries each month. And even with a fair degree of public understanding concerning the Endowment's programs in force, requests falling into ineligible categories average nearly $4. million per month. These requests cover a very wide variety of cultural programs, but the constantly stated reason for requesting assistance is that the individuals or organizations have exhausted all other resources of support and are turning to their Federal Government as a last hope.

> In this respect, it is interesting to note that in 1953 the boards of directors of symphony orchestras belonging to the American Symphony Orchestra League were surveyed and found almost unanimously opposed to Federal support for the arts. By 1965, a similar survey of 900 member organizations showed just the reverse to be true. In the 12-year span, deficits have mounted which cannot be met by the traditional private sources which once served these orchestras well.

The economic situation in the arts and its ramifications are reason enough for Federal concern, but one other complex factor must be considered for a full description of our national needs in the arts.

Studied projections by private and Federal Researchers estimate that the year 2000 will bring a gross national product of $2.1 trillion and a population of more than 300 million people. This represents three times today's productivity for only 50 per cent more people.

These increases will cause tremendous problems to our Nation in terms of productivity and population. But even greater problems will result from the combination of abundant goods produced through less and less dependency on laboring hours, while we have even more people available for work that doesn't exist.

How the working man will spend his non-work hours and what the quality of life will be in 34 years depends almost entirely upon the plans and programs undertaken at this time.—These relate not only to the inner satisfaction man derives from the arts, but to the outer aspects of his whole environment, those especially reflected in the arts of architecture planning, landscape architecture and design.

It remains to be said that the arts have been of fundamental value to all leading civilizations. Throughout history they have translated and described in lasting form man's highest aspirations. They express our individuality as nothing else can. Indeed, the chief contribution of the arts lies in what they can do for the individual—for his eyes and ears, his senses, his mind, and, perhaps most vital of all, his curiosity, his desire to explore, his all-important faculty of awareness. As this faculty is increased, as excellence is sought, so does the individual improve himself as a human being. In a rich and prospering country, in one called upon to assume a special role of leadership, and in one dedicated to the full development of the individual in a democratic society, it would seem of the utmost importance that the arts should be supported in every way possible.

OBJECTIVES

In light of the paramount needs in the arts, and from the experience gained by the Council and the Endowment, six clear objectives are manifest:

1. *The first objective is to increase opportunities for citizen appreciation and enjoyment of the arts through a wider distribution of our artistic resources throughout all areas of the nation.* Programs designed to achieve this objective will be primarily of a mobile nature. Certain performing and visual arts organizations can only be described as national artistic resources and these will be more widely available through matching grants for national tours. Other in-

stitutions of high artistic quality which have not been able to tour extensively performances or exhibitions in the past will be supported in their efforts to serve an entire region of several States. Still other institutions of professional quality, which are primarily local, will be assisted in serving a larger audience.

2. *The second objective is to sustain and encourage individual performing and creative artists*, in order that these especially talented and dedicated persons may more effectively offer the people of the nation artistic opportunities of the highest professional excellence. Programs aimed at this objective will be focused on individual grants to performing and creative artists so that they may have a measure of financial stability as they increase their special talents, and on developing opportunities for them to become better known to the public.

3. *The third objective is to help sustain and develop existing independent institutions of the arts*, in order that a high level of achievement can be attained and greater private support generated. Programs will be aimed primarily at overcoming the lack of capital needed for the consistent production of programs of the highest quality.

4. *The fourth objective is to increase the awareness and importance of the arts to our citizens through educational and experimental projects.* Programs under this objective will be small in terms of funds required for any single project, but the results could have an enormous impact on the future of the country. Such current educational pilot projects as the Laboratory Theatre for Education, and a study of the arts curriculum entrance requirements of our colleges will undoubtedly affect the attitude of many school boards toward the arts. Another pilot project—poetry readings in the schools in three cities—has stimulated interest by at least a dozen school systems and is now a program favorably viewed by the Office of Education as part of their Title III concepts under PL. 89-10. Also of an experimental nature is a matching grant project with the University of Wisconsin concerning the problems and opportunities for the arts in rural communities throughout the country.

5. *The fifth objective is to increase citizen participation in local artistic programs through a partnership with the States.* This objective is in part specifically stated in the Act. Programs aimed at achieving this goal will fall within the State program where a broad range of imaginative and worthwhile projects have been approved and are under way at the present time.

6. *The sixth objective is to provide the people of this nation with new opportunities in all aspects of the arts* which are consistent with the achievements of other mature societies. The emphasis here is on the words "new" and "in all aspects of the arts." The United States does not have a film institute nor an institute of design as do almost all of the other developed countries of the world. Currently, the Endowment is funding studies to determine how such institutions can be of greatest benefit to the United States. The Endowment intends to focus on new ideas and needs in the arts and to conduct objective studies concerning the feasibility of establishing new institutions or services. If a long term gain for our people can result from such a new institution or service, then encouragement will be given to its establishment.

The programs described in this budget estimate are based on the above objectives. Some strike decisively toward one goal, while others move broadly toward a number of objectives. It is possible that new objectives may emerge in light of developing experience; but at the present time, these are the objectives and programs which are considered of the greatest immediate consequence.

MUSIC

(1968—$1,225,000)

The Endowment's music projects, already in progress and projected for 1968, have been developed to further five of our stated objectives, as follows:

1. Wider distribution of our artistic resources through a project to send gifted young soloists on tour throughout the country; through the development of regional opera programs in the Southeast, on the West Coast, and support of opera for national audiences new to this art form; and through the establishment of a master chamber orchestra which will tour regularly.

2. The individual artist will be sustained and encouraged through all of these projects.

3. Independent existing institutions are being assisted, especially to create new works and broaden their audiences. The Boston Opera Company was given a grant to produce the difficult but artistically significant work, "Moses and Aaron" by Schoenberg. The Metropolitan Opera National Touring Company is being helped to develop new high school audiences and new labor group audiences. The San Francisco Opera will be able to develop a special four-state program.

4. Educational and experimental projects include both the young soloists program and the master chamber orchestra, plus a study project to develop in the United States the unique methods of teaching music, originated by Zoltan Kodaly.

5. New opportunities for the public and for the musicians are also reflected in the master chamber orchestra project and the young musical artist project. An event of special interest, nationally and internationally, was the meeting at the Interlochen Music Camp of the International Society for Music Education in Michigan this summer. This distinguished gathering was the first such meeting to be held in the Western Hemisphere, an encouragement of international communication in the arts, peculiarly appropriate to the purposes of our enabling legislation.

In keeping with the above, the following funding is requested for 1968:

Gifted young soloists' project -------------------------------------- $278,000

In 1967, a grant of $44,500 has already been made to develop plans for a project to select (through a distinguished panel of musicians) a group of gifted young soloists who will be given the opportunity to tour the United States, appearing with orchestras or other musical associations. These young men and women will be given broad opportunities to develop their skills as recitalists, including major metropolitan appearances. Assistance to these young artists is of critical importance in developing their careers within our own country.

Included in this program is a plan whereby the young concert artists will remain for several days when performing on college campuses, offer lecture-demonstrations, and generally assist in stimulating interest in music among the students. A minimum of $278,000 will be required for the full development of this program during fiscal year 1968. (See attached budget.)

Master chamber orchestra -------------------------------------- $400,000

This is a major program which will establish an orchestra of virtuoso calibre to function both as a performing group and as an institute to help solve the shortage of outstanding instrumentalists in our country, particularly in the string sections of orchestras. The rapidly expanding demand for orchestral music, and the necessity to provide greater financial stability for our musicians through longer concert seasons, has placed an increasingly heavy burden on the leading players of our major orchestras. The physical strain on certain types of instrumentalists will make it necessary within the next five years for many orchestras to employ extra musicians to carry part of the load. Presently, no organization exists to train these musical leaders.

Alexander Schneider, violinist and eminent chamber musician and conductor, will direct the project. A grant of $32,500 has been made to him to select the initial ensemble of 50 musicians, and to prepare the project for its first full year, which will require the above budgeted figure.

The chamber orchestra plans to tour, and will include visits of longer than the usual one-night performance—again, as with the Gifted Young Soloists' Project, offering the opportunity for expanded study of music as it is rehearsed and performed. Lecture-demonstrations and master classes will be included in some of these several-day engagements, and programs for the special needs in some disadvantaged areas are planned. (See attached budget.)

Regional opera projects -------------------------------------- $475,000

In last year's budget request, the following statement was submitted: ". . . The National Council on the Arts does not envision an elaborate system of regional (opera) companies in the near future. The plan here is rather to encourage the existing groups to gradually expand their touring efforts, or mount special productions for touring as a first experimental step."

During Fiscal Year 1967 the following projects were undertaken:

1. Boston Opera Company: A matching grant of $50,000 was approved. This

was an emergency grant, which came at a critical time in the artistic life of this excellent company, directed by Sarah Caldwell. It exemplifies the failure of traditional resources to meet fully the needs of an outstanding arts organization.

2. Regional Opera in the Southeast: A special study to gather all available information on the existing facilities and support for opera production in the southeastern part of the country is planned in 1967, with a view to developing a regional opera program which will ultimately include studio activities, full-scale productions, and well-presented local opera of a quality previously not available in the United States. At present $35,000 has been approved for research and development purposes. In addition, while the project is being researched, it is planned that the Metropolitan National Touring Company will extend its appearances in this part of the country to help develop the audience for opera already existing there, and a matching grant of $63,000 has been committed for this development.

3. Metropolitan Opera National Company: A grant of $150,000 to provide special performances in a number of midwest states for high school students and labor groups has been approved. The grant will enable these groups to have the opportunity to enjoy opera of the highest calibre, often for the first time. The Company, which in its last year's tour received nearly unanimous acclaim from the critics, was formed to bring opera to all parts of the country and to give young singers the opportunity for operatic performances hitherto available in most cases only in Europe. (It should be noted that the excellence of opera training in this country is without parallel, but our singers have found employment after graduation largely in Germany and Italy.) The Endowment's grant is only a small addition to the over-all budget required for this tour.

4. San Francisco Opera Company: A grant of $105,000 was approved for the San Francisco Opera Company for a one-year program. The project will create a small flexible opera ensemble to perform condensed and full-length versions of opera for schools and neighborhood and community organizations, including nationality and labor groups. Performances will also be held in smaller "grass root" areas where large scale opera is not feasible. Plans for regional performances by this ensemble will include California, Southern Oregon, Nevada, and Arizona.

For 1968 a minimum of $475,000 is estimated as essential for the continuance of projects to bring excellence in the opera to larger regional audiences, and to begin development of a national touring company.

Kodaly music education project------------------------------------ $40,000

From many expert sources we have learned that the method of music education developed in Hungary by the composer and teacher Zoltan Kodaly has amazing results with youngsters. Teachers throughout the United States have written to applaud the announcement of a project which will start with the study of the Kodaly teaching method by a selected group of able teachers and young musicians.

Eventually, it is planned that these professional musicians, through non-agency funds, will be sent to Hungary to learn the skills first-hand and bring them back for adaptation to the needs of this country.

Dr. Alexander Ringer, professor of musicology at the University of Illinois, is administering a study grant of $12,150 to set up the project. $40,000 is requested to continue this project in fiscal year 1968. The funds would enable up to six especially selected music teachers or musicians to prepare in 1968 for the fuller implementation of this project with Dr. Ringer.

International Music Council Congress ------------------------------ $32, 000

In keeping with the stated interest of the National Council on the Arts in supporting international meetings held in the United States and of important benefit to the development of the arts in this country, the Council has recommended support in 1968 of the International Music Council Congress, scheduled to hold its next conference in New York and Washington during April of 1968. None of the conferences of the International Music Council have taken place in the United States before, although credit for its organization has largely been ascribed to American representatives. The Endowment has already supported precedent-setting activities of this kind by enabling the United States to host significant international events in the arts, and believes that this particular conference will greatly benefit the field of music in the United States and serve to project American accomplishments to other countries, including those from Europe and Asia. The amount involved, $32,000, would be matched and is much needed to insure an effective program.

GIFTED YOUNG SOLOISTS' PROJECT

This project is designed to assist the musical careers of up to twelve especially gifted young artists, to be selected for American tours, which can include 35 concert annual engagements for each artist. These appearances (whether in concert halls or at educational institutions) will help to stabilize the careers of these young artists at a time when stability is most needed, that period between the conclusion of formal music education and the fully professional career. This is the period most difficult for the young artist to bridge.

The project will be handled through the Carnegie Hall-Jeunesses Musicales agency, which has considerable experience in assisting young American musicians. The funds will greatly increase the opportunity for young American artists to tour this country, and will allow for lengthened engagements at some colleges or other sponsorships, where the artist can be available for all kinds of additional demonstration, open rehearsals, or less formal educational gatherings with other interested young people. Under present conditions in the field of music, opportunities for an intensive schedule of regular performances are rarely available to talented young musicians.

Estimated budget for 1968

The National Endowment for the Arts will provide funds to cover fees, per diem, travel, concert promotion and tour direction services, to be administered through Carnegie Hall-Jeunesses Musicales as provided hereafter:

1. Fees: $250 per artist, $100 per accompanist (per engagement)
2. Per diem: $16
3. Concert promotion and Tour Direction Services: $155 per concert
4. Travel, Health and Accident Insurance

Estimated budget: 12 artists×35 concerts=420 concerts in 10–12 weeks (minimum: 3 concerts per week, 7 per diem, plus travel).

Per week:

Fee for artist ($250×3)	$750
Fee for accompanist ($100×3)	300
Per diem allowance (7×2×$16)	224
Services ($155×3)	465
3 concerts×$95 (travel, etc.)×2	570
	[1] 2,309

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[1] $2,309×12 artists×10 weeks average, plus $1,000 for contingencies equals $278,000.

MASTER CHAMBER ORCHESTRA

This is a major program to establish an orchestra of virtuoso calibre which can function both as a performing group and as an institute to help solve the shortage of outstanding instrumentalists in our country. A budget of $400,000 to organize and launch the project is required.

Alexander Schneider, violinist and eminent chamber musician and conductor, will direct the project. A grant of $32,500 has been made to him to select the initial ensemble of 50 musicians.

The chamber orchestra ultimately plans to tour, and will include visits of longer than the usual one-night performance, offering the opportunity for expanded study of music as it is rehearsed and performed. Lecture-demonstrations and master classes will be included in some of these several-day engagements, and programs for the special needs in some disadvantaged areas will be considered for planning.

Estimated budget: 1st season, Sept. 1, 1967 to May 30, 1968

A. Operating costs:	
1. Continuing office costs	$12,400
2. Continuing auditions	4,000
3. Rental of chapter hall (Carnegie) per year	15,000
4. House costs (Carnegie Hall concerts) per concert with one rehearsal, 20 concerts×$2,000	40,000
5. Promotion of concerts	7,000
B. Orchestra salaries and employment benefits (for 9 months):	
1. 37 players×$9,000	333,000
2. 11 players with negotiated salaries (estimated $12,000)	132,000
3. Conductor, orchestra manager, and other assistance	40,000
C. Travel and per diem for 32 weeks (estimated 50 men×100 concerts):	
1. Travel (50×100×$20)	100,000
2. Weekly per diem (32×50×$42)	67,200
3. Weekly pension fund (32×50×$8.65)	13,840
4. Contractor ($346×32)	11,072
D. Miscellaneous expenses and contigencies, at 3 percent of total budget	24,488
Total	[1] 800,000

[1] ½ of total funding from Arts Endowment, or an estimated $400,000.

DRAMA

(1968—$750,000)

The programs and projects in drama, already funded and herewith submitted, are aimed at attaining five of the six major objectives of the National Endowment for the Arts, as follows:

1. A wider distribution of artistic resources is achieved through the programs, some national in scope, some local, of the resident professional theatre companies, and through special audience development programs.

2. Grants to organizations which produce new works will sustain and encourage the individual playwright who is the most important creative element in the theatre. The Endowment has also initiated projects to assist playwrights and the production of new plays outside of New York.

3. The programs of aid to permanent professional theatre companies aim to both sustain and develop these institutions, permitting them to achieve and maintain high artistic standards.

4. The Laboratory Theatre pilot project, which is educational and experimental, may well point the way toward future developments in both the teaching and presentation of theatre for young audiences. (It should also be mentioned that the American Lyric Theatre Workshop, mentioned below, is a unique experiment, and is also closely related to drama, as it is to dance, music, creative writing, and the visual arts as well.)

5. Projects like the American Lyric Theatre Workshop and the Laboratory Theatre are aimed toward the development of new forms which can expand the art of the theatre and lead to the formulation of new institutions.

In keeping with the above, the following funding is requested for 1968:

Grants to permanent professional theater companies $250,000

After a careful survey of the existing permanent professional theater organizations, the Endowment initiated a program in fiscal years 1966 and 1967 of grants to sixteen selected theater groups including both resident theaters and those which tour. These grants, totaling $483,500, were for the general artistic development of the company, in most cases specifically through the employment of high calibre actors and directors.

This was conceived as a continuing program. The theaters which received grants are eligible to reapply. Many other theaters have already requested assistance. All these theaters will be reviewed and their work evaluated by members of the National Council on the Arts, the Theatre Panel, and through special research by the Endowment. Theaters will be judged on the basis of the quality of their current work and community service, their creative utilization of the grant (if they have received one), and their need. The above amount is extremely minimal in terms of needs, but budgetary limitations do not permit expansion at this time.

Laboratory Theater project	$500,000

A joint effort of the Endowment and the Office of Education, the Laboratory Theatre is a pilot project now underway in two cities: Providence and New Orleans. High quality professional resident companies, of a type not available in these cities heretofore, are presenting free daytime performances of classic plays to elementary and secondary school children. The plays produced are coordinated with the school curriculum, and special readings and lectures are given as supplemental aids to classroom work. The companies also give evening and weekend performances for adults. This project is in its first year. To fully prove its effectiveness and educational value, it is essential that the projects in each city continue for at least two years. The goal is to build new audiences for theater of high quality and thus to encourage community support and sufficient private resources for the theaters themselves. (Funds are requested to continue support for the New Orleans and Providence theaters and to fund one new such theater in one other metropolitan area, and possibly a second, should sufficient funds remain from this allocation. To date $165,000 has been required for Endowment funding of the initial projects in each of the two cities, Providence and New Orleans. Second-year costs may be lower, thus allowing for the possibility of two new projects.)

DANCE

1968—$300,000

The programs in dance are aimed at fulfilling five of the six major objectives of the Endowment as follows:

1. Wider distribution of our artistic resources is the major purpose of both the dance programs described below.
2. The individual artist is sustained and encouraged through the matching grants to the companies which, in turn, assist the individual dancers and choreographers.
3. Institutions are assisted directly by these programs.
4. Audience education is a primary objective of these programs and accomplished by the Endowment's plan that companies include master classes and lecture demonstrations in their schedules while on tour.
5. By assisting the developing dance companies of high standard, new opportunities and institutions are essentially created. The economics of dance require this type of support if companies are to achieve the stability necessary to bonafide institutions.

Dance has always been considered the stepchild of the performing arts in the United States from the standpoint of finance, administration and organization. At the moment not more than five or six dance companies can claim both a national reputation and relatively stable support capable of surviving a crisis. The average income of a professional dancer is $3,000 to $3,500 a year, and only a handful of companies can offer close to year-round employment.

And yet this country has produced two ballet companies which rank among the finest in the world, the New York City Ballet and the American Ballet Theatre—and Martha Graham, a towering figure in the world of modern dance, internationally acclaimed. Other modern dance choreographers, among them Jose Limon, Anna Sokolow, Merce Cunningham, Paul Taylor, are of the first rank, and have finely-trained but financially hard-pressed companies. During the past few years there has been remarkable growth in ballet, with hundreds of companies across the country, some of them professional, and many others doing high quality work and aiming toward professionalism.

All of these companies and individuals in dance, with the possible exception of the New York City Ballet which has since 1963 been supported by the Ford Foundation, are, with so many arts organizations, in an almost continual state of financial crisis. The other major companies and artists have been supported almost exclusively by a few smaller private foundations and wealthy patrons. This support is running out and a way must be found to maintain and nourish the best of what we have, as well as to encourage the most promising. Here, as in the theatre, but to an even greater extent, audience education is crucial. Choreographic talent must be stimulated and encouraged, for the vitality of this art form, as of every other, depends as much upon the creation of new forms and contemporary expressions as upon the conservation of the heritage of the past.

Grants to major dance companies	$250,000

Support here is essential if these companies are to maintain and develop their excellence. The necessity for touring and audience education has already been pointed out. It is planned to assist several among the most qualified and needed companies to tour, with an educational program which would involve not only formal performances, but lecture demonstrations as well. Selections would be made by the Endowment's dance panel.

Program of support for developing dance companies	$50,000

The Dance Panel and Endowment staff are currently surveying the major developing dance companies to select those with the highest artistic standards and the most potential for the future. As a beginning program, small grants would be made to these companies to assist them in engaging guest choreographers and dancers, to increase dancers' salaries, and to mount new works which enlarge their repertories.

CREATIVE WRITING

(1968—$500,000)

Programs and projects in creative writing are aimed at five of the six major objectives of the Endowment as follows:

1. Wider distribution of our artistic resources through the poetry projects for school children *, through the increased distribution of writers' works made possible by work of the Coordinating Council of Literary Magazines *, and through the literary anthology *, which will be widely offered for sale at a reasonable price.
2. The individual creative writer is the heart of the literary programs and therefore almost all the programs are helpful in some way. Individual grants for work-in-progress *, the literary anthology *, the Poetry project *, and the Equal Creative Opportunity project will all be of considerable aid to the particular writers involved.
3. Institutions of the arts are sustained and developed by the Coordinating Council of Literary Magazines project.
4. The Poetry *, and Equal Creative Opportunity projects substantially serve the objective of increasing citizen awareness through experimental and/or educational activities.
5. New opportunities in the arts for our citizens is the object of the Coordinating Council, the Literary Anthology *, and the Equal Opportunity projects.

In keeping with the above, the following funding is requested for 1968:

Grants to individual creative writers	$240,000

In the field of literature the *individual* creative artist is paramount. While other creative art forms value the individual, they also involve established and complex institutions such as museums, theatres, opera and dance companies. The writer works alone for months and years before the finished product can be offered to the public. *It is estimated by the Authors' League that a first novel earns less than $1,000 for its creator and that there are fewer than 300 writers who are able to spend full time on their writing because of financial needs.*

The existing individual grants programs of private foundations such as Rockefeller and Guggenheim have been unable to keep up with increased living cost trends. A typical private grant award is approximately half what is needed to maintain a reasonable standard of living in the United States in the sixties.

It is anticipated that a number of our grants may go to supplement inadequate awards from other sources.

In addition, we hope to emphasize a grants program aimed at reaching:

(a) non-teaching writers

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*Projects continuing from 1967.

(b) women with domestic responsibilities and dependent children

(c) talented writers from underprivileged backgrounds, who may need further educational or cultural supportive assistance before they can succeed in their work

(d) young writers who do not yet have the kind of established reputations which appeal to private foundations

(e) older writers who have made distinguished contributions to the cultural fabric of this country, and whose productive years may be extended and enriched by aid and recognition from the federal arts program.

All these classes of writers tend to be neglected by existing private programs.

Over a third of the total literary programs is devoted to these grants for works-in-progress. Funds received are to cover necessary travel, materials, and living expenses. Grants are estimated to range between $4,000 and $10,000, depending on individual need, type of project, and possible support of writer from other sources.

Project to equalize creative opportunity	$30,000

A *Pilot Project.*—To develop creative skills in literature, and the appreciation of the American literary heritage in culturally disadvantaged urban areas and isolated rural areas.

It is planned that three areas, different in quality but adjacent geographically, be selected in the following categories:

(a) an urban high school in an underprivileged area

(b) a Negro college which lacks creative arts programing

(c) an isolated rural college

Programs in the three areas would be coordinated, utilizing writers and teachers of creative writing for in-residence programs at the institutions, from periods of one week upwards. In collaboration with the existing faculty, they would design programs which would relate to the particular needs of the students involved.

The goals are tri-fold: First, the student would be put in closer touch with works of outstanding literary value on a person-to-person basis; second, doors to literature and the arts would be opened to him in ways that would strengthen his own motivation in continuing education, and acquiring tools of self-expression; and, third, the benefits of creative expression would assist the student in raising his own estimation of himself and his ability to contribute to the life of his area and his country.

From projects such as these, and their careful evaluation, more widespread programs of a similar kind—or of an improved kind—could be developed on a much broader scale in future years.

Program in poetry: In Schools and Communities	$80,000

The success of the joint project between the Academy of American Poets and the National Endowment for the Arts in bringing poets and poetry to the public schools of New York, Detroit, and Pittsburgh prompts the allocation of matching funds for similar programs, throughout the United States particularly for schools in the underprivileged areas, and in rural school areas where every type of cultural advantage, is lacking. In 1966 the Endowment granted to the Academy $47,000 to initiate this project in New York. 112 schools were involved at first; 200 more applied, forming the basis for an additional grant of $33,000. We consider this project as already having proved its merit, and as an example of a relatively small grant which has produced exceptional results.

Projects in arts criticism	$50,000

One of the major blocks to the greater appreciation and knowledge of the arts by our citizens is the inconsistency of criticism about the arts. It has been said that, "High standards of criticism are the best advertising the arts can have." Though excellent critics are now practicing, the general standard is low and too often tends toward academic bravado and to badly written and confused prose. As a result, the average newspaper or magazine reader often has a confused impression of the basic values of the arts in our society.

Therefore, a program designed to elevate the standards of literary criticism is urgently needed. One phase of the project would involve workshops and seminars which would be planned for critics and prospective critics from a variety of geographic areas. Also, individual grants would offer opportunities for critics to see and experience the arts in parts of the United States away from their home base.

It is planned that this allocation would be carefully coordinated with the programs of the National Endowment for the Humanities in this field. The Arts Endowment funding would allow for only a limited number of pilot activities in 1968, but it is believed that these could play a very significant role in the development of the arts in the United States.

Coordinating Council of Literary Magazines	$50, 000

A matching grant project to continue funding for a much-needed coordinating council serving the leading literary magazines of the country. These magazines, which are nonprofit corporations, lack sufficient capital to begin such a council. Once established, the financial benefits derived from coordinating such services as promotion, publication, and distribution, would enable the magazines to meet the costs of maintaining the council. The funding is based on minimum estimates of magazine representatives with whom the project has been discussed and by whom it has been enthusiastically recommended.

Literary anthology	$50, 000

This grant would continue the awards of $1,000 to writers and $500 to editors of magazines participating in the annual anthology of the best American writing. This project involves seven leading New York publishers, who have agreed to publish the anthology in rotation, observing uniform production standards from year to year. The funds supplied by the Endowment are to cover the sums needed to pay the winning writers and the magazine editors who originally selected their work. Like the Council for Literary Magazines described above, the anthology has been initiated on a pilot basis, and warrants continued support.

VISUAL ARTS

(1968—$535,000)

The programs and projects in the visual arts are aimed at attaining all six of the objectives of the National Endowment for the Arts as follows:

1. Wider distribution of our artistic resources is planned through programs with museums, traveling exhibitions, and distribution of prints and drawings to schools and libraries.
2. Assistance to the individual artist is planned through grants-in-aid for his professional development, through encouraging the development of certain types of distribution programs, through commissioning drawings, and through developing methods for a better understanding of contemporary art.
3. Support for existing institutions is included through museum programs and aid to specific art programs in schools.
4. Educational and experimental objectives are aided by pilot projects involving reproduction of graphic art and research in photographic services.
5. A partnership with the states is strengthened by distributing the benefits of certain projects through state arts agencies.
6. New opoprtunities for the general public are inherent in all of the planned programs and projects, but particularly in the photographic curatorships and the drawing and print portfolio projects.

In keeping with the above, the following funds are requested for 1968:

Museum projects	$220, 000

To make the resources of museums available to wider audiences, and to encourage the public to come to exhibition centers and to stimulate awareness in the arts, several projects are planned on a matching basis with outstanding museums. One such project will send exhibitions, films, lecturers, and the like throughout an entire state, utilizing the facilities of a major metropolitan museum. Smaller scale projects will be directed toward regional exhibitions of the visual arts. These programs will establish guidelines for creative cultural programming, utilizing new techniques for arts exhibits and for audience development. The exhibitions will be toured to community centers, college campuses, secondary and primary schools. This is a continuing program initiated in

1967 with a $90,000 matching grant to the Detroit Institute of Art, and matching grants of $30,000 each to the Institute of Contemporary Arts in Boston and the Amon Carter Museum in Forth Worth, Texas.

Project for photography	$20, 000

American photography has, in the past, made significant contributions to the record of our society. The daily use of photographs as a fundamental means of bringing national self-knowledge and understanding to our people is an art form in the highest sense and deserves support.

At present, museums lack sufficient funds to establish photography programs, though interest in such programs is intense. Also, there is a lack of knowledge as to the most effective means of training curators, designing programs, and developing broad recognition for excellence in photography. Therefore, $20,000 is requested for a small number of individual grants for curatorial fellowships at nonprofit institutions such as museums and historical societies, as a first step toward increasing public awareness of the importance of photography as an art form.

Grants-in-aid to painters and sculptors	$225, 000

We believe any well-balanced program to assist the visual artist from Endowment funds should include individual grants-in-aid. Like the creative writer, the visual artist works alone. The distribution of his work and the increase of public appreciation for his talents can be advanced by other means; but a key factor in assistance to the visual artist is a direct grants-in-aid project. Private and public funds have at times supported the individual visual artist, but at the present, there is limited support for his activities due to the withdrawal of the Ford Foundation's program, which in the past supported individual artists with grants of $10,000.

Direct financial aid to an artist at a crucial phase in the development of his career is considered by the Visual Arts Panel to be the most efficient way to enable him to continue his work and attain eventual financial stability. Panels of leading visual artists have been organized by the Endowment to serve the visual arts in all parts of the country. We now have an East Coast panel, a West Coast panel, and one concerned with the areas in between.

Awards to visual artists during 1967 totaled $300,000. Many more applications for this project were received than could be approved. We therefore request the above funds to continue a program of individual assistance to visual artists in 1968. We believe that at least $500,000 could be expended beneficially for this project in 1968. The request reflects budgetary limitations, and the need for a balanced and diversified program within these limitations.

Craft and folk art projects	$70, 000

During 1967 the National Council on the Arts approved grants to the Festival of the Performing Arts of American Indian ($29,000), American Folk Festival Association ($39,500) and the Archie Bray Foundation Crafts Workshop ($5,000). These small grants were selected on the basis of merit to assist in the stimulation of interest in the American folk and craft heritage.

Continued assistance to the above organizations is now under consideration and several other possible projects are under study.

$70,000 is requested to continue such projects and for further support of our folk art and craft national needs. The graphic and craft arts are included in the definition of arts categories in the enabling legislation. An allocation in this area is considered important to a well-balanced overall program. Relatively small grants can prove highly effective.

ARCHITECTURE, PLANNING AND DESIGN

(1968—$400,000)

The projects in this field of the arts are aimed at fulfilling all major Endowment objectives. Special emphasis, however, is placed on the first objective, dealing with a wider distribution of beneficial arts resources; on the fourth objective, dealing with increased awareness of the importance of the arts in our society; and on the sixth objective, concerned with developing new arts institutions.

In keeping with the above, the following funding is requested for 1968:

National institute	$150,000

The Endowment has committed $100,000 in 1967 for a study on how best to establish a National Institute on architecture, planning and design, and approved $222,500 for demonstration projects to be undertaken in conjunction with the study. The firm of Robert Nathan Associates has been approved to begin the first information-gathering phase of the study, now well under way. It is planned that the whole study will be completed by the spring of 1967.

It is envisioned that the Institute would serve as a center where expert advisory services would be coordinated and developed to serve our people, cities and states in their search for higher quality environment. Leading architects, planners and designers would be involved. As pointed out earlier, other leading nations have such institues—as, for example, Sweden, where excellence in design has brought about important economic benefits in international trade.

At the present time, it is believed that the Institute would function best as an independent facility, which would undertake special studies and research projects, hold conferences and seminars, publish reports and issue information bulletins. These activities would actively involve and serve leading professionals in the United States, as well as mayors, planning commissioners, governors, industrialists, educators, and other public officials and private citizens.

The Endowment believes that the study will fully justify the need for establishing the Institute on a permanent basis, at first with a relatively small, competent professional staff. It is believed that the securing of matching funds from outside sources would present no problem.

The Endowment estimates that $150,000 of its own funds would be needed for the first year of the Institute's life, and that, as in the case of the American Film Institute described below, these funds should be allocated now for 1968.

Demonstration and research projects

To enable the institute in its first year to conduct much-needed demonstration and research projects, we believe that a minimum of $250,000 should be allocated in 1968.

Examples of such pilot projects are as follows:

1. Support of industry through research on the improved design of urban street furnishings such as electric lighting fixtures, signs, benches, planting.
2. Support of improved design of community facilities in new suburban town centers.
3. Support of improved design in a newly developing recreation area, leading to a prototype park which would both retain and enhance natural beauty.
4. Support of improved design in portable arts facilities for residential neighborhoods, outlying towns and rural areas.
5. Support for prototype restoration and embellishment of the main squares of rural towns.
6. Support for prototype development of an old town's historic area stressing contemporary use and an improved economy.

PUBLIC MEDIA

(1968—*American Film Institute and Special Education Projects*, $480,000)

(1968—*Educational Television, Radio, Recording*, $200,000)

Programs and projects in the public media—television, recording, radio, and motion pictures—are aimed at meeting five of the major objectives of the National Endowment for the Arts.

1. To create wider distribution of the nation's artistic resources throughout all areas of the country by means of America's unique system of non-commercial television and radio broadcasting stations. All arts programs produced for television and radio will be distributed on a national basis, the programs embracing virtually all forms of the arts.
2. To sustain and encourage individual performing and creative artists by providing, through American Film Institute auspices, opportunities for talented individuals to make their special contributions to the film medium.
3. To sustain and develop existing institutions in the arts through the provision of support for the production of television and radio programs designed for a national audience.

4. To increase public awareness and importance of the arts through dissemination of experimental television and radio programs to a national audience and, through an American Film Institute, to offer the highest quality education and training to talented film makers.

5. To establish an entirely new national artistic institution, an American Film Institute (similar organizations have been serving most of the countries of Europe for many years) capable of greatly enhancing the art of film making throughout the United States.

In view of the above, the following amounts are requested:

AMERICAN FILM INSTITUTE, AND SPECIAL EDUCATION PROJECTS

(1968—$480,000)

The National Council on the Arts, from the 1966 appropriation, approved a $91,000 contract with one of the country's leading research organizations, Stanford Research Institute, to conduct a study leading to recommendations for establishing an American Film Institute. This inquiry was based upon the conviction that the production of motion pictures, pioneered in America, represents one of the leading forms of artistic expression in the world today. As President Johnson remarked when he signed into law the bill creating a National Foundation on the Arts and the Humanities, "We will create an American Film Institute, bringing together leading artists of the film industry, outstanding educators, and young men and women who wish to pursue this 20th Century art form as their life's work."

The Stanford Research Institute study, guided by members of the National Council on the Arts, has taken advantage of the expert judgment and opinion of highly qualified individuals in the film industry, film education and scholarship. Technical expertise in matters of motion picture storage and retrieval have also been carefully studied.

Recognizing that film is a "universal language," the research has not been limited to domestic experience. Most European countries have established film institutes in which experimental film-making opportunities and training for talented young artists are available, as well as formal and informal educational activities enhancing audience appreciation of this contemporary art. The Stanford study has embraced this European experience by on-the-spot inspections of film institutes in England, France, Italy, Czechoslovakia, Poland, Bulgaria, and the Scandinavian countries.

The study of film art and administrative procedures best suited to serve all motion picture interests in the United States has included the educational responsibilities (to audience and film-maker) of a national film institute, location criteria, manpower and training requirements, exhibition, storage and retrieval technology, archival potentialities, and long-range financing.

The major part of this allocation, at least $350,000, is requested for matching fund purposes in 1968 to assist in the establishment of an American Film Institute, an entirely new national artistic enterprise, providing a service to film artist and audience alike, building upon the Stanford study now nearing completion, and the recommendations of the National Council on the Arts.

Any remaining funds from this allocation would be used to support special pilot projects related to education—i.e., the Endowment is supporting with $72,000 in 1967 a unique project on a matching basis with Fordham University to develop special teaching methods using films of high quality in the instruction of secondary school children, particularly those from culturally and economically deprived backgrounds. It is planned to continue this project, should it prove as effective as anticipated. In 1968 the Endowment also plans to initiate with $30,000 a Master Teachers program, utilizing the talents of experienced artists in giving special advanced instruction at educational institutions.

EDUCATIONAL TELEVISION

(1968—$125,000)

Since its inception in 1952, when the Federal Communications Commission reserved 242 channels for non-commercial, educational television broadcasting, ETV has come of age. More than 115 stations are on the air, serving a regular audience of more than 10,000,000 with informal cultural and public affairs programs for adults, informal programming for children, and instructional televised lessons reaching into more than 50% of the nation's school systems. Regional ETV networks are now beginning to link metropolitan stations and statewide educational television networks. The creation of a national, non-commercial network is not far in the future.

Educational television has emerged from its early promise of an "electronic blackboard" to become one of America's most valuable cultural resources.

Through the pioneering efforts of American philanthropy, notably the financial assistance programs of the Ford Foundation, and Federal support for construction of new stations offered by the Educational Television Facilities Act, this new medium of communication now promises to play a major role in an age of increasing leisure time and opportunity for appreciation of the arts.

The National Council on the Arts in the current year has not only taken advantage of the opportunities for using this valuable resource to bring outstanding programs in all the arts into the homes and schools of the nation, but has also encouraged programming experimentation in the art of television itself. From current resources, the National Council on the Arts has approved grants totaling $768,000, which when matched meant $1.536 million for new programs and support of a wide spectrum of the arts. One grant was made possible by a $300,000 unrestricted gift from the Bristol-Meyers Corporation (see above). This project will bring 19 new major television programs to the 115 educational stations across the country. The total Federal share for this $1.25 million budget was $325,000. Two other grants approved in 1967 totaled $143,600 and were primarily aimed at wide distribution of arts programs via educational television. Unrestricted gifts donated to the Arts Endowment made possible virtually all of this educational television program, with the exception of $37,000 which is reserved from the Endowment's other available funds to meet all 1967 commitments in this area.

EDUCATIONAL RADIO, DISC AND TAPE RECORDING

(1968—$75,000)

The first educational radio station was established more than forty years ago; today there are well over 300 such stations. Twenty percent of these have gone on the air since 1962. This growth presents a challenge and an opportunity to those concerned with the vitality of education, and the arts in the United States.

Educational radio is a valuable national resource. The time is propitious for a new and vigorous experimental approach to art programs on radio and for exploring the art of radio, itself. Prior to the emergence of television, radio broadcasting, in addition to its communication of orchestral music and opera, had begun to discover its potential for dramatic art through the work of persons such as Norman Corwin, Dylan Thomas, Louis MacNeice, Archibald MacLeish, Henry Reed, and Orson Welles. It is highly desirable to re-establish "theatre for the ear" and other forms of the radio art, if for no other reason than to present alternatives to the unrelieved format of music and news which presently dominates this public medium. It is important to note that radio remains the best medium with which to reach people in areas such as Appalachia where television is barred in many instances by cost and terrain.

The opportunities and potentialities for fostering new talent and enriching this national radio resource are enormous. This has been demonstrated by venturesome non-commercial radio programming in the arts on educational stations such as WRVR in New York, WGBH in Boston, and in other locations.

The potentialities of non-commercial recording of music, drama, literary, and other arts programs for eventual use in public and private libraries as well as in cartridges designed for automobiles have been less well explored but bear an important relationship to radio broadcasting. The National Council on the Arts proposes to assist non-commercial radio stations in experimental projects designed to explore new ways to record arts programs on discs and tapes for distribution to large audiences.

The Endowment requests $75,000 for a matching grant project to support, through the auspices of National Educational Radio (a division of the National Association of Educational Broadcasters), non-commercial radio programs in poetry, drama, music, and discussion of the arts, produced by local educational radio stations, and distributed by National Educational Radio to its affiliated stations throughout the country.

PROGRAMS FOR SEVERAL ART FORMS

($360,000)

Projects and programs which are planned to serve more than one art form strike broadly at all of the six major objectives.

1. Wider distribution of our artistic resources is the very purpose of the Rural Arts Study project.
2. The individual artist is supported and sustained from small projects within the American Lyric Theatre Workshop and the Rural Arts Study.
3. Existing institutions of the arts are in large measure responsible for the carrying out of the rural project.
4. Both projects are experimental and educational by concept.
5. The rural project is primarily designed to serve the States by developing "blueprints" for rural programs which will be helpful to State programs.
6. The Lyric Theatre is a new institution established to develop new standards of excellence through a unique combination of the arts. It could lead to a new American art form of special value to our people. (See attached statement by Jerome Robbins.)

American Lyric Theatre workshop	$300,000

The American musical is a form of theatre which is recognized internationally as this country's foremost contribution to world theatrical art. Neither opera nor operetta, not pure ballet or straight drama, it is a uniquely American product developed and brought to fruition by our most outstanding creative and performing talents—playwrights, composers, choreographers, actors, dancers, singers, scenic artists, and musicians.

But here, as elsewhere, the economic pressures of our existing theatre have brought this flourishing form to a standstill in terms of creative development, so that even our finest contemporary musicals must be narrowly confined to their commercial aspects.

It is toward the creation of a new lyric theatre that the Endowment has made available to one of the most remarkably talented artists of our time, Jerome Robbins, funds to set up a workshop which will use all the forms and potentials of our lyric theatre to produce new and original works—works capable of expressing ideas with poetic vision and imagination. It will be a kind of laboratory in which projects involving music, speech, song and dance will be worked upon and developed, utilizing the talents of our leading writers, directors, painters, composers, and performing artists, and developing a company to perform these works.

The aim of the workshop is to provide a place for performing and creative artists to join together, work on ideas, create new works, extend and develop the musical theatre into an art capable of poetically expressing the events of our lives. It is planned so that ultimately a repertory of works will be assembled and developed, and a company and school established. $300,000 has been allocated for this project in 1967. We request the same funding for 1968. It should be pointed out that Mr. Robbins has agreed to devote two years to this project without personal compensation.

Rural arts study project	$60,000

The 1960 census revealed that 76,706,476 people still lived in communities under 10,000 population. This is nearly half the population of the United States. With this fact in mind, plus the results of a 1966 National Council on the Arts study which indicated that communities with an average population of 25,000 had virtually no cultural facilities and only limited services, a rural arts project was launched in FY 1967, with an allocation of $58,000.

This study is concerned with the problems of providing the highest possible standard for arts activities in the smallest of our towns. The University of Wisconsin offered to provide the matching funds necessary and five rural communities ranging in size from 1,100 to 9,000 population were selected. Two other communities were chosen for control purposes. Twelve private and State agencies are cooperating in the experiment, in addition to many of the departments and services provided by the University itself.

Over a three-year period, the five communities will be involved in the following five phases of the program:

1. An initial research survey to evaluate the arts programs presently available.
2. A demonstration phase involving prepared performances of plays, music, films and art exhibitions.
3. A phase during which the talents of the residents will be identified and aided.
4. An organizational phase in which local arts activities will be brought together for planning.
5. An evaluation and study phase.

The results of this project can have an important impact on the future of the arts in rural communities and the plans of the various State arts councils as they begin to plan State programs to serve all the people and communities within their borders through Section 5(h) of the National Foundation on the Arts and the Humanities Act. Therefore, $60,000 is requested to carry this project into its second year of study.

Statement by Jerome Robbins Regarding the American Lyric Theatre Workshop Project

The American Lyric Theatre Workshop would be a theatre, laboratory in which projects involving music, speech, song and dance would be worked upon and developed. It would also develop a company capable of performing works which do not fit into the present theatre forms, be it our commercial theatre or the separate realms of pure opera, ballet or concert.

Having worked in all of these fields, I find myself (along with others) with a body of ideas and projects which cannot be realized within the forms or pressures of our existing theatre. Even our contemporary musicals, which are internationally recognized as a unique American accomplishment, are narrowly confined to their commercial aspects.

I want to create a *new* kind of lyric theatre. It would use all the forms and potentials of our lyric theatres to produce new and original kinds of works capable of expressing ideas in large forms with poetic vision and free imagination. With my many years of experience in all fields of theatre, I believe that with proper assistance I will be able to bring such a theatre into existence.

Like a scientist or a painter, I need a laboratory in which to study, do research, develop material, experiment, and try projects. To do this I need time, space which would be a unique development in our American culture, and an indigenous and equipment (people). From this exploration, I hope to achieve a theatre which would be a unique development in our American culture, and an indigenous outgrowth of the American scene.

The Workshop would consist of a professional group of actors, dancers and singers who have talents in all three arts. There is such strong, rich talent available. A carefully selected group of apprentices would be added in the training and work. Composers, authors, poets, painters and others would be asked to instigate and collaborate on ideas. Projects would be started; some would be gathered from already existing material, some must be written. A great deal of the material must be developed within the workshop itself through continuing experimentation. When enough progress is made, audiences will be invited to observe "work-in-progress" rehearsals.

The ultimate aim of the workshop is to provide a place for performing and creative artists to join together, work on ideas, create new works, extend and develop the musical theatre into an art capable of poetically expressing the events, deep hopes and needs of our lives.

Finally, I hope a repertory of works could be assembled and developed, and that a company and school would arise, established on the grounds that our native indigenous materials and talents which we already know are rich, availble and productive.

Toward these ends, I am willing to free myself completely of commitments and devote myself solely to making this project come to fruition.

CREDITS OF JEROME ROBBINS

Musical plays

1945 ON THE TOWN (based on FANCY FREE)
1946 BILLION DOLLAR BABY (C)
1947 HIGH BUTTON SHOES (Mack Sennett Ballet)
1948 LOOK MA I'M DANCIN' (scenario, co-directed with George Abbott & C)
1949 MISS LIBERTY (C)
1950 CALL ME MADAM (C)
1951 KING AND I (Small House of Uncle Thomas ballet)
1952 TWO'S COMPANY (C)
1952 WONDERFUL TOWN
1954 PAJAMA GAME (co-directed with George Abbott)
1954 PETER PAN (adapted C & D)
1956 BELLS ARE RINGING (C & D)
1957 WEST SIDE STORY (conceived C & D)
1959 GYPSY (C & D)
1964 FUNNY GIRL (Prod. supervised)
1964 FIDDLER ON THE ROOF (C & D)

Straight plays

1962 OH DAD POOR DAD MAMA'S HUNG YOU IN THE CLOSET AND I'M FEELIN SO SAD (D)
1963 MOTHER COURAGE AND HER CHILDREN

Television

1953 Ford 50th Anniversary Show with Mary Martin and Ethel Merman
1955–56–60 PETER PAN with Mary Martin

Films

1956 THE KING AND I (C)
1960 WEST SIDE STORY (Co-directed and C)

Opera

1954 THE TENDER LAND (staged and D for NYC Opera)

Ballets

1944 FANCY FREE
1945 INTERPLAY
1947 SUMMER DAY
1948 PAS de TROIX (for Ballet Russe)
1949 THE GUESTS
1949 JONES BEACH (with George Balanchine)
1949–1959 Assistant Artistic Director NYCB Company
1950 AGE OF ANXIETY
1951 THE CAGE
1951 PIED PIPER
1952 BALLADE
1953 FANFARE
1953 AFTERNOON OF A FAUN
1954 QUARTET
1956 THE CONCERT
1956 FANFARE (for Royal Danish Ballet)
1958 N.Y. EXPORT: Opus JAZZ
1959 MOVES
1958–59–61 BALLETS: USA (own company—toured Europe for State Dept.)
1965 LES NOCES

D—director.
C—choreographer.

PROGRAMS FOR STUDY AND RESEARCH IN THE ARTS—$250,000

Section 6 of P.L. 89–209 transfers the functions of the National Council on the Arts under P.L. 88–578 to the National Endowment for the Arts. One of the functions transferred and of considerable assistance to the Endowment is the provision of authorization for special studies and research to determine the national needs in the arts. Using this authorization as a means of investigating the feasibility of certain major projects and proposals before public funds are invested has proved extremely helpful during the first two years of operation.

In the fields of the arts, codified information is in extremely short supply, and it is usually necessary to enlist the aid of particular institutions or individual experts in order to thoroughly check the advisability of undertaking a specific project. Certain projects are now under consideration which can be much more effectively evaluated if grants can be made to study the project in detail. Currently, these projects include the $91,000 contract with Stanford Research Institute regarding establishment of an American Film Institute, and the developing study, begun by Robert Nathan Associates, for establishing a national institute on architecture, planning and design.

Further, certain studies in limited areas of inquiry can have of themselves great impact upon the nation. For example, a current study on the arts curriculum entrance requirements of our colleges will point up evidence that greater emphasis is necessary at the high school level if we are to produce artistically literate citizens. Several other studies in this general area of arts curricula research can be of considerable help to education agencies at all levels.

Therefore, $250,000 is requested for individual grants and special research grants to institutions to carry out specific study, information, and research projects of national value.

PROGRAMS FOR ASSISTANCE TO THE STATES—$2,750,000

The declaration of purpose in the National Foundation on the Arts and the Humanities Act recognizes that support of national progress in scholarship in the arts and humanities, while a matter for appropriate concern to the Federal Government, is primarily a matter for private and local initiative. The provisions of the Act give substance to the declaration by specifically providing for the partnership between the States and the Federal Government for the development of the arts. Section 5(h) of the Act implements this partnership by providing for grants to be made to the States to assist them in supporting projects meeting the objectives of the Act.

In order to receive such assistance, each State first submits a State plan. The plan designates or provides for a State agency as the sole agency for administration of the plan and also provides that Federal funds paid to the State as grants-in-aid shall be expended solely on projects and programs approved by the State agency. Such projects may be supported from Federal funds to the extent of 50 percent of their cost. A total of $2,750,000, as authorized in Section 11(c) of the Act, is requested for this purpose to be allotted equally among the States as required by the Act. This will result in not more than $50,000 being paid to each State annually.

In FY 1967, 50 States and four special jurisdictions out of the total eligible 55 political entities applied for and received grants totaling $2,000,000, the full Congressional appropriation. All of these grants were approved with the assurance on the part of the States that State agencies and State plans would be developed for annual support. All the States have shown intention of applying for support for 1968.

In this first year of funding, 295 separate new projects in the arts were included in State applications. Due to appropriations curtailment, only 80 percent of these planned projects will be carried out. Nevertheless, including Federal grants, nearly $3,000,000 of new funds will be spent within the States on art projects and programs designed to bring about greater citizen participation and appreciation. With full appropriations, and with the initial year special non-matched study grants completed, the States would have $5,500,000 for additional new projects in 1968.

Perhaps the most significant feature of this program is the increase of support for the arts in excess of the minimum required to match Federal funding. Nineteen States have created permanent arts agencies this year by legislative action and made them part of the State's administrative machinery. This will mean administrative appropriations under State Civil Service for the maintenance of the agencies. Appropriations for these arts agencies have increased from $1,909,840 in 1965–66 for 23 States to $3,563,094 in the current year for 30 States. Best estimates indicate that requests to State legislatures for the next fiscal year will exceed $5,750,000 and include all States and special jurisdictions.

Combined with Federal funds, the States should be initiating approximately 700 new projects in the arts during the next fiscal year.

Therefore, in order to continue the momentum developed by this program, and to match the enthusiasm generated within the various States, the full authorized amount of $2,750,000 is requested for 1968.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Comparative summary of amounts available for 1967 with 1968 estimates

Appropriation and activity	Estimated available, 1967	Estimate, 1968	Increase or decrease (−)
Support of fellowship program	$1,900,000	$1,950,000	$50,000
Support of programs for research and publication	1,508,000	1,750,000	242,000
Support of programs in formal education and public understanding	832,000	1,150,000	318,000
Development and planning	260,000	150,000	−110,000
Total	4,500,000	5,000,000	500,000

SUMMARY STATEMENT

The Congress has charged the National Endowment for the Humanities with the development of a broad national policy of support for the humanities, because their support and use is in the national interest. The estimates submitted in this document serve two purposes; they describe the Endowment's initial efforts to carry out its mission in fiscal 1967, and they explain its plans and requested levels of funding for fiscal 1968.

To accomplish the Congressional mandate, it is necessary to enable humanists to provide knowledge and understanding of what is past and what is abstract, aesthetic, or not material, so that thoughtful men may realize their true potential through achieving greater perspective, being inspired to a vision of achievement, having the material with which to develop their wisdom, and ultimately to master themselves in their environment, including that part of the environment that we have made through technology. These things taken together are the ingredients of the nation's spirit, its ethics, and its morality. They are the basis of the judgments of value involved in all important decisions, whether they be public or private. They are bound together by the relevance of a man's knowledge and thought to his actions.

The need, therefore, is to provide better education and teaching in the humanities, better scholarly and creative work, and wider dissemination of the results through formal and informal educational channels.

The Endowment in fiscal 1967 and 1968 is attempting to attain three closely-related objectives based upon its mandate and the needs. These objectives are:

1. The development of individuals as scholars, teachers, and practitioners of the humanities throughout the country, in order that they may more effectively bring scholarship and thought to students in schools and colleges and to adults who are not formally registered in educational institutions. The appropriation request of $1,950,000 for fellowships is keyed to this objective.

2. The development and application of knowledge of the humanities through research, publication, and other scholarly activities in order to increase the national resources of knowledge and wisdom in those areas which pervade all life. This objective is of particular national importance, as funds for basic research in the humanities are sparse. The appropriation request of $1,750,000 for research and publication is keyed to this objective.

3. The development of the teaching of the humanities in schools, colleges, and universities, and also among the public at large through various communications media, in order that increasing numbers of the nation's citizens will have the ability and the desire to bring the humanities to bear upon their lives as citizens and individuals. It is urgently in the national interest to make available to the broad public as well as to the scholarly community the attitudes of mind, the methods of assessing value, the self-knowledge and civic knowledge which are the ultimate contributions of the humanities to public and private life. The appropriation request of $1,150,000 for formal education and public understanding is keyed to this objective.

The Endowment was not completely staffed until after the 1967 fiscal year had begun; therefore the bulk of the fiscal 1966 appropriation of $2.5 million was added to the fiscal 1967 appropriation of $2 million, giving the Endowment an effective program budget of approximately $4.5 million in the present fiscal year. Over 90% of these funds have been obligated as of the date of this submission. The 26 private citizens who are appointed by the President to serve as members of The National Council on the Humanities have reviewed and recommended the program activities planned for fiscal 1968, and the estimates of cost which are attached to these activities. The Endowment proposes for the fiscal year 1968 a budget totalling $6 million dollars in Federal funding for its program activities. The budget is in accord with the funding recommended by the President's budget for fiscal 1968 as follows: $5 million for program activities as indicated below, and $1 million as an equal share of the $2 million sought by the National Foundation on the Arts and Humanities to serve as matching funds for unrestricted gifts. The figures represent an increase of approximately $500,000 over the amount available in 1967 for program activities (from approximately $4.5 million to $5 million), and a decrease of $2 million in the amount available to serve as matching funds for unrestricted gifts (from $3 million to $1 million).

I. Fellowships

	Estimated, available, 1967	Estimate, 1968	Increase or decrease (–)
Appropriation: Support of fellowship programs	$1,900,000	$1,950,000	$50,000
Activities:			
Fellowships for young scholar-teachers	860,000	850,000	–10,000
Summer stipends	250,000	300,000	50,000
Senior fellowships	790,000	800,000	10,000

The programs financed under this appropriation are aimed at increasing the pool of effective and dedicated scholars and teachers in the humanities; they achieve this by providing three categories of fellowship support, two of which aim at the young scholar during the first five years of his professional career, and the other of which aims at the mature scholar who is in a position either to complete a work of high significance to the humanities, or to develop a new and promising line of investigation. The three programs are: 1) fellowships for young scholar-teachers; 2) summer stipends for young scholar-teachers; and 3) senior fellowships.

These activities are comprised within the authorization by Congress to the Endowment to "initiate . . . programs to strengthen the research potential of the United States in the humanities," and to "award fellowships and grants to institutions and individuals for training . . . in the humanities." [P.L. 89–209, sec. 7 (c) 2, 3)]. But as Congress in the same legislation authorized the Endowment to apply its programs to "those aspects of the social sciences which have humanistic content and employ humanistic methods" [sec. 3 (a)], it should be borne in mind that all of the Endowment's activities under this appropriation item are open to social scientists as well as humanists, so far as they meet the above definition.

The long-range objective of the fellowship programs is to maximize the national pool of effective and dedicated humanists and social scientists, through the provision of time for sustained study and reflection and the provision of the opportunity to gain access to research materials. In fiscal 1967 and 1968 these programs are in their initial stage of growth, and a certain amount of exploration and experimentation in their operation is essential. The results of the programs in 1967 have suggested certain revisions in the estimates for 1968, which are detailed below. However, the nature of the programs is such that the subactivity categories described below should permit modest flexibility of funds within the total estimate.

1. Fellowships for young scholar-teachers

The critical period in the development of a young scholar occurs during the first five years after his full entry into professional life. If he is able to sustain his intellectual vitality and win recognition and esteem, he may be expected to exert as a teacher and a scholar the leadership which flows from substantial achievement. Unfortunately, during these early years teaching assignments are at their heaviest and opportunities for sustained study and writing are rarely available. To meet the need for such opportunities, the Endowment is awarding approximately 100 fellowships in fiscal 1967 to young scholars to provide support for up to eight months of study at a cost of $860,000; therefore the average stipend is $8,600.

In administering this program, the Endowment has taken particular care to seek out scholars in smaller institutions and in geographical locations where the means of professional development are least accessible. Colleges and universities are permitted to nominate only one candidate each, thus insuring the widest possible distribution among institutions, and review committees have been established in each geographical region, composed of members drawn from the regions' own colleges and universities, to review the regional nominees.

The results of this arrangement were good in fiscal 1967. Even though the period between announcement of the fellowships and the deadline for application was unavoidably compressed (with the result that some eligible institutions did not submit a nominee), the fellowships in 1967 went to 39 states and the District of Columbia, and to institutions ranging from small colleges to major research universities. There is every expectation that in 1968, the geographical spread will be greater still.

In planning this program for 1968, the Endowment sought to remedy an obvious inequity while attempting to keep the cost proportionate to the total appropriation the Endowment can seek. The first year's experience showed that a fixed monthly stipend would be more equitable than a variable one keyed to salary, since in the latter case one penalizes the individual for the poverty of his institution. The cost of the program will decline slightly by the new method of calculating awards. It is anticipated that the program will be operated in fiscal 1968 at the 1967 level; under the new method, the cost will decrease from $860,000 in fiscal 1967 to approximately $850,000 in fiscal 1968 for approximately 100 fellowships. Expansion of the program in fiscal 1968 seems unwise in view of other responsibilities, but as there are some 13,000 young faculty members in the humanities alone who are eligible for this program, a reduction in the program would represent a step backward from the minimal effort, rather than a wise husbanding of resources.

2. *Summer stipends*

Another method for enabling the young scholar to develop his effectiveness in his career of scholarship and teaching is to permit him to spend his summer in study and thought, rather than impelling him of necessity to devote it to an income-producing pursuit. Some universities and colleges, but still far too few, award summer stipends to faculty members; however, the competition for these limited funds is intense, and the young scholar usually does not prevail.

The problem is heightened by an imbalance between institutional funds available for science, and those available for the humanities. For example, at one university, the average yearly figure for summer support of scholars in the sciences is over $41,000; in the humanities it is just over $12,000. A study of 38 liberal arts colleges showed that institutional funds available for support of scholars in the humanities ranged from none to $15,000, with the median between $5–6,000.

To meet this need, and in the hope of stimulating institutions to increase their efforts in this respect, the Endowment awarded 130 summer stipends at a cost of $250,000 in fiscal 1967 among the roughly 13,000 eligible young scholars. Thus, the average stipend was just under $1,900. In administering the program, the same procedures of institutional nomination and regional review were followed as in the fellowship program. The distribution of these stipends was as geographically and institutionally diverse as in the fellowship program.

The Endowment's summer stipends program is probably the easiest and least costly for institutions to emulate; therefore planning for 1968 has been geared to increasing the program's visibility and encouraging institutional participation. The number of such stipends is increased; the stipend, as in the case of the other two fellowship categories, has been set at a fixed amount; and the recipient is permitted to accept institutional or other sources of funding to supplement his stipend. It is anticipated that this arrangement will draw more institutional funds into such programs, both by the financial incentive and by the increase in numbers. Under such an arrangement, the Endowment can offer 200 such awards in 1968 for a cost of $300,000. This represents a rather small increase over the 1967 cost (see our letter to the House and Senate appropriations committees dated January 20, 1967), but a significant increase in the number of awards granted.

3. Senior fellowships

The third program under this appropriation item, the senior fellowships, aims at providing up to a year of time for uninterrupted research, thought, and writing for mature scholars in the humanities and social sciences. The purpose is to enable such scholars, academic and nonacademic, to make a significant contribution to their field, to scholarship generally, and to the general public. Such opportunities have been numerous in the sciences, and the enormous effect they have had in the production of scientific insight and advance indicates what they can achieve in the humanities and allied fields.

As the thrust of this program is to provide support for those who are likely to achieve significant break-throughs, the administration differs from the two young scholar-teacher programs. No institutional nomination is required, and applicants are evaluated in terms of their past performance and the promise of significant achievement. A national panel of distinguished practitioners of the humanities and the social sciences has been established to review the applications without regard to institution or geographical location. It is perhaps not much of an exaggeration to say that this program of senior fellowships may become the most distinguished award made in the humanities. In fiscal 1967, 57 such fellowships were awarded at a cost of $790,000. The average figure was thus $13,860. The bulk of the recipients were scholars of national reputation, and some of international reputation, in the fields of the humanities.

In planning the program for 1968, the 1967 experience again recommended operation upon the basis of a fixed monthly stipend rather than one keyed to salary for the same reasons which apply in the other programs. However, in the senior fellowship program this method may increase the average cost of each fellowship, because applicants are permitted to seek support for a longer range of time than in the other two programs, and the period of time, rather than amount of salary, will determine level of support. The program cost remains at approximately the 1967 level (the increase is from $790,000 to $800,000), and the program should be able to grant within the range of 50-60 fellowships for that amount.

It was with some difficulty that the decision was made to seek to maintain the activities under this appropriation item at their fiscal 1967 level. The reaction to the 1967 activities has been highly favorable, and under ideal circumstances an increase in the level of support would be sought. However, this is the largest single appropriation item as it stands, and to increase it significantly would eviscerate the ability to carry out other legislative mandates.

Examples of activities supported under this appropriation in fiscal 1967.—With funds provided by this appropriation in fiscal 1967 for senior fellowships, several studies will be made which will increase knowledge and understanding of the American experience: as one scholar studies the role and development of the American West in the 20th century, another will seek to interpret the major shifts of emphasis which occurred in American society and culture during the Second World War; a third will study deeper roots of American politics by examining the emergence of "Virginia's governing class" in the 18th century. Other scholars will be exploring matters farther afield—one, for example, a political scientist, will be studying the development of political sociology as a branch of political science and sociology.

The accomplishments of the fellowships and summer stipends for young scholars are likely to be reflected in their increased competence as teachers and scholars in their field over the whole of their professional career. But some indication of probable accomplishment can be found in examples of their proposed use of the awards. As one scholar uses the funds to make a study of the role of Woodrow Wilson in Mideastern nationalism during World War I, another will be quite independently examining the relations between Britain and the Mideast during the same period; the two efforts taken together will reinforce understanding of the complex roots of modern political problems in the Mideast. Another scholar will undertake a re-examination of the poetry of Wordsworth, while others will be seeking greater understanding of the development of concepts of political representation in the middle ages, the concept of moral virtue in the works of Aristotle, the changing role of women in 19th-century America, and the public careers of Senators Vandenberg and Bricker.

II. Research and publications

	Estimated available, 1967	Estimate, 1968	Increase or decrease
Appropriation: Support of research and publication programs	$1,508,000	$1,750,000	$242,000
Activities:			
Support of research	1,158,000	1,400,000	242,000
Support of editing and publication	350,000	350,000	--------------

The programs financed under this appropriation item are aimed at development and application of new knowledge in the humanities, and at providing new methods of making accessible to scholars the work which has previously been done in their areas of interest. Additionally, they seek to support the publication of works of particular importance to the scholarly and general communities which are not easily available. The activities are 1) support of research; and 2) support of editing and publication.

These activities are comprised within the authorization by Congress to the Endowment to "initiate and support research and programs to strengthen the research potential of the United States in the humanities by making arrangements (including grants, loans, and other forms of assistance) with individuals or groups to support such activities," and to "support the publication of scholarly works in the humanities." [P.L. 89–209, sec. 7(c) (2), (6)]. As in the case of the programs described under the fellowships appropriations item, these programs provide support not only to scholars in the humanities, but also to those in the social sciences whose work falls under the definition of P.L. 89–209: "those aspects of the social sciences which have humanistic content and employ humanistic methods." [sec. 3(a)]

The long-range objective of these programs is to provide support at a level which will permit the nation's scholars in the humanities to maximize, both in extent and in sophistication, the research potential of this country; and eventually to bring this research to bear on the improvement of public and private life. The further objective is to provide this support in ways which are flexible enough and various enough to fund major projects involving the collaboration of many scholars in differing fields and small-scale projects of individual scholars or small groups of scholars. In fiscal 1967 and 1968 the programs are being operated at a level which in general permits only the latter kind of support; but such operation is probably necessary groundwork for later expansion.

As activities under this appropriation item increase in variety and level of funding over the long term, each will develop a higher degree of specificity—for example, it may be desirable in the future to offer a separate program of support for the humanistic aspects of the social sciences; it may be desirable to offer special programs aimed at fields in the humanities which appear relatively underpopulated or unproductive when compared with other fields; it may be desirable to strengthen the ability of American scholars to participate in the international aspects of some kinds of scholarly research; and it may be desirable to offer a program which enables humanistic scholars to use computers as more than a labor-saving device in their research. However, in light of other responsibilities of the Endowment, no new programs are sought in fiscal 1968, and the increase sought for on-going programs is only slightly above the fiscal 1967 level.

1. Support of research

As little Federal support is available for research in the humanities (less than 0.5% of Federal funds for support of research in fiscal 1965, according to the 18th report of the House Committee on Government Operations), the Endowment is attempting to draw the boundaries of eligibility for this program as wide as possible. Individuals and groups of scholars in all fields of the humanities and social sciences are eligible for support; affiliation with an academic institution is usual but is not mandatory. The research supported under this program ranges from precisely-defined studies of particularly important points in the various fields to syntheses based upon the combination of established knowledge and new research. The program places at the forefront the national interest in the development and strengthening of research potential in the humanities, but it cannot be expected that all such research will be of immediate applicability any more than all scientific research is of immediate use.

The program is administered in such a way as to draw evaluations of applications for support from a wide spectrum of competent scholars in a variety of fields. Panels comprised of scholars from all over the country have been established to make recommendations upon applications; in addition individual scholars of marked distinction are used to give preliminary evaluations of applications received. In view of the thrust of this program, which is to develop the strongest possible programs of research in the humanities, it is not desirable to establish any criteria, other than exceedingly high quality and fundamental importance, for funding projects.

In fiscal 1967, approximately 100 applications for research support were strongly recommended for funding by the panels and referees, and 66 more were recommended for support contingent upon available funds. If the Endowment had granted the requested amount of support for the 100 strongly-recommended applications, the cost of the program would have been approximately $2,830,000, and the average cost per grant would have been approximately $28,300. Three measures were taken to bring costs within the available funds for 1967 of $1,158,000: 1) no grants were made for a period of longer than one year; 2) if it was apparent that a substantial and discrete achievement could not be completed in a one-year period, no grant was made; and 3) in almost all cases where it was possible, a partial grant, rather than the amount requested, was provided, in the expectation that other sources of funds would be sought or that, if such efforts were not successful, a substantial achievement would nevertheless ensue from the grant. By these methods the program was able to make grants to 78 out of the 100 strongly-recommended applications, at an approximate average grant cost of $14,850. This average cost figure is just over half the average amount requested by the applicants.

In planning the program for fiscal 1968, it was clear that, even assuming a stable volume of strongly-recommended applications, additional funds would be desirable; it was further apparent that, with growing awareness of the program in the scholarly community, the volume would not be stable, but would increase (in the first four years of the operation of the National Science Foundation, volume of application increased in a comparable program 220%, and averaged a 30% annual increase). Finally, it seemed wise, in view of the Endowment's other activities, that the increase sought should be a modest one. It is planned to operate the program in fiscal 1968 at a cost of $1,400,000; this is an increase of $242,000 over the 1967 cost. If the three measures mentioned above are applied (one-year grants, no grants to projects which cannot make substantial achievement in one year, and partial grants wherever possible), it should be possible to maintain approximately the same ratio between the number of applications strongly recommended and the number of grants made. It is desirable at this time to maintain flexibility as to the number and magnitude of grants to be made within the total program estimate for fiscal 1968, since the figure depends on the nature of the projects, the concrete possibility of other sources of support in each instance, and the feasibility of partial funding in each instance.

2. *Support of editing and publication*

At present, this activity is limited to support for the editing of definitive editions of major American authors, and a study of the most practical and desirable way for the Endowment to implement its legislation mandate to "support the publication of scholarly works in the humanities." [P.L. 89–209, sec. 7(c)(6)].

As in the case of support of research, two quite different kinds of support of two quite different magnitudes of cost can be provided under this mandate. One kind is support for large-scale multi-volume projects involving the work of many scholars working on various segments of the overall task; this is in fact the kind of project which is conceived by several groups which have applied to the Endowment for support. The other kind of support is for single volumes or individual periodicals involving the work of a single scholar or a small group, and in which the major cost of support is not usually reflected in salaries and wages, but in costs incidental to the production and dissemination of the scholarly work.

In fiscal 1967 the Endowment is supporting a large-scale project to produce definitive texts of several major American authors; the advantage of such a project is that it is likely to benefit from the collective expertise and judgement of dozens of competent scholars, and that the consequent result will be production of texts with consistent standards of scholarship and format. No direct support is being given for the second kind of project, but a study grant is being made to representatives of university presses to ascertain, in consultation with other publishers and with scholars in the humanities, the present and future needs of support for the publication of scholarly works. Until the study is completed, it would be premature for the Endowment to expand its efforts in this respect, though it is anticipated that a very small sum of money (approximately $50,000) can be expended on this kind of project in fiscal 1968.

The cost of the publication support program in fiscal 1967 was $350,000, and it is desired to maintain it at that level of funding in fiscal 1968.

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The activities described above for fiscal 1967 represent in effect a report to Congress on the Federal activity in support of basic research in the humanities and their allied disciplines, because these programs are virtually the only Federal ones with this focus. Although it seemed unwise to seek major increments in the program costs in fiscal 1968, the examples cited below indicate the value of the programs, and point to the national benefits which will accrue when a higher level of funding is possible.

Examples of activities supported under this appropriation in fiscal 1967.—With funds provided for scholarly research by this appropriation in fiscal 1967, a group of literary scholars will continue an imaginative investigation into the role which popular literature has played in shaping American attitudes; another group from a broad spectrum of fields will examine China in the 14th through the 17th century, a period crucial in the development of Chinese civilization; a political scientist and his colleagues will be investigating the personal, political and social attitudes of early members of the Nazi party in the hope of arriving at new understanding of the conditions under which such political parties arise; approximately 36 American scholars of international reputation will be enabled to exercise leadership in international scholarly societies; a group of scholars assembled from differing fields will continue their efforts to provide a method whereby all scholars of American history and allied fields can gain easy access to scholarly information in their fields; and another group will be seeking to assemble comparative historical data on American and other major nations.

With the help of funds provided under this appropriation in fiscal 1967 for support of editing and publication, 15 volumes of the works of Emerson, Thoreau, Hawthorne, Whitman, and other major American authors, will be completed in definitive scholarly editions.

III. Educational and public programs

	Estimated available, 1967	Estimate 1968	Increase or decrease (−)
Appropriation: for support of educational and public programs.	$832,000	$1,150,000	$318,000
Activities:			
1. Education programs	274,000	660,000	386,000
a. Elementary and secondary	148,660	300,000	151,340
b. Institutional programs	61,340	215,000	153,660
c. Teaching internships	64,000	100,000	36,000
d. Experimental programs	----------	45,000	45,000
2. Public programs	508,000	490,000	−68,000
a. Communications	208,000	140,000	−68,000
b. Museums and historical societies	300,000	240,000	−60,000
c. Experimental programs	50,000	110,000	60,000

The United States in the second half of the twentieth century finds itself the world's materially and technologically richest society; yet there is growing concern at the imbalances in our society's intellectual life. Emphasis on science and technology, materialism and affluence do not alone enrich the quality of human life nor do they satisfy the deeper aspirations of our citizens.

The tone of a civilization stems from the attitudes woven into the minds of its people in their formative and most receptive years: the books and poetry (and today television) that one comes to appreciate in childhood; the intellectual stimulation in the classroom; the music and plays and films that sparkle the imagination; the knowledge of great books, history, philosophy and art that are the essence of the stimulus for richer understanding of life.

The Humanities Endowment has a unique role in seeking ways to foster these intangible qualities through the programs financed under this appropriation using the existing structure of American education, and using the channels of communication open to the inquiring minds of the general public. The programs are divided into two activities (1) aimed at furthering knowledge of humanities through formal education and 2) aimed at stimulating interest in the humanities in areas, other than formal education, which affect the general public. When these are accomplished, or well begun, the Endowment can increase efforts to encourage the use of humane knowledge in decision making.

These activities are comprised within the authorization by Congress to the Endowment to "develop and encourage the pursuit of a national policy for the promotion of progress . . . in the humanities," to "foster the interchange of information in the humanities," and to "foster, through grants or other arrangements with groups, public understanding and appreciation of the humanities." [P.L. 89-209, sec. 7(c)(1), (4), (5)]. As in the case of the programs described under the preceding appropriation items, the activities funded here provide support not only to those in the humanities, but also to those in the social sciences whose interests fall under the definition of P.L. 89-209: "those aspects of the social sciences which have humanistic content and employ humanistic methods." [Sec. 3(a)]

The long range objective of these programs is to provide support for innovation in formal instruction and in means of presenting humanistic knowledge to the general public, and to provide support in such ways and at such levels of funding that the status of the humanities in the schools and among the general public will be dramatically raised. In the initial stages of these programs it is desirable to permit some flexibility of funds between the programs, which are in an exceedingly complex area where Federal and other public agencies, as well as private organizations, have large and various programs.

In both of the activities included in this appropriation item, the Endowment has sought to administer its programs in such a way as to draw forth the maximum amount of outside consultation and evaluation. Panels of competent experts, consultants drawn from various areas of operation, and individual scholars in various fields have advised the staff on the structure of the programs, solicitation of applications, and evaluation of applications. In many instances all of these processes have been brought to bear on each application received; and in all instances at least one of these methods has been used to achieve appropriate outside opinion, both as to the programs themselves, and as to the applications within the programs.

In every case, an important consideration has been the availability of other sources of funds—whether Federal, local, or private. A consistent effort has been made to refer applicants whose proposals seemed eligible for other Federal programs of support to those sources; and in general, the programs have been administrated in close consultation with other Federal educational agencies, such as the Office of Education, the National Science Foundation, and the National Endowment for the Arts.

(1) Education programs

In carrying out the programs in formal education, the Endowment has been mindful of the fact that potentially supportable educational projects often come from the same constituencies receiving attention and funding from other agencies of the Federal Government (for example, the Office of Education) and from private foundations. Therefore, the Endowment seeks to play an innovative, supportive and an evaluative role, while at the same time establishing consultative and cooperative arrangements with the various Federal and private agencies. Three programs are presently funded under this activity: (a) strengthening the humanities in elementary and secondary education; (b) institutional programs for strengthening the humanities in higher education; and (c) improving the quality of teaching in the universities through an internship program.

In fiscal 1967, the amount available for these three programs is $274,000. In fiscal 1968, the Endowment is seeking to increase the funding for this activity to $660,000.

(a) *Elementary and Secondary Education.*—Improvement of the teaching of the humanities in the nation's elementary and secondary schools is the broad aim of this program in the appropriation activity. Significant public and private support already exists for the development of curricula affecting the humanities in the schools, particularly at the secondary levels of education, but these developments have only partially been disseminated into the nation's school system. Good basic curricula exist in many fields, but the gap between development and application remains large. This reflects lack of strong rapport between the universities, which have developed the curricula, and the schools, which must decide whether to accept and apply them.

In fiscal 1967, the Endowment is supporting, as one aspect of this program, efforts which will bring school personnel into a continuing relationship with college and university teachers so that they will together contribute to the application of new and effective methods of teaching humanistic subjects. The typical vehicle for curriculum dissemination is the summer institute or workshop, but mechanisms for continual give and take between the innovator and practitioner have been emphasized in the projects being supported. In fiscal 1968, a modest expansion of this aspect of the program is anticipated; the volume of applications will grow as a result of increasing awareness in the schools of the Endowment's concern with the problem of more effective curriculum dissemination.

Through the encouragement of proposals for new and important techniques in the teaching of humanistic subjects, the Endowment hopes to support projects which will not only ultimately benefit the academically oriented student, but the student whose educational career is primarily vocational in emphasis. Additional study and experience needs to be gained in the definition of what can fruitfully be supported in strengthening or introducing humanistic content into vocational schools. Concurrently, the Endowment is concerned with the effort to enrich the lives of culturally deprived students, bearing in mind that cultural deprivation is not limited to low income levels. This is another aspect of the overall program effort to use the humanities as a vehicle to help youngsters understand and appreciate the world, their cultural and ethnic heritage, and themselves. In fiscal 1967, modest support is provided for a project which imaginatively attacks the problem of providing culturally disadvantaged children with an exposure to the humanities they have no present means of achieving. This is an area of concern which is planned for gradual expansion in fiscal 1968.

In fiscal 1967, $148,660 was available for support of projects to improve humanities teaching in elementary and secondary schools. In fiscal 1968, the Endowment wishes to increase the level of funding for this program to $300,000 so that it may increase its support for imaginative projects in curriculum dissemination, in qualitatively increasing the humanistic knowledge of teachers, in strengthening the humanistic content of vocational education and in enhancing opportunities for culturally disadvantaged children.

(b) *Institutional programs.*—The long range aim of this program is to improve higher education, and specifically to revitalize, reorganize and strengthen the teaching and content of humanities in the colleges and universities of the country. The task is to accelerate the infusion of humanistic and artistic thought, awareness and activity throughout the fabric of American higher education. In the long run the aim is to broaden the range and number of institutions providing a more hospitable climate for the humanities and social sciences; to enlarge the ranks of humanists and to recruit more first rate individuals into the humanities and social sciences; and to enable humanists to claim a more incisive voice in higher education.

Initially in fiscal 1967 with limited funds, the Endowment is supporting projects for institutional cooperation planned to encourage colleges and universities in the same vicinity to take mutual advantage of their respective facilities and resources. In this manner, research interests of college faculties can be kept alive and stimulated; and a cross-fertilization of teaching ideas can take place. Exchanges of faculties and students, reciprocal use of libraries, joint colloquia and departmental seminars, and joint planning, research and teaching are the kinds of efforts being encouraged as a means to more effective teaching in the humanities.

In fiscal 1968, this type of project should be modestly expanded to support development of new methods of teaching. These might take the form of experimenting with use of personnel, imaginative use of new technology and media, the development of interdisciplinary curricula and other innovations. The result of innovations within disciplines and between disciplines in the humanities and the social sciences should be to create teaching and teaching materials which make humanistic scholarship more relevant to each other and to daily life. Humanistic studies are less subject to a speedy reevaluation and revision of curricula than are the scientific subjects. But coherent steps, such as those described above, can be taken to strengthen the teaching of humanities in undergraduate and graduate education.

Concurrently, professional education, well regarded in this country and abroad, is nevertheless criticized for its highly specialized content and the absence of a broad humane context in which technical matter is studied and taught. Technical and professional schools are themselves concerned about this problem and efforts by some institutions to find ways in which the human understanding of professional persons can be increased is encouraging. The Endowment seeks in fiscal 1968 to provide support for projects which demonstrate imaginative approaches to this problem.

The Endowment is also mindful of the significant role that junior or community colleges are playing within the spectrum of higher education. These colleges now enroll one-third of all entering freshmen in college, and before many years will enroll over one-half. There are now some 800 junior colleges, and the number is growing annually by 40 to 50 such institutions; state-wide systems are developing and many metropolitan areas are establishing multicampus junior college systems. In fiscal 1968, the Endowment includes this dynamic sector of higher education in its efforts to find ways of improving instruction in the humanities. In support for junior colleges particular attention will be directed at the role of the humanities in the education of those students who may not continue further formal education.

In fiscal 1967, $61,340 was available for institutional programs. In fiscal 1968, gradual and careful broadening of this program is sought at an estimated cost of $215,000. Discussions with the academic community indicate that this program could usefully absorb much larger funding; however, because of other Endowment responsibilities this program requests an increase which is modest relative to the needs.

(c) *Teaching internships.*—Although no sharp distinctions can be made, it is generally true that colleges excel in teaching, and universities in research. In fiscal 1967, the Endowment has established a teaching internship program which uses the college environment as a training ground for potential university instructors. A small number of colleges are designing experimental courses in which a committed younger university teacher can participate for a year under the guidance of a master teacher. It is expected that the resident teacher will return to a university department with an increased capacity for imparting his knowledge of humanistic subjects to undergraduate students. The response of colleges and university departments to this innovation for improving the calibre of teaching has been encouraging. The Endowment hopes to enlarge this program from the present level of $64,000 to $100,000 in fiscal 1968.

(d) *Experimental programs.*—In the educational programs activitiy, the Endowment is in the initial stages of developing and defining the specific efforts to achieve an environment in our schools, colleges and universities where the humanities can flourish and develop immediacy and relevance in the lives of students and teachers. A small amount of funding is requested for fiscal 1968 which would enable the Endowment further to test methods of implementing objectives and to support pilot demonstrations which will point the way to new programs for the future.

Adult continuing education is an example of an important and increasingly essential aspect of the educational scene which is becoming accepted as a part of the responsibilities of our educational institutions. Continuing education, not so much in the sense of continuation of formal education or in the sense of remedial courses, but rather as a way of transferring systematic learning processes themselves to the interests and demands of adult life, is becoming a major interest of large numbers of the public. The Endowment believes it can help broaden the commitment to adult education for a variety of groups and individuals.

Fruitful experimentation can be attempted in many other areas: such as channeling the increasing involvement and commitment by students themselves to help in the education of others who have had more limited opportunities; developing methods of early identification of outstanding students for careers in the humanities; and developing pilot projects of a humanistic nature for the benefit of occupational and professional groups.

The $45,000 requested for seeking new methods in fiscal 1968 is small, but it is projected within the limitation of a total request of $660,000 for formal education programs.

2. *Public programs*

The second activity included in this appropriation item aims at creating public appreciation of the humanities, and at developing and fostering the ability to apply humanistic method and humanistic content to the problems of public and private life. Three programs are presently funded under this activity: (a) strengthening the humanistic capacities of various communications media; (b) strengthening the training of museum and historical society personnel; and (c) experimental programs, which will permit the Endowment to gain small-scale experience in new areas prior to development of full-fledged programs or activities.

In fiscal 1967, the amount available for these three programs is $558,000. This is about 12% of the Endowment's total available 1967 funds; as such, it reflects the desire of the Endowment to spend a small amount well in an area where Federal and other public agencies, as well as private agencies, have various programs. Although a decline of $68,000 from the 1967 level is shown by the 1968 estimate of $490,000, in fact the funding of on-going programs would rise by $42,000, since the decline is caused by the termination of the Endowment's talking books program, which new legislation relating to the Library of Congress has permitted the Endowment to discontinue. The modest rise of $42,000 sought for on-going programs reflects the other pressures on Endowment funds, in view of which it seems unwise to plan for a dramatic increase in the funding level of this activity during the next fiscal year.

(a) *Communications media.*—The aim of this program is to improve qualitatively those media which customarily bring the general public into direct contact with the subject matter of the humanities. The media upon which this program concentrated in fiscal 1967 were television, "talking books," and the press. For fiscal 1967 the Endowment was appropriated $100,000 to fund a study of educational television and radio. A grant is being made for that amount to underwrite a study, by competent persons in the field, of the present quality of presentations in the humanities on instructional television, to suggest ways in which the presentations can be improved qualitatively, and to produce and submit model presentations of humanistic content of exceptional quality. The Carnegie Commission on Educational Television in its report expressed the hope that Federal and other agencies would study the role of television in formal instruction. In view of the Commission's recommendations, the Endowment decided to focus initial attention on a study of instructional television. It is anticipated that the result of the study will affect the thrust of efforts in fiscal 1968, but it seems clear that if the Endowment is to support significant humanistic improvement in the visual media over the long run, it will need to expand its efforts into public educational television as well as instructional television, into instructional films and video-tape libraries for the schools, and perhaps indirectly, into commerical television. In fiscal 1968, the funding sought remains at approximately the 1967 amount.

For 1967 the Endowment received an appropriation of $100,000 for the development of talking books to be made available to persons other than the blind. New legislation enabling the Library of Congress to continue such efforts makes it unnecessary for the Endowment to seek further funds for this effort in 1968. An experimental effort for 1967, which has received an enthusiastic response, was to grant funds to a non-profit organization with long experience in the production of "talking" books for the blind, to produce new titles in the humanities to be experimentally disseminated to a small group of cooperating hospitals, for the use of temporarily handicapped patients who are unable to read by conventional means. It is expected that experience with the Endowment-funded effort will lead local groups to continue the effort with their own funds. A further benefit is that the "talking" books, which may run to over 1600 new titles in the humanities, will be made available to the Library of Congress for distribution by its 34 regional libraries, as well as under the new legislation which permits distribution to handicapped persons other than the blind. In addition, such recordings could be broadcast by radio stations to a general audience.

The final effort in the communications program in fiscal 1967 was to support initial planning of a program for the qualitative improvement of journalistic critics; as the effort is expanded in subsequent years, it will permit critics to deepen their understanding of the humanistic environment, thereby providing the public with a more stimulating and informed basis for reacting to literature, the performing arts, scholarship, and education.

The Endowment seeks funding in fiscal 1968 for the communications media program at approximately the fiscal 1967 level. The "talking" books program will be terminated, but an increase of $42,000 is sought for on-going efforts. In the case of television, the plan is to broaden the definition of proposals eligible for support to include new methods of producing films for instructional or educational purposes in the humanities, and the particular interest of the Endowment will be in establishing closer relationships between scholars and teachers in the humanities on the one hand, and the actual producers of the films and video-tapes on the other. In the case of critics, further planning grants, and perhaps a small grant for an experimental critics program, will be made in fiscal 1968; but it is not expected that such efforts will involve a major portion of the program funds for communications media.

(b) *Museum and historical society personnel.*—In the view that the museums and historical societies of the nation are a major untapped source of humanistic understanding, the Endowment is operating a program in fiscal 1967 which aims at the most critical need of these institutions: upgrading the competence of their professional staff by in-service training and by the training of new personnel for the field. In the current fiscal year, grants are being made for cooperative ararngements between museums and universities to expand the educational and training opportunities for students who intend to make their professional career in museums and historical societies; other grants are being made to bring personnel who are presently full-time staff at small museums into the environment of a large teaching museum where they can, for a designated interval, deepen their subject matter knowledge and improve the skills necessary to impart this knowledge effectively through collections and exhibits; still other grants were made to enable museum and historical society personnel to participate in short-term training seminars and training institutes. The cost of this program in fiscal 1967 was $300,000. In 1968, as in fiscal 1967, these efforts will be coordinated with those of other agencies by a committee of the Federal Council on the Arts and Humanities.

It is planned to operate the program at a slightly lower level of cost in fiscal 1968; $240,000 is the estimated cost. The funds freed by the reduction will be applied to the third program under this activity, the experimental programs.

(c) *Experimental programs in new areas.*—In fiscal 1967, a small sum was allocated to make grants which would enable the Endowment to test methods of implementing objectives before seeking substantial levels of funding. In fiscal 1967 only one such grant is being made, for a study of the feasibility and desirability of establishing a center or centers in which outstanding or promising people from the whole range of the humanities and the social sciences are included. In such a setting, the interchange of information in the humanities and among humanists and social scientists could be facilitated, and the interplay of disciplines heightened. The center or centers would serve an educational purpose; but hopefully they would also demonstate the relevance to public and private life of the humanities and allied disciplines, both in the interests of the members and in the dissemination of their teaching and scholarship.

If the feasibility study of the center progresses adequately in fiscal 1967, it will be funded to completion in fiscal 1968. In addition, in fiscal 1968 other experiments will be funded—for example, it may be desirable to make a small grant to explore the possibility of cooperative educational programs in the humanities between schools and museums, or to make a grant to test the validity of the planning of the critics program, or to make a grant for a pilot-program in an aspect of communications media. In order to have the capacity to carry out such experiments, the Endowment seeks a budget for experimental programs in this activity category of $110,000 in fiscal 1968, as opposed to $50,000 in fiscal 1967.

The total funding sought for the activities under this appropriation item in fiscal 1968 is $1,150,000, an increase of $318,000 over the 1967 cost. Even with this increase, the amount is markedly smaller than that requested under the two previous appropriation items. As soon as possible, the Endowment will seek to bring this appropriation up to parity with its other appropriations; but in view of the overall authorization ceiling, the fiscal 1968 requested increase is as far in that direction as it seems possible to move at present. It is anticipated that most gifts from private sources will be used in this area.

Examples of activities supported under this appropriation in fiscal 1967.—With funds provided by this appropriation in fiscal 1967, secondary schools in five school districts will establish cooperative summer programs with neighboring universities to improve the competence of teachers in a variety of humanistic disciplines; children who have never read—or even seen—a book, will be encouraged to appreciate reading and book-ownership; teachers in Alaska and elsewhere will gain a greater knowledge and appreciation of Alaskan history, classroom teachers and instructional television producers will develop closer relationships and new methods to improve materials used in instructional television; an association of thirteen neighboring colleges will exchange faculty and other resources among themselves and with nearby universities in order to strengthen their teaching and curricula in the humanities; and museum curators will learn how to understand and display their collections to better effect.

IV. Planning and development

	Estimated available, 1967	Estimate, 1968	Increase or decrease (−)
Appropriation and activity: Planning and development	$260,000	$150,000	−$110,000

The appropriation language submitted to the Congress for the National Foundation on the Arts and Humanities in fiscal 1968 contains the provision that not to exceed 3% of the funds appropriated for the programs of each Endowment shall be available for program development and evaluation. This section of the justification explains why such a provision is desirable; but it also explains why, irrespective of the legislative provision, the Endowment is requesting funds to be appropriated specifically for program planning and development.

By statute the National Endowment for the Humanities is directed to "develop and encourage the pursuit of a national policy for the promotion of progress and scholarship in the humanities." It is given the additional responsibility by law of fostering the interchange of information in the humanities, and encouraging public understanding and appreciation. [P.L. 89–209, sec. 7(c) (1), (4), (5)]. To fulfill its missions, the Endowment must assemble reliable information and conduct studies significant for the development of its programs and policies, but also significant for the development of a national policy for the humanities.

The Endowment therefore has a dual responsibility with respect to development and planning. For the agency to function effectively it should acquire the quality and quantity of information which allows it to maximize its impact on the humanities while expending the minimum possible of Federal funds. The information assembled for this purpose should then be susceptible to combination with other information in order to "foster interchange" and "encourage public understanding and appreciation."

In fiscal 1967 the Endowment is providing support for efforts useful to the Endowment itself but also useful to the academic and educational community. A study will be made of the strengths and weaknesses of teaching in the humanities at the level of higher education. Such a study will suggest activities which the Endowment ought to support; but equally important, it will provide food for thought for educators concerned with strengthening the humanities in the colleges and universities, and for the general public interested in higher education.

In fiscal 1967 another study is planned to determine whether a visiting scholars program in which personnel from the colleges and universities are consistently involved with secondary school personnel all over the country is feasible and desirable. The various organizations which have made partial efforts to provide this kind of service will be involved in the study, and the hope is that out of the study will come greater national visibility for the need to think of all education—not just humanistic education—as a joint responsibility of instructors at every level of the educational enterprise.

In fiscal 1967 and continuing in 1968, the Endowment, with the cooperation of the National Endowment for the Arts and the Office of Education, plans to establish a commission on the humanities in the schools, for the purpose of assessing and defining the proper status of the humanities in the schools, of determining the probable effect of on-going curriculum development project and of devising practical steps to maximize their impact.

The nature of planning and development grants is such that they are not administered in open competition; however, all grants are reviewed by outside evaluators and by committees of the National Council on the Humanities prior to award.

In fiscal 1968 the amount sought for planning and development grants is decreased $110,000 from the fiscal 1967 level of $260,000 to $150,000; this reflects the desire to allow the maximum amount of funds to be available for action grants under the other three appropriation items, while leaving a minimum amount available for program development and evaluation.

APPENDIX A

Fellowships offered by the National Endowment for the Humanities, fiscal year 1967 [1]

[Fellowships are listed by State, institution, and number and kind of fellowship support on an awards offered basis]

State and institution	Younger scholars	Summer	Senior
Alabama:			
Birmingham-Southern College	--------	1	--------
University of Alabama	--------	1	--------
Alaska: University of Alaska	1	1	--------
Arizona:			
Arizona State University	1	--------	--------
Northern Arizona University	1	1	--------
University of Arizona	--------	1	--------
Arkansas: University of Arkansas	1	--------	--------
California:			
California State College (Long Beach)	--------	1	--------
California State College (Los Angeles)	1	--------	--------
Claremont Men's College	--------	1	--------
Occidental College	--------	1	--------
University of the Pacific	1	--------	--------
Sacramento State College	--------	1	--------
San Fernando Valley State College	--------	1	--------
Stanford University	1	--------	--------
University of California (Berkeley)	1	1	3
University of California (Davis)	--------	--------	2
University of California (Irvine)	--------	1	--------
University of California (Los Angeles)	--------	1	4
University of California (Riverside)	1	1	2
University of California (San Diego)	1	1	1
University of California (Santa Barbara)	1	1	--------
University of Southern California	1	--------	1
Connecticut:			
University of Connecticut	1	1	--------
Wesleyan University	1	--------	--------
Yale University	1	--------	3
Colorado:			
Colorado College	--------	--------	1
Colorado State University	--------	1	--------
University of Colorado	--------	1	--------
District of Columbia:			
Catholic University	--------	1	--------
George Washington University	--------	1	--------
Trinity College	1	1	--------
Florida:			
Biscayne College	--------	1	--------
Florida Presbyterian College	--------	1	--------
Florida State University	1	1	1
University of Florida	1	1	--------
University of Miami	--------	1	--------
University of South Florida	--------	1	--------
Georgia:			
Emory University	--------	1	--------
University of Georgia	1	1	--------
The Woman's College of Georgia	--------	1	--------

See footnote at end of table.

Fellowships offered by the National Endowment for the Humanities, fiscal year 1967[1]—Continued

[Fellowships are listed by State, institution, and number and kind of fellowship support on an awards offered basis]

State and institution	Younger scholars	Summer	Senior
Hawaii: University of Hawaii	1	1	1
Illinois:			
Concordia State Teachers College	1	--------	--------
Illinois Institute of Technology	1	--------	--------
Illinois State University	--------	1	--------
The Newberry Library	--------	1	--------
Northern Illinois University	--------	1	--------
University of Chicago	1	1	--------
University of Illinois (Chicago)	1	1	--------
University of Illinois (Urbana)	--------	1	1
Indiana:			
DePauw University	1	--------	--------
Indiana University	--------	1	2
Purdue University	1	1	1
University of Notre Dame	1	1	1
Iowa:			
Grinnell College	--------	1	--------
Luther College	1	1	--------
Morningside College	--------	1	--------
University of Iowa	1	1	1
Kansas:			
Baker University	--------	1	--------
Fort Hays Kansas State College	1	--------	--------
Kansas State University	1	1	--------
University of Kansas	1	1	--------
Kentucky:			
University of Kentucky	--------	1	--------
University of Louisville	1	--------	--------
Louisiana:			
Tulane University	--------	1	--------
University of Southwestern Louisiana	1	--------	--------
Maine: Colby College	1	--------	--------
Maryland:			
Johns Hopkins University	--------	--------	1
Loyola College	--------	1	--------
University of Maryland	1	1	1
Massachusetts:			
Boston College	1	--------	--------
Boston University	--------	1	--------
Brandeis University	--------	--------	1
Clark University	1	--------	1
Harvard University	--------	1	1
Mount Holyoke College	--------	1	1
Smith College	--------	1	--------
Southeastern Massachusetts Technological Institute	1	--------	--------
University of Massachusetts	1	1	--------
Wellesley College	1	1	--------
Wheaton College	--------	1	--------
Michigan:			
Michigan State University	1	1	1
Northern Michigan University	1	--------	--------
Oakland University	1	1	--------
University of Michigan	1	--------	--------
Minnesota:			
Carleton College	--------	1	--------
University of Minnesota (Minneapolis)	1	1	--------
University of Minnesota (Morris)	--------	1	--------
Mississippi:			
Mississippi State University	--------	1	--------
University of Mississippi	1	--------	--------
University of Southern Mississippi	--------	1	--------
Missouri:			
Stephens College	--------	1	--------
University of Missouri	--------	1	--------
Washington University	1	1	--------
Nebraska:			
Concordia Teachers College	--------	1	--------
University of Nebraska	1	--------	--------
New Hampshire: Dartmouth College	1	1	--------
New Jersey:			
Farleigh Dickinson University	--------	1	--------
Newark College of Engineering	--------	1	--------
Princeton University	1	1	1
Rutgers, the State University	1	1	--------
New Mexico: New Mexico State University	--------	1	--------

See footnote at end of table.

Fellowships offered by the National Endowment for the Humanities, fiscal year 1967 [1]—Continued

[Fellowships are listed by State, institution, and number and kind of fellowship support on an awards offered basis]

State and institution	Younger scholars	Summer	Senior
New York:			
Adelphi University	1	--------	--------
Bard College	1	1	--------
Brooklyn College	--------	1	--------
Long Island University	--------	1	--------
City College of New York	1	--------	1
Colgate University	1	--------	--------
Columbia University	1	1	3
Cornell University	--------	1	1
Fordham University	1	1	--------
Hamilton College	--------	--------	1
Hofstra University	1	--------	--------
Hunter College	--------	--------	1
Keuka College	--------	1	--------
Manhattan College	1	--------	--------
New York University	1	--------	1
Polytechnic Institute of Brooklyn	--------	1	--------
Queens College	1	1	1
St. John's University	1	--------	--------
State University College (Buffalo)	--------	1	--------
State University College (Fredonia)	--------	1	--------
State University College (Genesco)	1	1	--------
State University College (Oswego)	1	--------	--------
State University College (Potsdam)	--------	1	--------
State University of New York (Binghamton)	1	1	--------
State University of New York (Buffalo)	1	--------	--------
University of Rochester	1	--------	1
Utica College	--------	1	--------
Unaffiliated	--------	--------	1
North Carolina:			
Atlantic Christian College	--------	1	--------
Davidson College	1	--------	--------
Duke University	--------	--------	1
North Carolina State University	1	--------	--------
St. Andrews Presbyterian College	--------	1	--------
University of North Carolina (Chapel Hill)	1	1	1
University of North Carolina (Greensboro)	1	1	--------
Wake Forest College	--------	1	--------
North Dakota: University of North Dakota	1	1	1
Ohio:			
Bowling Green State University	1	1	--------
Case Institute of Technology	1	--------	--------
John Carroll University	--------	1	--------
Oberlin College	1	1	1
Ohio State University	--------	1	1
Ohio Wesleyan University	--------	1	--------
University of Cincinnati	1	--------	--------
The University of Toledo	--------	1	--------
Western Reserve University	1	--------	--------
Oklahoma: Oklahoma State University	--------	1	--------
Oregon:			
Oregon State University	1	--------	--------
Reed College	1	--------	--------
University of Oregon	--------	--------	1
Pennsylvania:			
Allegheny College	--------	1	--------
Bryn Mawr College	1	1	--------
Bucknell University	1	--------	--------
Dickinson College	--------	1	--------
Franklin and Marshall College	--------	1	--------
Immaculata College	--------	1	--------
Lehigh University	1	--------	--------
Messiah College	--------	1	--------
Swarthmore College	1	--------	1
Temple University	1	--------	--------
University of Pennsylvania	--------	1	1
University of Pittsburgh	1	--------	--------
Villanova University	--------	1	--------
Rhode Island: Brown University	1	1	1
South Carolina:			
Converse College	--------	1	--------
University of South Carolina	1	1	--------
Tennessee:			
Memphis State University	--------	1	--------
University of Tennessee	1	1	--------
Vanderbilt University	1	1	--------

See footnote at end of table.

Fellowships offered by the National Endowment for the Humanities, fiscal year 1967 [1]—Continued

[Fellowships are listed by State, institution, and number and kind of fellowship support on an awards offered basis]

State and institution	Younger scholars	Summer	Senior
Texas:			
Arlington State College	1	---------	---------
Rice University	1	---------	---------
University of Houston	1	1	---------
University of Texas	1	1	1
Vermont: Middlebury College	1	1	---------
Virginia:			
College of William and Mary	---------	1	---------
Old Dominion College	---------	1	---------
University of Virginia	1	---------	1
Washington and Lee University	---------	1	---------
Unaffiliated	---------	---------	1
Washington:			
Eastern Washington State College	---------	1	---------
Everett Junior College	---------	1	---------
Washington State University	---------	1	---------
West Virginia: West Virginia University	1	---------	---------
Wisconsin:			
University of Wisconsin (Madison)	1	1	1
University of Wisconsin (Milwaukee)	1	---------	---------
Wisconsin State University	---------	1	---------
Wyoming: University of Wyoming	1	1	---------
Total	100	130	57

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[1] In subsequent budget submissions, the endowment will append a listing of fellowships awarded in the fiscal year most recently completed. However, since the present fiscal year is the 1st full year of operation, it seemed more likely to be useful to the committees and to Congress to append a list of fellowships being offered in the present fiscal year.

APPENDIX B

RESEARCH, EDUCATIONAL AND PUBLIC PROGRAM GRANTS AWARDED BY THE NATIONAL ENDOWMENT FOR THE HUMANITIES, FISCAL YEAR 1967 [1]

(Grants are listed by state, institution and approximate amount on a grants offered basis. Multiple grants are indicated by number following the name of the institution.)

State and institution	*Approximate amount*
Alaska: Alaska Methodist University	$9,580
Arizona: Museum of Northern Arizona, Flagstaff	10,000
California:	
Claremont Graduate School and University Center (2)	35,211
Fresno State College	5,300
Lowie Museum, Berkeley	10,000
Occidental College	5,300
Pomona College	5,300
University of California, Berkeley	1,273
University of California, Los Angeles (2)	27,650
University of California, Santa Barbara (2)	16,321
Colorado: Colorado College	5,300
Connecticut:	
American Oriental Society, New Haven	25,000
American Society of Papyrologists, New Haven	19,250
University of Connecticut	16,599
Yale University (3)	79,900
Wesleyan University	5,300

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[1] In subsequent budget submissions, the Endowment will append listing of grants made in the fiscal year most recently completed. However, since the present fiscal year is the first full year of operation, it seemed more likely to be useful to the Committees and to Congress to append a list of grants being made in the present fiscal year. Such a listing is of necessity tentative, and accounts for the fact that some grant totals are approximate.

APPENDIX B—Continued

State and institution	*Approximate amount*
Delaware:	
Dover School District, Dover	$6,500
University of Delaware	32,400
Winterthur Museum, Winterthur	10,000
District of Columbia:	
American Classical League	32,500
American Historical Association (3)	55,600
Center for Applied Linguistics	13,280
Frederick Douglass Institute	20,000
Georgetown University	7,500
George Washington University (3)	72,800
National Academy of Sciences	10,000
Smithsonian Institution	20,000
Florida: Florida State University	12,000
Georgia: University of Georgia	22,104
Hawaii: Bishop Museum, Honolulu	10,000
Illinois:	
Field Museum of Natural History (2)	16,558
Southern Illinois University (3)	31,633
University of Chicago	10,000
Indiana: University of Indiana (3)	48,522
Iowa: University of Iowa (2)	13,196
Kansas: University of Kansas	11,000
Kentucky: University of Louisville	30,000
Maryland:	
Peale Museum, Baltimore	10,131
University of Maryland	10,800
Massachusetts:	
Brandeis University	5,000
Clark University	15,000
Harvard University (2)	53,692
Smith College (2)	31,124
University of Massachusetts	11,448
WGBH Educational Foundation	100,000
Wellesley College	13,890
Michigan:	
Albion College	5,300
Aquinas College	8,976
Association for Asian Studies, Ann Arbor (in conjunction with American Council of Learned Societies)	10,000
University of Michigan	10,000
Minnesota:	
Minnesota Historical Society	5,000
St. John's University	10,000
University of Minnesota	18,728
Missouri: University of St. Louis	11,730
Nevada: University of Nevada	12,027
New Hampshire: Dartmouth College	3,582
New Jersey:	
Princeton University (2)	19,200
Rutgers University	2,294
Seton Hall University	6,000
New York:	
American Council of Learned Societies	25,000
American Research Institute in Turkey	14,000
Clarkson College of Technology	500
Columbia University (2)	46,250
Cornell University (2)	24,994
Modern Language Association	300,000
New York State Education Department	9,300
New York State Historical Association, Cooperstown	10,000

APPENDIX B—Continued

State and institution	*Approximate amount*
New York—Continued	
New York University (4)	$74, 521
Queens College, City University of New York	31, 069
Recordings for the Blind, Inc	100, 000
State University College, Oneonta	32, 400
University of Rochester	5, 550
North Carolina:	
Duke University and University of North Carolina	17, 205
Old Salem Museum, Winston-Salem	10, 000
University of North Carolina	23, 232
Ohio:	
Antioch College	5, 300
Great Lakes College Association	13, 500
Ohio Historical Society, Columbus	20, 000
Ohio State University (3)	43, 873
Pennsylvania:	
Bryn Mawr College (2)	15, 300
Bucknell University	5, 300
University Museum, University of Pennsylvania	10, 000
Tennessee:	
American Association for State and Local History	55, 850
Memphis State University	5, 099
Texas: University of Texas	12, 000
Virginia:	
Colonial Williamsburg, Inc., Williamsburg	10, 000
Randolph-Macon College	5, 300
University of Virginia	19, 495
Washington and Lee	5, 300
Wisconsin: University of Wisconsin (4)	69, 688
Total	2, 156, 834

ADMINISTRATIVE EXPENSES

11.0 Personnel Compensation

The following table shows the number of positions, annual salary rate, average employment or man-years, and net cost for permanent positions, and funds for intermittent employment (Council Members, temporaries, panelists, consultants, and experts) estimated for 1967 from available funds and budgeted for 1968:

	Estimated for 1967				Requested for 1968			
	Positions	Annual rate	Man-years	Net cost	Positions	Annual rate	Man-years	Net cost
Permanent:								
A. Arts	32	$376, 176	28. 5	$342, 600	40	$462, 176	38. 0	$437, 450
B. Humanities	26	311, 373	22. 1	265, 195	30	353, 994	28. 5	335, 055
C. Shared staff	17	161, 257	14. 6	141, 405	31	285, 982	29. 5	270, 627
Total, permanent	75	848, 806	65. 2	749, 200	101	1, 102, 152	96. 0	1, 043, 132
Intermittent:								
A. Arts				24, 000				60, 303
B. Humanities				24, 000				63, 565
Total intermittent				48, 000				123, 868
Total, personnel compensation				797, 200				1, 167, 000

A. PERSONNEL COMPENSATION—NATIONAL ENDOWMENT FOR THE ARTS

1. *Permanent positions.*—An increase of eight permanent positions is requested for the National Endowment for the Arts. The necessity for this request is caused primarily by the increasing volume of grants and proposals to be proc-

essed in all program areas and serious staffing insufficiencies demonstrated by experience. Approximately 33% more proposals are being received in 1967 than were received in 1966. As more new programs are established and funded, this rate will increase, workloads will increase, and staffing needs will increase. The eight new permanent positions are needed in the following units:

a. *Office of the Chairman:*

2 Clerk-Typists	GS-5

The two clerk-typists are requested primarily to assist in answering the heavy and increasing volume of correspondence of the Endowment, Chairman, Deputy Chairman, and National Council on the Arts. The workload on existing staff has already reached proportions which require additional assistance in this area, and will increase still further in 1968.

b. *Office of State and Community Operations:*

1 Clerk-Typist	GS-5

This office is responsible for the administration of the Endowment's program for a partnership with the States beginning in the current year representing one third of the Endowment's total program budget. In all, 102 separate applications were processed and approved under current appropriations. As required by the Act, each State must report to the Chairman on the results of grants made within the year. The States submitted a total of 295 projects for approval, all of which must be evaluated by this office.

In 1968, over 700 projects are expected in applications from all of the States and territories. These must then be evaluated and an equal number for 1969 processed before July 1, 1968, as required by the Act.

In addition to the large volume of evaluation and processing of projects and evaluations done by this office, and the large amount of correspondence and travel necessary to maintain relations with 55 separate and autonomous State arts agencies, this office also provides the other Program Directors with valuable information concerning the conditions of the arts throughout the country. Without professional and clerical assistance much valuable information will not be available for analysis and planning.

c. *Program Directors for Special Arts Programs:*

2 Program Assistants	GS-13
1 Program Assistant	GS-12

The bulk of the workload connected with the increased volume of grants and proposals falls to the Program Directors for the several art form categories. These staff members are responsible for the evaluation of proposals (300-400 in each art form in the Endowment's first year of operation); the evaluation of operating grant programs (of varying sizes and dimensions, from major programs to individual grants); travel and correspondence to maintain liaison with professional associations, private institutions, public organizations, and individuals related to the particular art form; advisory services to applicants and grantees; and the setting up and operation of advisory panels. This workload and the intimate knowledge of the particular art form required in these positions require the employment of one professional assistant for each of these Program Directors in the fields of music, drama, and the visual arts. Further, we have this problem: without these back-up positions not only will important portions of the various programs suffer, but the loss, through sickness or attrition, of any one of the Program Directors would result in a serious set-back to the program. Our Program Directors in the fields of creative writing and architecture and design are also in need of assistants. In the interest of economy, however, it is believed that the above request will meet minimal needs in 1968.

d. *Office of Planning and Analysis:*

1 Director	GS-15
1 Secretary	GS-5

We need an Office of Planning and Analysis—the President has emphasized the urgent need for better planning; the Bureau of the Budget has asked for greater effort in this respect; experience has already proved our need. The primary function of the Office will be to assist in establishing the long-range objectives of the Endowment; planning toward these objectives; integration of this planning with current programs; and the coordination of the total work of the Endowment toward the established objectives.

2. *Intermittent employment.*—In the early stages of our new programs consultants and experts are essential; evaluative panels have proved to be an absolute necessity—as a mater of fact, their use is authorized by our basic law; the Council, in order to be fully effective, should meet four times a year. Experience has emphasized this need.

It should also be pointed out that panelists in 1967, in a number of cases, have been asked to serve without compensation, particularly in the latter half of 1967, because of an acute shortage of funds. We believe that this creates unfair hardships and should not be continued. The compensation costs of such services are estimated as follows:

	Estimated for 1967	Requested for 1968
(*a*) Council members	$10,800	$14,400
(*b*) Council committees	1,200	5,475
(*c*) Panelists	3,875	21,000
(*d*) Consultants and experts	8,125	19,428
Total	24,000	60,303

a. *Council:*	
4 2-day meetings averaging 24 members in attendance at $75 per day each: (4 x 2 x 24 x 75)	$14,400
b. *Committees of the Council:*	
Executive Committee	1,800
Film Committee	1,200
Education Committee	1,125
Planning Committee	1,350
Total	5,475
c. *Panelists:*	
7 panels, 70 members, 3 2-day meetings, at $50 per day each	21,000
d. *Consultants and Experts:*	
Consultants and Experts	19,428
Total, Intermittent Employment	60,303

B. PERSONNEL COMPENSATION—NATIONAL ENDOWMENT FOR THE HUMANITIES

1. *Permanent positions.*—Funds for the following additional positions are requested:

a. *Office of the Chairman:*	
1 Public Information Officer	GS–13
1 Secretary	GS– 6
b. *Division of Fellowships & Stipends:*	
1 Program Analyst	GS– 9
c. *Division of Research & Publications:*	
1 Program Analyst	GS–11

a. *Office of the Chairman:* The two additional positions needed are:

Public Information Officer at GS–13 is needed now and the Endowment's grant activities are increasing and are expected to increase greatly in 1968 and thereafter. This officer, under the immediate supervision of the Deputy Chairman, would deal with the press and the general public wishing information (as distinct from queries from potential applicants). Included in the duties would be: Planning press relations, writing press releases, answering inquiries by telephone or mail, planning and dissemination of reports to the public on Endowment activities or interests, channel for requests for NEH speakers or participants in conferences, writing speeches for other staff members and speaking as a representative of NEH, providing information to Members of the Congress and officials of the Executive Branch, and maintaining liaison with the Director of Public Affairs of the Arts Endowment.

Secretary to the Public Information Officer at GS–6.—Typing and secretarial duties for the Officer described above will be extensive and staff for this workload is not now available.

b. *Division of Fellowships and Stipends:* A *Program Analyst* at GS–9 is needed in addition to the present Program Officer in view of the anticipated volume of applications. Duties would include administrative work to organize and systematize the procedures of the Fellowship programs; liaison with the Grants Office on pre-screening and post-grant details; assisting in the administrative duties of arranging for review panels; organizing panel meetings (including the necessary paperwork for travel vouchers, expenses, etc. of panelists, arranging for the meeting place in different regions of the country, etc.); collection and organization of materials for panel meetings; and quantitative research and evaluation of the developing trends of the fellowship program, e.g., the number of fellows by discipline, geographic spread, from liberal arts colleges or multi-university, etc.

c. *Division of Research and Publications:* A *Program Analyst* at GS–11 is needed as a third professional member of the staff to assist in handling the anticipated increase in volume of applications. The administrative duties would be similar to those described for the similar position proposed for the Division of Fellowships. However, the analyst in this Division would be more involved in the evaluation of proposals in terms of research relating to the merits of a specific proposal, i.e. determining the extent of other scholarly efforts in the field, validity of proposals, budget, relationship of project to other proposals under consideration, etc. The analyst would be an assistant to the Director in arranging for pre-panel expert evaluation; research about scholarly research in the humanities and publications in order to develop program guidelines and substantive emphasis; maintaining relations with grantees, getting and evaluating narrative reports from grantees; and generally functioning as a program assistant to the Director and the Program Officer on administrative and substantive matters of the Division.

2. *Intermittent Employment.*—Experience to date has shown the desirability of such resources and that 1967 funds available for the purpose are seriously inadequate. For 1968 the Endowment requests the following:

	Estimated for 1967	Requested for 1968
(*a*) Council members	$17,400	$22,050
(*b*) Selection panels and experts	28,500	41,515
Total	45,900	63,565

a. *Council Members.*—The estimate of $22,050 is calculated as follows:

(a) Four Council meetings—2 days each at $75 per day	$15,000
(b) Council committee meetings at $75 per day:	
Committee on Planning—8 days (6 members)	3,600
Committee on Fellowships—2 days (7 members)	1,050
Committee on Research—3 days (6 members)	1,350
Committee on Educational & Special Projects—2 days (7 members)	1,050
Total, Council	22,050

The estimate of $22,050 for the compensation of the National Council for the Humanities members will provide for 4 two-day meetings of the Council; the compensation of individual Council members attending meetings of the Committee for Planning, the Committee on Fellowships, the Committee on Research and Publications, and the Committee on Education and the Public.

b. *Selection Panels and Experts.*—The Endowment employs various panels and individual consultants at $50 a day who assist in the evaluation of applications for fellowships, the evaluation of proposals and serve in a general advisory capacity. The $41,515 requested for the services of these panels and individual consultants is calculated as follows:

(1) Division of Fellowships: For panels on Senior Fellowships, Regional Panels, and Final Selection Panels, and Experts on Post-doctoral and Summer Fellowships	$12,400
(2) Division of Research and Publications: For experts for pre-panel evaluation and Regional Panels	15,000
(3) Division of Educational and Special Projects: For panel on Museum Fellowship Interns, etc., and other needed consultants	6,250
(4) Office of Planning and Analysis: Needed consultants	7,865
Total	41,515

C. PERSONNEL COMPENSATION—SHARED STAFF

The Foundation's "shared staff" units (General Counsel, Administration, Grants, Research) were established to serve both Endowments more economically and effectively than would be possible with small separate staffs. The following table shows the number of positions, total annual salary rate, average employment or man-years, and net cost estimated for 1967 and requested for 1968:

Unit	Estimated for 1967				Requested for 1968			
	Positions	Annual rate	Man-years	Net cost	Positions	Annual rate	Man-years	Net cost
1. Office of General Counsel	2	$33,808	2.0	$33,808	4	$54,245	3.8	$51,337
2. Office of Administration	6	52,397	4.6	41,974	10	89,653	9.5	84,829
3. Office of Grants	5	41,199	4.3	34,678	10	81,197	9.5	76,838
4. Office of Research	4	33,862	3.7	30,945	7	60,887	6.7	57,623
Total	17	161,257	14.6	141,405	31	285,982	29.5	270,627

Establishing a new Federal agency with all new programs is a complex and difficult administrative undertaking at best:

> The unique organizational and authority structure of this agency poses additional problems for which precedent and example are lacking. Imagination—invention—innovation are required, and the administrative and legal staff, experience, and time for the task are essential.
>
> Designing, testing, installing, and perfecting administrative policies and systems needed to make this an effective and efficient instrument of government must receive more attention.
>
> Administrative servicing by another agency was necessary at the start and has been of real value in certain routine activities such as payroll work. At the same time, the arrangement has created other time-consuming problems and has not lent itself to the internal development of urgently needed administrative policy, structure, procedure, and practice.

This budget recognizes the importance of these matters and proposes a course of action and provision of resources to make necessary progress possible.

1. Office of the General Counsel

The General Counsel of the Foundation serves as legal adviser to the National Endowment for the Arts, the National Endowment for the Humanities, and the Federal Council on the Arts and the Humanities. He is also responsible for handling legislative matters of concern to the Foundation.

In a new agency, it is highly important that solidly based legal precedents be established at an early date in order to have a sound basis on which to build.

Policy problems and day-to-day urgent legal questions have placed a very heavy burden on the Foundation's Office of General Counsel. Moreover, the dual nature of the organization imposes special responsibilities on the Office of General Counsel which do not exist in a unilateral structure. Furthermore, legislative matters are becoming of increasing concern to the Foundation.

It is, therefore, clear that the Office will require additional assistance in 1968 in order to carry out its duties in an adequate manner. As a minimum, this involves employment of an additional attorney and a secretary. This additional attorney would be able to conduct the fundamental legal research so urgently required, as well as to assist the General Counsel in dealing with legislative matters and with daily problems of an emergency nature.

Accordingly, an attorney at GS–14 and a secretary at GS–5 are requested.

2. *Office of Administration*

From its establishment until September 1, 1966, most of NFAH's administrative services (personnel, payroll, accounting, auditing, financial reporting, purchasing, reproduction, etc.) were provided by the General Services Administration on a reimburseable basis.

Beginning on September 1, 1966, administrative services were transferred on a phased plan from GSA to the National Science Foundation.

The agreement between the National Science Foundation and NFAH stipulates that this arrangement is to exist only until June 30, 1967, and that all plans and activities during the current year will be based on the assumption that NFAH will be on its own administratively after that date. GSA and NSF consider this highly desirable if not imperative.

The administrative workloads handled by this office are increasing and will increase substantially in 1968. The Endowment programs and staffs served are budgeted at higher levels in 1968. The budget for this unit reflects these factors.

In-house performance of basic and essential administrative functions will require four additional positions. Each of these positions will have a primary area of responsibility but will also involve assisting and substituting in one or more other areas. The four new positions are:

> One at GS–12 primarily assigned to budget, accounting, financial reporting, and related work. This position will be the principal fiscal officer; it demands broad and detailed professional competence in these fields.
>
> One at GS–12 primarily responsible for personnel and payroll work. This position will involve the full range of responsible functioning in two complex administrative fields.
>
> One at GS–7 for voucher examination, financial document preparation, and related work. This position will provide clerical and back-up assistance to the two higher level positions listed above.
>
> One clerk-typist at GS–4 to serve these and existing positions.

3. *Office of Grants*

The Office of Grants is responsible for administrative policies to effect the specialized objectives of several distinct grant programs in the arts and humanities areas, and to assure consistency with Federal requirements. The Office has additional responsibility for records and processing systems.

The current staff allowance consists of a Director, two assistants, and two secretarial-clerical personnel. This staff can maintain current grant financial status records, process obligation and payment documents, and provide some support for administrative processing of applications. However, it (1) cannot provide adequate assistance in implementation of grants policies, and (2) cannot undertake substantial processing and controls functions required for 1968.

As its primary duty, the Grants Office should give major assistance to program personnel in applying sound grants administration practices. The need is acute because of the variety and complexity of the Foundation's activities. Distinct approaches have to be refined for grants arrangements with individuals and with groups, with universities and organizations, for research, fellowships, and productions. Resulting policies have to be applied on a case-by-case basis.

For these requirements, two additional Grants Specialists at GS–12 are requested.

The second role of the Grants Office is maintenance of records, processing, and controls systems for applications. The volume of activity is expanding rapidly, particularly in those program areas characterized by mass periodic handling of documents, through the review and award stages. The growth of applications is estimated in the substantive budgets of the Endowments. In addition to the quantity factor, the variety in processing systems is significant. Each type of award program, within each of the Endowments, requires a separately designed relationship in program office and Grant Office roles.

Three additional positions are requested: One Grants Assistant at GS-9 to supervise systems operations, and review applications for administrative sufficiency; and two clerk-typists at GS-4 to provide clerical and secretarial support.

4. Office of Research

The Office of Research locates, evaluates, and compiles information and materials for public distribution and for Program Directors, Deputy Chairmen, Chairmen and Council Members of the National Endowment for the Arts, the National Endowment for the Humanities, and the Federal Council on the Arts and the Humanities. Under the supervision of the Chairmen of the National Endowment for the Arts and the National Endowment for the Humanities, it is responsible for the development and operation of a library of books, periodicals and basic materials; gathering and organizing background material and information; designing, compiling and preparing special publications, reports and publications; initiating and executing studies and research programs for staff use and for publication.

The office provides administrative, secretarial, research and editorial services to the Federal Council on the Arts and the Humanities. It is responsible for locating, evaluating and distributing information on existing and developing Federal programs in all areas of the arts and humanities and for obtaining and reviewing information on all other programs in those areas developed by public and private organizations.

Existing and emerging interest in the arts and the humanities are creating new program areas, new audiences, new opportunities for teachers and artists and new sources of financial support. Governments, foundations and associations, and the artistic academic, and business communities are developing new institutions and expanding existing organizations. Each must be investigated in order to permit the Chairmen, Program Directors, and staff of the National Foundation on the Arts and the Humanities to evaluate current and projected programs. Each must be explored to enable the Foundation to keep the Congress, press, and public informed. To meet the needs of an expanding library and an increased demand for background materials and publications, it is planned to expand the Office of Research to include:

One additional Research Assistant at GS-9 to assist in soliciting, compiling, evaluating, and preparing for publication informational materials.

Secretary for the Federal Council on the Arts and the Humanities at GS-13, to arrange and record meetings, prepare and distribute information and materials, compile reports and studies, coordinate activities, programs and publications where necessary and provide general assistance to the Director of Research; and a secretary at GS-5 to handle the resulting clerical responsibilities.

Other Objects

12.0 Personnel Benefits

Estimated for 1967	$56,000
Requested for 1968	77,000

The amount needed for the agency share of employee benefits programs is determined by computing 7 percent of the estimated net salary total. This figure is lower than the 7½ percent normally used because the Foundation's experts and consultants are not eligible for Civil Service retirement benefits.

21.0 Travel and Transportation of Persons

Estimated for 1967	$70,000
Requested for 1968	126,000

To carry out the purposes of the Act, both Endowments are authorized to utilize panels of experts and special consultants. These are essential to the projects and programs of the Endowments. They make recommendations concerning grants to be made; they help initiate new ideas; and they serve to broaden the base of private participation in the Endowments' activities. The panels listed below will be fully operative in 1968; all will be established during 1967. The panelist numbers have been kept to the lowest minimum believed possible to cover the responsibilities prescribed in the Act.

A. ARTS

The following table shows the travel funds estimated for 1967 under the appropriation and limitation and requested for 1968:

	Estimated for 1967	Requested for 1968
1. Council	$12,500	$15,000
2. Council committees	2,000	3,650
3. Panels	4,500	19,320
4. Staff	16,000	25,030
Total, arts	35,000	63,000

1. *Council Members.*—Four Arts Council meetings are planned for each year. On the basis of actual experience, this will require a minimum of $15,000.

2. *Council Committees.*—

Executive Committee—6 members for 4 one-day meetings	$1,200
Film Committee—4 members for 4 one-day meetings	800
Education Committee—5 members for 3 one-day meetings	750
Planning Committee—6 members for 3 one-day meetings	900
Total, Council committees	3,650

3. *Panels.*—

Art form	Panelists	Transportation estimated cost
Architecture and design	10	$1,800
Creative writing	10	1,800
Drama	10	1,800
Dance	10	1,800
Music	10	1,800
Visual arts and museums	10	1,800
Public media	10	1,800
Total	70	12,600

Transportation.—These costs are based on an average of $60 for each panelist for three two-day meetings in 1968.

Per Diem.—Three meetings at two days each for 70 panelists, $6,720; total panel travel, $19,320.

4. *Staff Travel.*—In order to evaluate projects already funded by the Endowments, to make careful assessments of projects for future funding, to contact leading representatives of the arts in various parts of the country, and thus to help develop new programs and ideas, it is essential that adequate travel funds be available for Endowment staff. Present travel limitations impose serious restrictions on the staff's abilities to carry out properly the purposes of the Act in 1967. These problems, if unresolved, will impose far greater difficulties in 1968 in terms of developing programs and those submitted in this budget. It is em-

phasized that the following amounts represent the Endowment's minimum estimates for staff travel in keeping with the various programs and their objectives.

	Salary	
	Yearly	Monthly
Program directors:		
Architecture and design	$2,760	$230
Creative writing	2,760	230
Drama and dance	4,680	390
Music	2,760	230
Visual arts	2,760	230
Public relations officer	2,280	190
State program director	5,280	440
Office of Chairman and Deputy	1,750	146
Total, staff travel	25,030	

B. HUMANITIES

	Estimated for 1967	Requested for 1968
1. Staff	$2,786	$12,300
2. Council	14,512	20,700
3. Fellowship program	6,066	8,700
4. Research and publication	8,856	8,300
5. Educational and special projects	1,980	6,000
6. Office of planning	800	6,000
Total, humanities	35,000	62,000

The travel estimates and justifications for the Arts Endowment were presented above in considerable detail. The requirements of the Humanities Endowment were computed in substantially the same fashion; consequently, this section of the budget is presented in less detail.

The travel estimated is the minimum amount needed for the travel necessary for the Endowment staff to maintain contact with the academic community, to attend conferences, and to supervise and observe the actual operation of various programs funded by the Endowment in 1968. This would enable the Endowment staff to keep abreast of developments in the Humanities throughout the country and to consult with applicants, grantees, contractors, and others involved in the Endowment's program.

The travel estimated for the Council members, members of selection committees, and consultants enables them to travel to and from Washington and to regional meetings to assist the staff of the Endowment in the development, review, and evaluation of programs and polices.

The amount available for staff travel in 1967 is inadequate for the implementation of the program.

C. SHARED STAFF

The only travel budgeted directly for the Foundation's Shared Staff is for local trips by taxicab and bus. An allowance of $500 is needed for this purpose.

For travel by members of the Federal Council on the Arts and the Humanities $500 is requested.

23.0 Rentals, communications, and utilities

Estimated for 1967	$53,000
Requested for 1968	85,000
Equipment rental:	
Estimated for 1967	5,500
Requested for 1968	6,500

Rental and maintenance of Xerox equipment is the only item in this account. The difference in the 1967 and 1968 amounts is a result of acquisition late in 1967 of a Model 2400 copier to replace a Model 914. Increased production and improved quality, as well as savings in time, will more than compensate for the difference in cost.

Communications:

Estimated for 1967	$34,400
Requested for 1968	50,000

The increase in 1968 reflects cost of installation and equipment rentals for additional staff and greatly increased activity necessitated by expanding programs.

$20,000 is requested for 1968 to pay the Post Office Department for postage costs for both 1967 and 1968. To date the Foundation has not been billed but we have been informed by the General Services Administration to plan to meet the cost no later than 1968.

Building rental and space alterations:

Estimated for 1967	$13,100
Requested for 1968	28,500

In addition to the appropriation transfer of $74,700 to the General Services Administration for office rent, an additional $5,200 was paid from this object class for a small additional block of space made available early in the fiscal year.

Housing the additional staff for which funds are requested in 1968 will require $22,500 for office space rental. Partitions and other alteration work will require $6,000; a total of $7,900 has been spent for this purpose in 1967.

24.0 Printing and reproduction

Estimated for 1967	$12,500
Requested for 1968	26,000

The Arts and Humanities paragraphs below refer to special needs attributable to the separate programs. General needs, such as letterhead stationery envelopes, internal administrative materials, and the like, are covered under "Shared Staff."

A. ARTS

Estimated for 1967	$5,750
Requested for 1968	9,500

The Arts Endowment receives a huge volume of requests for information. Adequate supplies of materials of various kinds giving current program information must be maintained ready for mailing.

The needs for more and better program announcements, application forms, and other program management tools are increasing and as programs develop frequent revisions and reprinting will be necessary.

Manuscripts are often received by the Endowment as attachments to proposals or grant applications; these documents must be reproduced for Council and panel consideration and many are lengthy.

B. HUMANITIES

Estimated for 1967	$6,250
Requested for 1968	9,500

By 1968 we anticipate increased activity in the production of materials to inform the public about Humanities' Endowment programs, factbooks in various areas of Endowment interest, and other similar materials. Some materials will receive wide distribution, such as certain materials aimed at college humanities teachers (80,000 copies at least), with an even larger number for secondary school teachers. Many of these programs have never before received Federal government financing and enthusiasm for them in the academic community is expected to generate a large volume of correspondence. Informational needs about expanded programs in 1968 will require greater expenditures for printing and reproduction.

C. SHARED STAFF

Estimated for 1967	$500
Requested for 1968	7,000

General printing and reproduction needs are increasing and will continue to do so in 1968. These demands are caused by (1) expanding Foundation programs and activities, with resultant larger and more intensive public response and interest, in turn involving increased correspondence and need for informational materials; and (2) new and greater volume of forms and other program management materials.

Also included for 1968 is $1,000 for the Federal Council on the Arts and the Humanities.

25.1. Other services

	Estimated for 1967	Requested for 1968
A. Arts	$12,500	$25,500
B. Humanities	4,000	47,500
C. Shared staff	2,000	1,000
Total	18,500	74,000

Another need arising from the newness of the Foundation's programs and responsibilities as a Federal endeavor is that for expert assistance in fact gathering, analysis, and evaluation. Sources of information in these fields within government are inadequate. Thus the two Endowments must look to qualified individuals and institutions to help.

A. ARTS

Current information on the status of the arts is most accurately kept by the professional associations of arts organizations, of which there are more than one hundred. While certain kinds of information are available to the Endowment merely by requesting cooperation, other types of statistics and data are not routinely recorded. It is to the financial advantage of the Endowment to contract for these services with membership organizations which maintain regular contacts with their members than to attempt to gather this information independently.

In addition, it is necessary from time to time to contract with organizations specializing in specific background information in order to gather preliminary material for activities under consideration. Under these contracts would fall the updating, revising, and expanding of already completed studies as well as separate small contracts for statistical analysis of past and present projects.

B. HUMANITIES

The contract services funds will be used to purchase the technical information and expertise (largely existing within the staffs of non-profit or commercial organizations) which it would be prohibitively expensive to obtain in any other way. For example it is clear that the Endowment will need technical expertise on both computers and libraries to fulfill our role as a contributor to the President's study on Libraries. Additionally some data processing will be required for record keeping and analysis of programs as volume increases; an example is the need to have data-processing services on our fellowship applications in order to maintain statistical control.

C. SHARED STAFF

As the administrative staff becomes able to serve the Foundation completely "in-house," this account can be reduced to a minimum of $1,000 to meet emergencies or very special problems.

25.2 Services of other agencies

Estimated for 1967	$25,000
Requested for 1968	0

The 1967 figure is the amount obligated for payment to other agencies for administrative services agreements. These services are being furnished by the General Services Administration for a portion of the year and by the National Science Foundation for the remainder of 1967, while no agreements of this type are anticipated for 1968.

26.0 Supplies and materials

Estimated for 1967	$6,750
Requested for 1968	9,000

The Shared Staff is responsible for maintaining operating and inventory supplies and materials at a level sufficient to enable the Foundation to accomplish its day-to-day functions effectively and efficiently. Additional and expanded programs, anticipated increases in staff, and administrative independence will necessitate greater expenditure for supplies in 1968.

31.0 Equipment

Estimated for 1967—$1,000
Requested for 1968—$56,000

As noted earlier, reliance on other agencies to furnish large amounts of printing and other operational functions has proven complex, cumbersome, and generally unsatisfactory, certainly for the long pull. The Foundation believes that it must at the earliest practical date, develop capability to perform these functions on its own. For these purposes, new equipment will be needed as follows:

Bookkeeping equipment.—A machine at approximately $10,000 will be required for performance "in-house" of responsible fiscal functions.

Automatic typewriter.—Experience has already clearly demonstrated the need for modern equipment in handling necessary paper work in grants administration. Manual work is expensive in time and money. One urgently needed tool is a Flexowriter or similar machine. The needed machine will cost approximately $3,000. This modern implement would pay for itself in two or three years and output would be improved in quality and timeliness.

Collator.—We have one small offset press and a Model 2400 Xerox Copier. Hand collating the output of these machines is slow and costly. Purchase of a small mechanical collator would be a good investment—it would improve speed of service and save expensive staff time. A $600 collator would pay for itself in the first year.

"Punch and bind".—To furnish multi-page documents such as this budget presentation, other reports to the Congress, materials for Council members, informational materials for State Arts Councils and humanistic institutions, a small table model punch-and-bind set would be most helpful. Sending such work out to be done is time-consuming and wasteful. Investment of $375 to purchase the equipment would be good business.

Other equipment.—For efficient operation the following new items will be needed:

1. One adding machine	$250
2. Dictating equipment	4,175
3. Portable typewriters	1,675
Total	6,100

Equipment replacement.—Our furniture, typewriters, and other furnishings and equipment will still be relatively new in 1968. Thus, replacement should be limited to items damaged to the point of uneconomic repair. We have little experience to guide us here; $1,500 is estimated.

Office furnishings.—Furniture will have to be acquired for the 26 new positions for which funds are requested. Experience this year indicates an average cost per new position of $1,500. Estimating only $1,250 per new position in 1968, an allowance of $32,500 for this purpose is requested.

Miscellaneous.—Unforeseen needs always occur. Generally, these are for small items. $1,925 is estimated for this purpose.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Itemization of estimate

[In thousands of dollars]

	Actual, 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease
Program and financing:				
Total obligations	2,632	16,111	18,370	+2,259
Receipts and reimbursement—trust, etc	−34	−2,000	−2,000	
Unobligated balance available start of year		−3,186		+3,186
Unobligated balance available end of year	3,186			
New obligational authority (appropriation)	5,784	10,925	16,370	+5,445
Obligations by objects:				
11 Personnel compensation	334	797	1,167	+370
12 Personnel benefits	21	56	77	+21
21 Travel and transportation of persons	50	70	126	+56
23 Rent, communications and utilities	59	53	85	+32
24 Printing and reproduction	9	12	26	+14
25 Other services	15	18	74	+56
Services of other agencies	23	25		−25
26 Supplies and materials	15	7	9	+2
31 Equipment	71		56	+56
41 Grants, subsidies and contributions	2,035	15,073	16,750	+1,677
Total obligations	2,632	16,111	18,370	+2,259

NATIONAL ENDOWMENT FOR THE ARTS

PREPARED STATEMENT

Chairman HAYDEN. Mr. Stevens, will you please submit your written statement for the record, and then highlight it for the committee?

Mr. STEVENS. Yes, sir. I have here a statement that I will submit to the committee, and just highlight it in general.

(The statement follows:)

During its first year and a half of operations, covering two fiscal years, the National Endowment for the Arts has initiated some 93 separate projects to support and encourage the development of the arts in the United States.

Small projects, requiring less than $10,000 in Federal funds, have been implemented, and major projects have been supported, requiring funding in the range of $250,000 to $300,000. Through the Endowment's program, arts organizations and individual artists are being assisted in all 50 states, and in the District of Columbia, Guam, Puerto Rico and the Virgin Islands. At this time 295 additional projects to benefit the arts are being conducted by state arts agencies supported by the Endowment with the $2 million appropriated for this purpose.

NEEDS IN THE ARTS

The needs in the arts are set forth in detail in our justification. However, I would like to stress at this point the primary cause of concern. Plainly stated, the traditional sources of private support which sustained the development of the arts in the United States in the past are no longer able to keep pace with new and ever-increasing demands. A number of factors are involved and these are discussed in the justification. In brief, however, let me say that the arts in this country are facing a time of financial crisis; and if they are to be enjoyed and appreciated by the many and not the few, they will need a substantial transfusion of new funding. By substantial, I mean funds in excess of $150 million per annum.

Now, it is not the intent here to suggest that such a sum should come from the Federal government at this time. Our authorizing level is in no such category. However, with the funds recommended in the President's budget, we can provide that essentially needed "seed money" which can stimulate private incentive and initiative. What we are requesting for the Arts Endowment on a per capita basis, is less than 5 cents per person per year in Federal funds. In those terms, it would appear a small amount, but I can assure you that it can mean a most valuable investment in terms of our country's present and future goals.

For what is involved here is, really, the quality of our life. Man's aspirations have always been expressed in tangible and lasting form through the arts; understanding and appreciation of the arts put us in close touch with these aspirations. The knowledge to be gained through the arts, the new dimensions the arts add to human awareness and inspiration are of great value to all our people, especially now when as an affluent nation we have increasing amounts of leisure time to enjoy. Particularly is this applicable to our older citizens. The arts can provide them with broad new opportunities for a more rewarding life.

INDIVIDUAL IN A DEMOCRACY

Thus, in this statement I want to make very clear that what I am describing is not a frill or a luxury. It is of fundamental worth to the individual, and to the full development of an individual in a democratic society. This is of special relevance at this moment in our history. We are not only a nation which is rich in material resources, but we have a deep cultural heritage, and we need to be deeply concerned with its growth and fulfillment. If we are to win the battle which involves men's minds, we must project at this very time the best possible image of the United States abroad. The arts—great music, drama, literature, painting and sculpture—speak in an international language. They voice universal aspirations. They cross boundaries which otherwise may be closed. They personify freedom of expression, and the worth of the individual within the framework of democratic beliefs. The arts are central to the quality of our life, and it is of exceeding importance at this critical time in history that they be assured of a climate in which they may flourish. The encouragement of such a climate is in accord with our mandate from the Congress.

But if the arts are to be fully beneficial to our people, they must be readily available to the many and not to the privileged few. Our efforts are directed toward this purpose as much as they are toward assisting individual creative and performing artists and the organizations they themselves sustain and foster.

PUBLIC INTEREST

Too often today the arts, especially the performing arts, are priced out of range of the general public. The costs of producing excellence in drama, in music, in opera, have risen sharply in recent years. Community theatres are plagued with increasing deficits. Our nation's major orchestras have been assisted by massive support, totaling $82 million, from the Ford Foundation; but there are great numbers of orchestras, whose annual budgets are less than $100,000 which the Ford program does not reach; and these are increasingly hard-pressed.

The recent inability of the Metropolitan Opera Company to support a national touring company emphasizes the current failure of private sources to support a major artistic endeavor at a level commensurate with public demand.

If the financial crisis facing the arts in the United States today is allowed to continue, it can only worsen and produce conditions which may well be impossible to rectify. With adequate funding, the Arts Endowment can alleviate this crisis, by meeting emergencies where they exist, by taking priority actions needed to build a careful program for the future, and, above all, by helping to stimulate a broad-based partnership between our citizens and our government.

THE NATIONAL COUNCIL

The 26 private citizen members of the National Council on the Arts, who have met five times since the enabling legislation was enacted and twice during the current fiscal year, continue to work diligently and frequently at their own expense between regular Council meetings. Their advice and experience have been of immeasurable value to the operation of the Endowment. They have originated many new ideas for our nation's cultural advancement, and through their leadership they help us achieve the goals of partnership between the Government and the private community.

Partnership and cooperation with the private community is further advanced through panels of private experts who are assisting us, as authorized in the legislation. We believe that these panels are essential to our work, not only in the recommendations they make, but because they provide us with the opportunity of encouraging private initiative, in accord with the spirit of the Public Law. If there is favorable action on our appropriation request, we can strengthen this cooperative partnership, and we can better meet the needs in all areas of the arts.

Let me review briefly some of the projects which we have initiated to date.

Since September 29th, 1965, when the Act was signed into law by President Johnson, the National Endowment for the Arts has designed programs which are creating new opportunities for artists, initiating innovative projects in the arts, expanding and developing audiences, and enabling existing organizations to broaden arts programs.

With the advice of the National Council on the Arts, Endowment programs have:

Assisted artists by enabling

50 novelists, poets, painters, sculptors and composers teaching in institutions of higher learning to take one-year leaves to pursue creative work in the arts.

77 promising young students in the arts who graduated from college in June 1966 to visit art centers, museums, institutions, cities or areas of the United States in order to broaden their cultural experience.

60 painters and sculptors to receive awards in recognition of past contributions and to encourage their future careers.

8 choreographers to create and produce important works.

22 writers, including novelists, poets, and biographers to conduct research or complete works in progress; and the Radcliffe Institute for Independent Study to provide aditional fellowship funds to women creative writers.

Playwrights to secure public performances of high professional quality in resident professional and university theatres.

Provided the stimulus for 50 States, the District of Columbia, Puerto Rico, the Virgin Islands and Guam to survey their cultural resources and develop programs, facilities and services at the community level. Thirty-three States and three jurisdictions have created official State arts agencies since 1965 when the National Foundation on the Arts and the Humanities was established. The state program, with close to 300 projects now under way, is proving of great value.

Opened new opportunities for arts programming on educational television by using unrestricted gifts to the National Endowment for the Arts for projects which have enabled educational stations throughout the country to provide additional programming in arts fields.

Initiated new programs aimed at creating an American Lyric Theatre Workshop, a National Chamber Orchestra, a Literary Anthology to assist small magazines and writers whose works appear in them, low-rent studio-living quarters for artists; and also aimed at expanding metropolitan museum resources to smaller communities.

AUDIENCE DEVELOPMENT

Encouraged the expansion and development of audience by enabling

The Martha Graham Dance Company to make its first national tour in 15 years in the fall of 1966. The tour gave people in 32 cities with a total population of 16.7 million the opportunity to see an internationally acclaimed dance organization.

The American Ballet Theatre to embark upon nationwide tours in the fall of 1966 and the spring of 1967. The tours give people in 73 cities with a total population of 21.4 million the opportunity to view one of the nation's best existing full-scale dance companies.

The New York Shakespeare Festival to conduct educational programs throughout the city.

Resident professional theatre companies to enhance the artistic quality of their productions. People in 16 cities with a total population of 19 million will have the opportunity to attend performances by 15 resident professional and repertory theatres which have engaged performers and guest directors to further develop the excellence of their companies.

Hull House in Chicago to implement plans for special theatrical productions in public housing projects, and in areas for the economically disadvantaged.

Stimulated young audiences by enabling

Laboratory Theatre Companies in Providence and New Orleans to give free performances to student audiences, play to the general public at reasonable rates, and develop techniques to improve the instruction of dramatic literature in secondary schools. More than 90,000 children in the two cities will have the opportunity to attend performances during the first year of this project.

The Academy of American Poets to send young poets into hundreds of New York, Detroit and Pittsburgh public school classrooms to read and discuss their own poetry and to permit high school English teachers to attend lectures and readings by outstanding senior poets.

The Metropolitan Opera National Company to give special performances for student and labor groups throughout the country.

The National Repertory Theatre to expand its audience subscription program and broaden its student educational programs. People in 12 cities with a total population of 20.4 million will have the opportunity to attend this leading repertory company's performances.

EDUCATION PROGRAMS

Strengthened arts in education programs by enabling Fordham University to develop a demonstration program using films to stimulate effective communication among culturally disadvantaged secondary school children; Budd Schulberg's Writers' Workshop at Douglass House in the Watts area of Los Angeles to expand its activities; Dorothy Maynor's St. James Community House School of the Arts to continue music and theatre training programs for underprivileged youth in New York City.

Supported the first international conferences held in the United States by American P.E.N. (Poets, Playwrights, Essayists and Novelists) and the National Music Camp at Interlochen, Michigan, which were attended by more than 450 writers and 800 musicians from foreign countries.

Strengthened existing arts organizations by enabling the Wisconsin Idea Theatre to explore methods of bringing arts activities to small rural communities; supporting the Boston Opera Company's special production of Schoenberg's "Moses and Aaron"; assisting the Metropolitan Museum of Art to provide a special two-month exhibition of historical and contemporary costumes; and developing technical assistance programs for the American National Theatre and Academy, the American Symphony Orchestra League, and the American Educational Theatre Association.

Launched studies to explore the feasibility and techniques of establishing an American Film Institute, an institute concerned with environmental design and including architecture, planning and landscape architecture, an Association of American Dance Companies, and a new system of music education for elementary and secondary schools.

Assisted regional arts programs with support for such pilot projects as a design conference on Tock's Island which includes six counties in New Jersey and Pennsylvania, and a feasibility study on converting the Denver Symphony Orchestra from a local to a regional group.

Initiated a series of other pilot projects in architecture and allied fields which can produce prototypes for improved highway signs and graphics to enhance the appearance of the highway and improve highway safety, for industrial river areas, and for an American guide series on significant architecture, landscape architecture and planning.

OTHER ACTIVITIES

Other projects which the Endowment is undertaking will permit

Composers to defray the costs of copying scores and parts for orchestral presentation of their work.

Painters to create new prints for distribution in portfolios of the highest quality to high schools, libraries and educational institutions, and special editions of contemporary and historic drawings to be similarly circulated.

Young musicians to participate as soloists in national tours.

Fifty undergraduate students selected by schools of architecture, planning and landscape architecture to travel and conduct research during the summer before their final year of study.

Students of architecture, planning or landscape architecture to obtain practical experience through work in selected public agencies on significant public projects throughout the country.

Regional opera development in the Southeast United States.

Three cities to display outstanding pieces of sculpture in specially designed outdoor areas.

The American Playwrights Theatre to make new plays available to member university, community and resident professional theaters and the Inter-American Foundation for the Arts to increase artistic exchange between Latin America and the United States.

PILOT PROJECTS

Finally, let me stress, as I did a year ago, that the program we are developing is based on pilot projects—on those which our Council of private citizens and our panels of private experts believe are most essential.

They do not, of course, fully answer the many needs in the arts, for that is beyond the scope of our funding; but we believe that they constitute a solid base for future actions, and that this base is of indispensable value to the future quality of our country's life.

COUNCIL FORMATION AND MEMBERSHIP

Mr. STEVENS. We are now in our second fiscal year of the arts endowment program. The council was established a year earlier. We have had a number of meetings of the 26 individuals who constitute the National Council on the Arts. These are leaders in the various fields of the arts throughout the country. They have given very generously of their time, and we feel the programs that they have suggested through the National Council have been very successful, in terms of public acceptance and press acceptance.

We have had a number of favorable articles written about them. We feel, therefore, that we must be handling the money appropriated to us efficiently and well.

ENCOURAGING PRIVATE FUNDING THROUGH PILOT PROJECTS

The demand for the arts, for money in the arts, you might say, is so large that we feel that we should devote ourselves to pilot projects, hopefully to prove that an idea is a good one, and should be supported by private funds, if possible, and that has been our policy.

NONFUNDING OF ARTS FACILITIES

We have had to arbitrarily refuse to give any money for physical improvements and rehabilitation of arts facilities, because the few million dollars appropriated to us could be expended on just one project. Also, generally speaking, we have not made funds available for just plain deficit operations. We feel that the communities have to handle that.

So what we have tried to do is to stimulate and to lead and to help new projects and support worthwhile projects that are already in operation.

ART APPRECIATION DEVELOPMENT

We feel that we should support great talent where necessary, where the money is needed. Also at the same time, we believe we should try to develop an appreciation and an interest in the arts, by the people throughout the country, and try to balance out a situation where, generally speaking, creative artists and performing artists are concentrated on the east and west coasts. We feel it is necessary to bring the talent to the people throughout the country, which because of the great distances and costs involved, is rather hard to do today.

We also feel it is most important that we keep in mind that there are shorter hours of work now, and there is more leisure time, and people are living longer, and they can look forward to a longer retirement. To help people enjoy a better way of life and to be happier, we feel that the arts can constitute a very important factor in this respect, sir.

ESTIMATED UNOBLIGATED BALANCE

Chairman HAYDEN. What is your estimated unobligated balance of prior appropriations, that is, for fiscal years 1965, 1966, and 1967, as of June 30 of this year?

Mr. STEVENS. Approximately $76,000 is the amount that we have not authorized for expenditures at this time. Is that not correct, Mr. Biddle?

Mr. BIDDLE. Yes, Mr. Chairman, we have a summary table, which I submit to the committee, showing the allocations that we have to date approved for various projects in the arts.

Now, this covers two fiscal years, when the grants were possible to be made.

Chairman HAYDEN. I will put that in the record.

(The table follows:)

Summary of Arts Endowment projects by allocations to arts categories (following listing in Public Law 89-209) [1]

	Projects, 1966 (½ year)	Projects, 1967	Projects, 1968 estimate	3-year totals
Music	$212,575	$195,500	$750,000	$1,158,075
Opera [2]	----------	403,000	475,000	878,000
Drama	265,000	713,000	750,000	1,728,000
Dance	605,250	38,550	300,000	943,800
Creative writing	261,747	573,000	500,000	1,334,747
Visual arts [3]	163,000	957,000	535,000	1,655,000
Architecture and design	(4)	222,500	400,000	622,500
Public media [5] and special educational projects	437,000	226,433	680,000	1,343,433
Projects for a variety of art forms	449,500	435,564	360,000	1,245,064
Special studies and research	91,000	173,950	250,000	514,950
Total	[6] 2,485,072	[6] 3,938,497	5,000,000	11,423,569
Support of State arts agencies	(7)	2,000,000	2,750,000	4,750,000

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[1] It is difficult, in all cases, to identify projects of the Endowment by specific art categories. In many instances projects are designed to encourage a better appreciation of excellence in the arts by our people, and this relates to an educational factor, while in no way duplicating the efforts of other agencies. The Laboratory Theater project, described in the justification, is an example. It relates to drama, but its primary purpose is educational: to increase among young people a greater appreciation of excellence in the theater. In this case the allocation is divided between the category of drama and special educational projects over the 3-year span. The table, therefore, represents a guide to the Endowment's programing and funding approved by the National Council on the Arts, within a somewhat flexible category framework.

(With respect to the Laboratory Theater, it should be pointed out that the Endowment is cooperating with the Office of Education on this project, but that the preproduction costs essential to the project could only be funded by the Endowment under its enabling legislation. This is also an example of how the provisions of Public Law 89-209 are uniquely suited to initiating projects which may be supported, once they are established, by other agencies.)

[2] Opera, the costliest of all the arts to produce, is treated as a separate category under music.

[3] The visual arts include in this summary painting and sculpture, the graphic arts, and folk art, though this latter category could also be covered by projects dealing with a variety of the arts.

[4] Study planned in these fields.

[5] Public media projects have also been supported by unrestricted gifts made to the Endowment, as explained on p. A-4.

[6] As shown in the table, funds totaling $6,423,569 have been committed at this time out of a total appropriation of $6,500,000 for 1966 and 1967. The Endowment is reserving $76,431 to cover contingencies for the remainder of the fiscal year, when it is expected all funds will be obligated.

[7] Not authorized.

Absence of Carryover Funds

Chairman Hayden. How much of this unobligated balance results from funds to be carried over from the fiscal year 1967 appropriations?

Mr. Biddle. If I could answer that, Mr. Chairman, I believe that by the end of this current fiscal year, we will have obligated overy bit of our appropriation. We don't have any carryover funds for next year's projects.

SIX OBJECTIVES

Chairman Hayden. You list six objectives of the National Endowment for the Arts. Would you review these briefly for the committee?

Art Appreciation

Mr. Stevens. Well, the first objective is to increase the opportunities for citizen appreciation and enjoyment of the arts through a wider distribution of our artistic resources throughout all areas of the Nation, I touched upon that in my opening statement. It is a primary concern of ours to make quality art available, in the performing arts and in the visual arts, to people throughout the country.

Sustain and Encourage Individual Artists

The next objective is to sustain and encourage individual performing and creative artists. Of course, fundamentally, it is the individual that creates art, and it is necessary to make grants to such individuals, in order that new art can be created.

And, also, it is most important that the artist feel that the Government is interested in his welfare. One of the problems, I think, in the past in this country, is that artists have been often neglected, and felt that they were alone in the world, and yet they have created so much happiness and created so much that has helped the rest of the world, I think it is important that they feel that they are appreciated.

Sustain and Develop Art Institutions

The third objective is to sustain and develop eixsting independent institutions of the arts. A good example of that would be Martha Graham's company. She is one of the great geniuses of the century. For years, she has been unable to tour the country. We gave a grant to her group to make a tour throughout the country, and to give people a chance to see this great genius on a farewell tour.

Also, we did the same for the famous American Ballet Theatre Company. We made it possible for them to tour at the same time, enabled them to stay in business.

Citizen Education

Another objective is to increase the awarness and importance of the arts to our citizens through educational and experimental projects.

We have such projects as poetry readings, which have been much more successful than we anticipated. We have a project involving schools, where for the first time, many schoolchildren can go and see classics performed, in what is called live theater. In both New Orleans and in Providence, we are trying out an experiment involving the impact a first-rate professional theatrical company can have on secondary school pupils. The hope is that the pupils, seeing for the first time the plays they are studying in school, will take a great deal of interest in the classics. Usually, they are taught in an uninteresting way. Now, I have attended both the Providence and the New Orleans projects, and considering that today, the average child is supposed to have spent 20 hours a week watching television, it is amazing, the reaction that these children have to first-rate live performances of classical plays.

That is an example of what we are talking about.

Citizen Participation

Then we would like to increase the citizen participation in local artistic programs through a partnership with the States. One of the more successful parts of our program concerns that portion of the act which calls for a grant of $50,000 to each State, if they have an arts agency, and the money is matched for each project they undertake.

The first year allowed for a study costing up to $25,000, which did not have to be matched, and it is interesting to note in some form or other, there is a State arts agency in literally every State and territory of the country right now. How many of them will continue, after their study, to provide $50,000, which is necessary for the matching grant, we don't know, but I would think a very large proportion of them, and this is a way of seeing that every State has a chance to participate in the program.

I think there are something like 295 projects, wasn't it, Mr. Mark, that came out of the first year of this program?

Mr. Mark. Yes.

New Opportunities in the Arts

Mr. Stevens. And then the sixth objective is to provide the people of this Nation with new opportunities in all aspects of the arts. That is sometimes a matter of studies, to see what is necessary, and what the public feels that they need in the way of the arts. We also like to create opportunities as far as the small communities are concerned.

RURAL ARTS PROJECT

We have a very interesting project in Wisconsin right now, assisted by the University of Wisconsin, where studies are being made in five small communities under 10,000 people, to see what their needs and hopes are for the arts. I would not want to take your time now to go into it in detail, but I think it would be very interesting as far as the committee would be concerned to see that the communities under 10,000 feel they are just as interested in the arts as the larger cities.

AMERICAN FILM INSTITUTE

Another kind of project is the American Film Institute. One could very properly say, why should the Arts Council be helping the film industry, which has large profits, by trying to establish a film institute?

Well, the point is that the film industry never has done this. Many other nations, certainly the leading European nations, and countries behind the Iron Curtain, have film institutes. These film institutes are developing young talent that is very seriously competing with our films.

Now as we all know, leaving the arts aside for the moment, there is a very large amount of money that comes in from foreign exchange, which we need these days, and if the foreign countries develop this new talent as they have been doing, they can become very competitive. In fact, they are already becoming very competitive.

The problem is—and it really is a problem that goes all through every field of the arts—that there is a gap between the time that a person graduates from college or school, and becomes able to earn his living professionally. The top professional people in the film business feel it is very important to sustain and develop young talent. As I say, it goes through in the theater, literature, visual arts, and that is the real problem today.

MUSIC PROGRAMS AND ORGANIZATIONAL MATCHING FUNDS

Chairman HAYDEN. Thank you. I observe from your justification statement that the $32,000 programed for the International Music Council Congress will be matched by that organization. Are the other grants under your music program also matched by the recipients?

Mr. STEVENS. Well, sir, the law says that all of our grants to organizations must be matched, or we can make nonmatching grants to individuals. Now, in one case, we have a music project for young soloists. We would make the grants directly to them. In the case of a master chamber orchestra, as listed in our justification, it will be necessary for them to match that grant, but they can do it, out of both funds they get elsewhere, or from receipts. As I say, the law calls for all grants to institutions to be matching.

MASTER CHAMBER ORCHESTRA

Chairman HAYDEN. I see. On page 25 of your justification statement you set forth a budget of $800,000 for the master chamber orchestra, and indicate that the arts endowment's share of this budget is $400,000. Who supplies the remainder?

Mr. STEVENS. That, as I say, is the case of an organization. They have to either get the money from private individuals, foundations, or they can use receipts, as a matching basis.

LABORATORY THEATER

Chairman HAYDEN. For the laboratory theater project, a budget of $500,000 is indicated. Would you please describe this project for the committee?

Mr. STEVENS. Yes, sir. I mentioned it several minutes ago. That is the project that we started last year in New Orleans and Providence, which is to bring live theater as a teaching instrument to the secondary schools. And I mentioned before the success we are having with that program.

Chairman HAYDEN. Where do you propose to finance a new theater which you indicate will be funded, and the possible new theater which may also be funded?

Mr. STEVENS. We approved two laboratory theater projects for this year. The Office of Education, which cooperates with us on these projects, chooses the locations. They chose Providence and New Orleans, and as I understand it, they have a tentative approval for another project in Los Angeles. Actually, the local school boards concerned applied for the funds to pay for the performances. We in the arts endowment put up the preproduction money, but they buy the performances for the children, and so when they have approved a location, then it is our duty to try to supply the schoolchildren with the finest possible productions.

The total request involved here is $500,000. The two projects in Providence and New Orleans were funded by us at $165,000 each. It may well be possible to curtail these amounts during the second year of the projects in these two cities because of increasing community interest and the possibilty of gaining community funding. We would like to see these theaters, begun in areas where they were needed and where they would not compete with local groups, continue until they are self-supporting. We believe this would be a great advantage to the cities involved. If it is possible to enlist sufficient community support in Providence and New Orleans, we would be in a position to fund a fourth laboratory theater project in 1968. We mention this in our justification. There has been, as I say, great interest in this program in other parts of the country, and we would like to see it expand. We consider its beginnings highly successful, particularly for young people, but it also provides the adult community in the cities involved with the opportunity of seeing evening and weekend performances of top theatrical quality at reasonable prices.

In sum, we would like to continue the two projects that we are already doing for another year, along with the project in Los Angeles, and possibly in a fourth city.

DANCE PROJECTS

Chairman HAYDEN. Do I understand that the $250,000 which you have programed for grants to major dance companies is to be available but the grantees have not yet been determined?

Mr. STEVENS. No, sir; there is a dance panel meeting on March 22 and 23 to make these determinations. Our dance programs have received most favorable publicity in the press. It is a field that is very short of money. It is developing fast, and, as I say, we have aided two known companies. We have given support to choreographers. As is the case with all of our grants, we try to work with the leaders in the field, and take their advice, as to what we should do, and how we should make the grants. As I say, this dance panel meeting will take place shortly, and I will be glad to forward to the committee the choices.

ARTS IN DISADVANTAGED AREAS

Chairman HAYDEN. What is equal creative opportunity project?

Mr. STEVENS. That is a project in accord with the belief that there is a great deal of creativity among the poorer people and the disadvantaged. For example, we have supported a project in Watts, under the auspices of Budd Schulberg, after the riots last year, in which he has found that there is a great deal of writing talent in that area. He is, of course, a well-known novelist.

There is a great deal of writing talent available in these poor areas, and it does not get a chance to be discovered. Last year we made a grant to help him in his work of giving disadvantaged people a chance to prove themselves.

In fact, studies show now that creativity has less a correlation with IQ interestingly enough, than had been thought. From what I am told, if you have a very high IQ, you are not necessarily creative. A lot of people think that there is a great deal of creativity that does not come to the surface for many reasons. We know this applies to people in the poor areas, and we are doing small experiments in that line.

MUSEUM PROJECTS

Chairman HAYDEN. Can you tell us now which museums will be assisted in your "Museum projects" item, for which you ask $220,000?

Mr. STEVEN. Yes. Part of it will be to continue projects that we have been working on already, where we have made grants to three museums: one, in Detroit; one in Fort Worth; and one in Boston.

The purpose of these grants is to develop ways and means of taking the arts out to locations away from the museums, and also to try to develop a means of making the resources of the museums available to more people by bringing people into museums, so we can set up a program that will help the museums grow, and help educate the many people that do not now use the great resource we have in museums.

GRANTS TO PAINTERS AND SCULPTORS

Chairman HAYDEN. How will you divide the $225,000 proposed for grants-in-aid to painters and to sculptors?

Mr. STEVENS. Well, last year we made 60 awards, many to younger and lesser known sculptors and painters. For next year the number would be more limited. We are planning approximately 45 for next fiscal year.

NATIONAL DESIGN INSTITUTE

Chairman HAYDEN. Please describe the National Institute under the section of your justification entitled "Architecture, planning, and design," and indicate whether the $150,000 requested is the total amount which will be necessary.

Mr. STEVENS. I would like to have Mr. Spreiregen, our Director on Architecture and Design, answer that question.

Mr. SPREIREGEN. Well, Mr. Chairman, at this time, we are in the midst of a very detailed study to determine what should be the role and objectives of a National Institute for Design, and in doing this, we are talking with the leading architects, city planners, landscape architects, industrial designers, and interior designers of the country, to find out the need for such an institute, and what this role might be.

So far, we have found that there are four quite deserving areas of activity for this institute, one being the support of professional education; one being the support of research and development; one being the improvement of public information; and one involving experiment prototypes in various kinds of design projects.

The $150,000 that we have asked for is to begin the institute next year. We want to begin it modestly, because we want to learn our way as we go.

AMERICAN FILM INSTITUTE

Chairman HAYDEN. Who will provide the matching funds for the American Film Institute?

Mr. STEVENS. Hopefully, the foundations and the film companies themselves. There has been indications that there will be funds forthcoming, because other people, even the film industry itself, now, is beginning to see the necessity of a film institute. Our film advisory group is in contact with several of the large foundations to get the matching money, because in this case it is necessary to have matching money before we can start.

AMERICAN LYRIC THEATER WORKSHOP

Chairman HAYDEN. The American Lyric Theater Workshop which you propose to fund at $300,000 is now in existence. Would you please describe this project and indicate how long it will be continued?

Mr. STEVENS. The project has been in operation this year, and would operate for another year, as far as the Council is concerned. Mr. Jerome Robbins, who is regarded as the outstanding choreographer and director of dance and theater in the world, literally, came to us a year ago, and said that he felt a necessity for new art forms in the theater—new development. He agreed to work without any compensation for 2 years, and being one of the most highly paid men in the industry, he was sacrificing a great deal of money to do this.

What he felt was that to develop this new form of theater he needed to be like a scientist who could experiment with actors, dancers, musicians, and composers, and the like. There are severe limitations in commercial theater today, where they need the complete script when they go into rehearsal.

Otherwise, they would literally bankrupt themselves. Mr. Robbins wanted the chance to experiment and to develop a new theater art form. What it really amounts to, fundamentally, is that he expects to be able to use music and dance to advance the story line, as it is technically called.

If any of you saw "West Side Story" this was what was called a breakthrough in that field, because dance was used to advance the story line.

As I said before, he hopes to combine dance and music, and come up with a new form of entertainment. Now, because he is such a genius, the Council unanimously felt that this was the kind of project we should do, because there would be no private groups that would undertake such a project.

FUNDS FOR STUDY AND EVALUATION

Chairman HAYDEN. Included within your $5 million estimate for activities under section 5(c) of your act is $250,000 for individual grants and special research grants to institutions for specific study, information, and research projects. I understand that this will meet the costs of the National Council on the Arts which was transferred to the Endowment for the Arts. My question is this: Is the $250,000 to be in addition to the 3 percent of section 5(c) funds requested for "Program development and evaluation"?

Mr. STEVENS. They cover two different aspects. One is a study to see what kinds of projects the Council should enter into.

Take the case of the Film Institute, that I just mentioned. Because there was such a large industry, and there were conflicting groups, we felt that by hiring an independent group, namely, Stanford Research, which wasn't involved in films themselves, they could study the project without any prejudices. We felt that after their study was ready, and it is nearly completed, we would then be able to make intelligent decisions in going forward with the Film Institute. We felt that is the case in a number of fields, in which we want to enter.

EVALUATION

But in terms of the 3 percent, that is an evaluation situation. To give you an example of that, we have made grants to a number of community theaters. There were some that we weren't able to make grants to, through lack of funds. We feel that before we go forward and make any more grants, that the program should be evaluated. An independent critic is now visiting all the theaters we made grants to, and some that we did not make grants to, so that we could have a report, as to whether our program was working the way we hoped it would, and from an outside source.

As I said before, we are mainly supporting pilot projects, and trying to see whether they are worthwhile. Hopefully, the foundations and private individuals, if we can demonstrate to them the needs in this field, will carry on with the projects, rather than us. And that is what that 3 percent is for. It is to evaluate.

AID TO STATE ART AGENCIES

Chairman HAYDEN. Have you disbursed the total amount thus far appropriated for assistance to States?

Mr. STEVENS. Mr. Mark, how do we stand on our assistance to States?

Mr. MARK. We have to date disbursed all but $235,000 of the $2 million appropriated. I have requests right now that I am processing for another $37,000; so within a week, we will have left $197,986, to be called for.

STUDIES

I anticipate that this money will be called for within the next month, because, as you know, we funded studies first for a number of these States, and these studies are just beginning to come in now. They are just beginning to complete them, and then they can call on a limited amount of matching money for this year, which is about $12,000.

PROGRAMS

Most of the moneys left are for States which have done the study first, and have not asked for their program funds to date. Altogether 14 States are involved. Six States have asked for part of their matching program money. They are just getting started, and eight are just completing their studies.

Mr. STEVENS. I might add, Mr. Chairman, if I might, that last year, because of the cut in the amount that has been authorized, from $2,750,000 to $2 million, there were a number of States that wanted and felt they could match more money, but could not do it because we just didn't have the money to give them.

APPROPRIATIONS EQUALLY DIVIDED AMONG ALL STATES

Mr. MARK. As the act reads, "All sums appropriated must be equally divided among all States," so that any amount less than $2.75 means a cut in appropriations for all the States. There are 55 entities defined as States. That number divided into the requested amount means $50,000 for each.

Chairman HAYDEN. Senator Bartlett.

Senator BARTLETT. I have just a question or two, Mr. Stevens.

Mr. STEVENS. Yes, sir.

STATE AGENCY INCREASE

Senator BARTLETT. You mentioned that each of the States now has a unit, and wherever the American flag flies beyond their shores, there is likewise a unit. Did these all come into being, or most of them, following the Federal action?

Mr. STEVENS. I think it is fair to say that most of them did. How many art agencies were organized, Mr. Mark?

Mr. MARK. Actually, in terms of having an active program organization, there were approximately four before the act. There were some that were on paper, you might say, some groups meeting, which weren't really organizing anything that was substantial or functioning as they now are. So we have gone from about five to 54, in a year.

Senator BARTLETT. The four aside from the States being Puerto Rico, Guam——

Mr. MARK. Puerto Rico, Guam, Virgin Islands, and the District of Columbia. American Samoa is the last unit, and they haven't come in yet.

Senator BARTLETT. We have got the Trust Territory to deal with, too.

Mr. MARK. That is not in the act.

Senator BARTLETT. Not in the act. It should be.

Mr. MARK. Yes.

AMERICAN FILM INSTITUTE

Senator BARTLETT. I would be interested if you would explain a little bit more, Mr. Stevens, about the Film Institute.

Mr. STEVENS. Well, as I mentioned before, from the very start of the activities of the Arts Council, the members of who were professionals in the field felt that it was most important that a film institute be started in this country, so that there could be a training program to cover the period when young people were leaving universities, and before they could earn their living as professionals. There is a gap there of training that is badly needed, and many of the professional photographers, directors, and writers have, through their organizations, volunteered to give a certain period of their time to help younger people get trained, if a film institute could be formed.

European Film Competition

Where it will be located, one does not know, but it could either be in Washington, New York, or Los Angeles. The need is there, as is evidenced by the fact that many foreign films are penetrating our market, and they are doing a great deal of business, from a practical dollars-and-cents point of view. It is felt that because it has been hard for people to break into the business, and because younger talent is neglected, that something must be done to keep even with the competition of European films.

Training Program

Senator Bartlett. The basic purpose of this, then, will be to produce original films?

Mr. Stevens. No, sir. The basic purpose will be training.

Senator Bartlett. Training?

Mr. Steven. Training for individuals in every facet of the films. In the educational field, actors, directors, and also documentary film people. Our film advisory group has worked very hard. The Stanford research group have interviewed leaders in film institutes abroad, and they have also interviewed approximately 125 well-known individuals here, in every facet of the film business, so that it has been a very thorough and exhaustive study. At the same time, many leaders of our film industry have given a great deal of time to it.

Anticipated Film Industry Funding

Now, there has been some discussion that if this film institute is formed, and it gets into operation, that some of the major film companies might make available funds for the best students in the film institute to try to make some new films, but that is in a hypothetical stage. But like everything else, there gets to be a time when somebody has to take action, just as a doctor becomes an intern, and then he becomes a resident physician, but eventually, he has to perform that first operation.

To make it really succesful, however, I hope that there would be funds available for the more talented people to develop films of their own, or produce films of their own.

Senator Bartlett. That is to say, during the course of this training, if it happened that a brilliant film were produced, it would not be thrown in the ashcan.

Mr. Stevens. No, sir.

Study Cost

Senator Bartlett. What was the fee paid or what will be paid to Stanford research for this?

Mr. Stevens. As I recall, it was $91,000. We allocated $100,000, but it came in at $91,000.

ALASKA ARTS AGENCY

Senator BARTLETT. Going back to the State art councils, and I want to say that there is a very active council in Alaska, principally due to the inspired leadership of Mrs. William Emmal. The activity is going to peak very soon because this is Alaska's centennial year, and the arts council work is going to play a very great part in the centennial celebration.

NONCORRELATION OF IQ AND ARTS CREATIVITY

You interested me very much, Mr. Stevens, when you said that there is no necessary relationship between the IQ and creative ability. How extensive have these studies been? This opens up a delightful prospect.

Mr. STEVENS. Well, it is a fascinating concept, Senator. My knowledge of this, of course, is very limited, because it would involve a project more perhaps in the humanities than in our field. Mr. Calvin Taylor, from the University of Utah, is one of the people that has done a great deal of work in that field, and don't misunderstand me. Just because a person has a high IQ doesn't necessarily eliminate creativity. But they have found that the correlation, especially in the higher IQ's, it is not necessarily running along parallel on the graph, as you would expect, to creative ability.

COOPERATIVE STUDIES

I would hope, and I think I can speak for Dr. Keeney, that he and his council and our council might cooperate someday in doing further studies, because I think there is a feeling that there is a great deal of creativity which now is lost. There is a foundation, I think it is the Richardson Foundation, that has been financing Mr. Taylor on these projects, but their fundamental application is for industry, rather than for the arts and humanities. We are watching these studies, however, and maybe we can join in with them some time in the future, don't you think?

OVERRATED CORRELATION BETWEEN IQ AND ACADEMIC PERFORMANCE

Mr. KEENEY. I would like to join in on some study of creativity. I am not convinced yet that that is the best means to do it.

I might add, sir, that the correlation between IQ and academic performance isn't as high as it is generally thought to be, either.

Senator BARTLETT. Well, I will conclude by saying that what has been related by both of you on this subject today ought to command all the headlines in all the papers tonight and tomorrow morning throughout the United States, but it will not.

Thank you very much.

Mr. STEVENS. Thank you, sir.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Chairman HAYDEN. Now, Dr. Keeney, would you please file such written statement as you have for the record, and highlight it for the committee?

Mr. KEENEY. Mr. Chairman, I appreciate the opportunity to appear before this distinguished subcommittee. This is Mrs. Hardy, who is director of the planning and analysis staff, and Mr. Edgerton, the deputy chairman, on her right. Dr. Redding is director of the research division. Mr. Walker is director of the education division, and Mr. Blessing is director of the fellowship division.

PREPARED STATEMENT

I will file my statement for the record.

(The statement follows:)

First I shall speak very briefly of the mission of the Endowment for the Humanities. Historically, societies, including our own, have attempted to solve their practical and political problems before spending much of their national energy or resources on their intellectual and esthetic problems. Our own society is a partial exception, since the leaders who established our independence and our government were well versed in the humanities, especially the ancient classics, history and political philosophy, and drew many of their examples and much of their wisdom from that study. The enduring nature of our Constitution is a monument to their experience, which taught them what was expedient, and their studies of history and philosophy, which taught them what was right. That the Constitution is both expedient and right is the reason it has endured.

In the second half of the 19th, and the first half of the 20th Century, Americans and their educators became preoccupied with the need for technological knowledge and skill for use in the material development of the country, and in so doing, they and we often lost touch with the humane subjects as a forming element in real life. Decisions came oftener to be made on the basis of expediency rather than of value and ultimate considerations. What appears to be expedient often turns out to be the opposite, often because it is not right.

There have been many efforts to encourage the return to study of values through the arts and humanities, but it was not until the last Congress that the Federal Government began to take an active part. Historically, the difficulty is that often it is too late when humane knowledge is applied to practical problems. Justice, for example, which our society has sought ever since its inception, is a very practical problem. It is also an abstract problem and has been the preoccupation of every philosopher from Plato on, and of every political theorist. It is also an historical problem, for the various efforts of societies to secure justice are illuminating and often useful in a contemporary framework. It is important, therefore, that as our society seeks justice it draw not only upon the practical experience of case and statute law but upon the history of previous efforts and on abstract thought about the nature of justice itself. This I think is an illustration of what the Humanities Endowment is about and of what its purpose is. It is intended to improve the study and the teaching of literature, of philosophy, of history, of art, and of the social sciences in order that our lives may be enriched thereby, but I think, more importantly, so that we may lead our lives better as individuals and as a society, and that we may make our decisions thoughtfully. Ultimately, the purpose of the Endowment is to facilitate the use of human knowledge in decision making, both public and private.

In its effort to carry out its mission, the Humanities Endowment has established three principal programs. One of these is to improve the quality of practicing humanists through fellowships, which are intended to give them opportunity to develop; the second to improve the amount and quality and understanding of humane knowledge through grants for research: and third, to improve the presentation of the humanities both in school and out, in order that we may have better understanding and better use of these essential subjects which contain much of that which makes our lives worthwhile. It is our aim to find ways in which innovative programs may be launched and evaluated. However, innovation without subsequent development of successful programs is dangerously frustrating. It is important that we build upon our successful program sufficiently to make a real impact.

FISCAL YEARS 1966 AND 1967

In fiscal year 1966 the Endowment planned its program, but made very few actual grants. (Indeed, only $39,000 was formally obligated, although an additional $500,000 was specifically designated in FY 1966 for grants to be made within various program areas shortly after the beginning of the 1967 fiscal year.) In effect, therefore, the Endowment entered the present fiscal year with virtually the total fiscal 1966 appropriation of $2.5 million unobligated; this amount, combined with the fiscal 1967 appropriation of $2 million, gave the Endowment a program budget of approximately $4.5 million with which to operate in the present fiscal year. The Endowment had obligated most of this program budget by February 15 of the present fiscal year. Staffing proceeded rather slowly, but is now virtually complete.

We have awarded 287 fellowships, with a total expenditure of $1,900,000. Of these, the 57 senior fellowships were awarded to a group of scholars who are likely to make important contributions to knowledge. The 100 postdoctoral fellowships for younger scholars as well as the 130 summer stipends are intended to be spread as broadly as possible geographically and among institutions. These latter two have about tripled existing opportunities for young scholars. Through these three programs we have made grants to individuals in 187 institutions in 44 states and the District of Columbia.

In the research program we attempted to select from the many proposals made to us those that were most promising in terms of the caliber of the investigators and the quality of the material to be investigated. We have deliberately emphasized American studies, feeling that these subjects would have the most immediate relevance to the problems that face the Nation. Many of the grants, and more of the applications, were to support work that is essential for further progress in the various fields such as bibliographies, dictionaries, and other aids to scholarship. A major grant was made to the Modern Language Association to fund its Center for Editions of American Authors, which prepares definitive editions of great American authors whose works are now in inaccurate text. The editorial work is by established scholars, who use and thereby train younger humanists. About twenty such volumes have appeared. These are important for scholars investigating the thought of the writers. They are important for students in colleges and schools, and they will be important for a wide segment of the general public when they find their way into inexpensive but accurate reprints at no further expense to the government. Thus, this grant summarizes the three purposes of the Endowment—to develop humanists, to increase humane knowledge, to disseminate it through teaching to students and to make it available to the American public. In general, the quality of the research proposals supported is good and some, like the Editions of American Authors, will very quickly have an effect upon national thought and life.

The programs of fellowships and research grants bear initially on scholars and ultimately on all of us. The program to present the humanities to students and to the public, to improve their understanding and their knowledge will ultimately depend upon them, but cannot await their results. Therefore we have attempted in this program to select areas that were not adequately covered by various other Federal and private programs of support of education, to find new areas for improvement, and to set up pilot and experimental programs in the hope that they will produce worthwhile opportunities for other agencies as well as for this one.

Roughly speaking, this program can be divided into two parts: that which is conducted in schools and that which is conducted outside of schools. We aim to encourage colleges and universities to cooperate together to improve mutually their resources and instruction in the humanities and social sciences. In the schools we have attempted to tie together universities and school systems, and to encourage the dissemination into actual teaching of some of the excellent research that has been done. Related to but not within schools, we have set up a program in two depressed communities to encourage exposure to good books for school children who are not accustomed to good books at home, using parents and college students as tutors.

For the public, most of whom are outside of the schools, we have attempted to improve the resources of museums by setting up programs to improve their management and to train their personnel. Over 300,000,000 Americans visited museums last year, and learned something about their past in that way. At the last count there were 5,000 museums in the United States, and they are growing at the rate of over 100 per year. They are a great resource for public education and understanding, as are the local historical societies for which we have similar programs. Most museums and historical societies need better trained personnel, and more financial support. We have concentrated on the first need, for personnel, anticipating that better staffs will make the museums even more interesting, and attract more private support.

A great deal of attention has been paid to educational and instructional television during the past year. In our appropriation for this year was $100,000 for a study of educational television. We proceeded with caution until we had a general idea of the substance of the Carnegie Report. We have made one grant of $100,000 to underwrite a study, by competent persons in the field, of the present quality of presentations in the humanities on instructional television, to suggest ways in which the presentations can be improved qualitatively, and to produce and broadcast model presentations of humanistic content of exceptional quality.

In order to call the attention of the school systems to the great resources that are available to them in the colleges and universities, and to call the attention of the colleges and universities to the great opportunities that are open to them in the school systems, we are proceeding now to set up a humanities "faculty" available to those school systems of the nation desiring it. It will consist of distinguished teachers of the humanities from universities who will each spend a couple of months visiting school systems and working with the teachers, and perhaps with the students. We hope that we will be able to find private support for this program from the unrestricted gifts we are seeking, so that the Endowment may draw upon the undesignated funds to be made available if they are matched. We expect that if this program is successful the schools will pick up most of the cost, and that close associations will be formed among clusters of colleges and universities on the one hand, and of school systems on the other.

In order to draw attention to the condition of the teaching of the humanities in the schools and the need for their improvement, we plan likewise with private support to set up a commission to study the humanities in the schools to make recommendations for teaching them more effectively, in order that they may focus the attention of the nation on what is done and what needs to be done. In this effort the U.S. Office of Education and the Arts Endowment will cooperate.

A final example of our educational program is in the area of talking books for persons who are not blind, for which we received an appropriation of $100,000 in fiscal 1967. Many patients in hospitals are fully in possession of their mental faculties but are unable to read because of physical disability. Many hospitals have internal radio circuits over which music of various quality is transmitted to the patients and which could be used for recorded books. We have made a grant to Recordings for the Blind, by which they will produce perhaps as many as a thousand titles on recordings. They have made arrangements with four large hospitals of various types to make this material available to their patients, sometimes by internal radio, sometimes by tape recorder, and in one hospital by cartridge tapes, which RCA will record and lend to the hospital together with players for the tapes. We have planned for an evaluation of this program in order to determine whether or not it is worthwhile to enlarge but we do not expect to continue major activities in this area because of the recently enlarged mandate to the Library of Congress by legislation which now permits them to prepare talking books for persons who are not blind. Moreover, we anticipate that this program will be continued by private donors to hospitals if it is successful. Since many of the titles recorded will come from works edited as a result of our grant for editions of American authors, this grant will further amplify the public effect of humane scholarship.

We have faced a major problem of selection this year in all of our programs. The number of applications suitable for grants has substantially exceeded the number of grants our funds permit us to make. In order to make our selections we went through these steps: First, there was a staff examination and discussion within the staff as a whole of various proposals. Those for which no programs were funded were eliminated at this stage. Then we assembled panels of experts and submitted the proposals to them for their recommendation. Since most of the panels recommended more grants than there were funds, further staff work was necessary. Finally, the recommendations of the panels and of the staff were submitted to the National Council on the Humanities, which advised the Chairman in each case, and the grants are being made on that basis. It is clear from the applications that there are significant opportunities for further support in these and other areas.

REQUEST FOR 1968

For fiscal 1968 we have requested the full authorization of $5,000,000 under section 11(a) for carrying out the purposes of section 7(c) of P.L. 89-809, and, together with the Endowment for the Arts have requested $2,000,000 under section 11(b) of the same act. In addition, we have requested somewhat larger administrative funds. We have had great difficulty administering this year's program with the staff now authorized, and it has been impossible to investigate applicants on the spot with the travel funds available. Both for evaluation of applications and for evaluation of the success of grants awarded, staff travel is essential.

For the program to develop individual humanists through fellowships, we ask $1,950,000, which is $50,000 more than is available this year. This program has great promise as a means of developing larger and better resources of highly trained humanists for this country and providing humanists with greater incentive and opportunity to excel. Eventually we should like to expand it considerably, but the opportunities in research and education are so great that this amount seems a reasonable share of the total funds. We anticipate no major changes in the program during fiscal 1968 except those suggested by the experience of 1967, but we shall be examining other possibilities during the remainder of this year and beginning of next year. For example, considerable numbers of very competent humanists take positions in academic administration, or outside of education entirely. After a decade or so, sometimes less, sometimes more, many of them wish to return to teaching. If they have been out of teaching for more than five years, they are in fact obsolete. We believe that it would be a useful and economical device to provide a few of these people each year with funds for six months to a year of intensive work to start them off again as teachers and scholars.

The research program has available this year $1,508,000. For next, we wish $1,750,000, an increase of $242,000. We anticipate a much greater volume of applications resulting from an earlier announcement and better knowledge of the Endowment. We already have some very interesting applications. Since many of our grants will result in publication, we wish to make a modest beginning of support of publication for the already heavily burdened nonprofit university presses, but no major program of that sort can be expected with authorized funds. We have made this year a number of grants for the use of the computer in humane research. These are mostly probes to determine fruitful areas. We hope that we will be able to find more sophisticated ways in which the computer can be used in the arrangement and retrieval of humane knowledge so that it may be more quickly available and more readily useful to those who require accurate and rapid digest of what is known, and equally important, what is not known.

For the improvement of understanding of the humanities in and out of the schools, we have asked for the largest increase, bringing the total to $1,150,000, as against $832,000 this year. This increase of $318,000 results from an effort to achieve better balance among our programs, and is based upon the experience of this year, which indicates that there are many formal and extramural educational activities that are not now adequately supported, and which may be started with great profit. It is our desire, in the educational area, to get things started and to demonstrate their worth in the hope that other funding agencies, both governmental and private, as well as colleges and universities and school systems, will take over a good deal of their support. We shall continue to attempt to get the best innovative work in elementary and secondary education into wider use, and to tie more closely together universities, which are the sources of teachers and of knowledge, with school systems, which use both. Again, if we can establish useful devices, which are accepted by the public and private agencies, we are ready to turn tested programs over to them. We hope, further, to encourage the cooperation of groups of colleges and universities more economically to use their scanty human and financial resources in the humanities, and we are particularly anxious to find ways to assist the community colleges to develop a program of instruction in the humanities which will be a worthwhile educational experience in itself, and at the same time relevant to the many vocational programs conducted in community colleges. We hope, in a small way, to encourage at all levels of education innovation and experimentation.

We believe that the program that we have launched in museums and historical societies is the one which will have the quickest impact on large numbers of Americans, and we wish to continue that. In communications, i.e., journalism, radio, television, and film, we shall seek to find ways in which to bring the best humane knowledge and resources to bear on the education not only of school children but of the adult public. Here again, we can only hope to serve an innovative function. Finally, we are anxious to continue our study of the desirability and feasibility of a center for the humanities and social sciences, where scholarship and action would be brought more closely together, hopefully to the mutual benefit of both.

In the course of the remainder of this fiscal year and the beginning of the next, we shall plan and test procedures to determine the effectiveness of grants made in the various programs. We shall seek to evaluate the concrete accomplishment in the individual grants, and of the grants collectively, to assess the importance of the work done through grants made, both in terms of other possible grants and in terms of different levels of funding of the grants.

Of particular importance in the accomplishment of the evaluative task is the appropriation requested for planning and development in the final section of our budget submission. We have asked for $150,000, in order that we may test programs which we have not yet formed and so that we may adequately evaluate the worth of existing programs. This relatively small expenditure should result in the elimination of waste by pre-testing and thorough investigating of ideas for programs.

The programs of which I have spoken are described more fully in the appropriations request.

May I state again the meaning of the humanities and the arts. It has often been said that civilizations and societies are remembered, not for their acts and their power, but for the ideas they leave behind them in their literature, their philosophy, their art and their laws. These are the things that give life its quality. We owe it to ourselves to create a high civilization for our own enrichment and to leave its monuments behind for our posterity.

RESPONSIBILITIES

Mr. KEENEY. The Humanities Endowment is charged with the development and the promotion of literature, history, philosophy, history of arts, and those other subjects that relate to the acts, the beliefs, the speculations, the judgments, and the aspirations of man in the past. Though they are in the past, they shaped and illuminate the present. It is our constant effort to bring the wisdom of the past and the experience of the past into the present, to help make the great decisions that lie before us.

For example, the achievement of justice for all has been one of the major preoccupations of the people of this country since our settlement. It has also been a preoccupation of all the great civilizations of the past. And one can illuminate his thinking about justice through the study of philosophy, through the study of history, through the study of law, political science, and, hopefully, may more frequently make a just decision.

NATURE OF PROGRAMS

We have three broad programs aimed at this objective: One is to improve humanists through the award of fellowships at the postdoctoral level; the second is to increase knowledge through the award of research grants; and the third is to use this knowledge and to use these people through the better development of teaching of the humanities.

APPROPRIATIONS

Our appropriation for fiscal year 1966 was $2½ million. Since the Endowment was not fully organized at that time, only $39,000 of that was obligated at the end of the year, so that there was almost a 2½ million carryover.

You appropriated for this year $2 million, and we had, therefore, in all, about $4½ million to spend this year. We have committed all of this, excepting for $396,000.

DISCUSSION OF PROGRAMS

We have achieved a broad spread in our fellowship program, which we have prejudiced in favor of the smaller institutions, rather than permitting the fellowships to cluster in a few universities as most fellowship programs do. Nevertheless, we think we have achieved a very high quality of choice.

The range of research grants is very wide, and again, they have been awarded to various kinds of institutions.

The probing and innovative activities of our educational program are intended to find better ways to do better teaching, whether it is to people in schools or to the general public. For example, we have within our public programs a museum program. Each year, 300 million people in this country are estimated to visit museums, and we are spending this year about $300,000 to improve the personnel of those museums.

DOLLAR VOLUME OF APPLICATIONS AND GRANTS, FISCAL YEAR 1967

We had requests for grants totalling $53 million by 1,500 applicants.

We have awarded $4.1 million to 414 applicants in 46 States and the District of Columbia.

APPROPRIATION REQUEST FOR FISCAL YEAR 1968

Our request for 1968 is for our full program authorization of $5 million, which is $500,000 more than we actually had this year. We also request a small increase in the staff.

In the fellowship program, we would like to increase that to the extent of $50,000. We would like to increase the research program by $240,000, the education program by $318,000, since we are finding new ways to approach that, and to decrease the planning and development activity by $110,000, in order to carry out these programs.

I should have said, sir, that the $396,000 of fiscal 1967 funds that we have not yet committed for obligation will be committed, and probably completely obligated, by the end of fiscal year 1967.

Mr. Chairman, I believe, and Congress declared when it passed this law, that the humanities are vital to our society, not simply to make it more elegant and pleasant, but to make us wiser, so that we may carry out our responsibilities well, and make decisions that are right and just, as well as expedient.

Thank you, Mr. Chairman.

TOTAL OBLIGATIONS AND EXPENDITURES

Chairman HAYDEN. Will you please provide for the record the total amount which the National Endowment for the Humanities has obligated during its existence?

Mr. KEENEY. Yes, sir. We have obligated $809,474, and an additional $3,292,762 is currently in the process of obligation; that is why I spoke of $4,102,236 as in effect obligated.

Chairman HAYDEN. Also, please submit the total amount which the National Endowment for the Humanities has actually expended thus far.

Mr. KEENEY. As of March 8, $496,410.

SPECIFIC FISCAL YEAR 1967 APPROPRIATIONS

Chairman HAYDEN. Last year, the Congress indicated specific amounts which you could distribute among five different activities. Would you review briefly for the committee your programs under these activities, including, of course, the reprogramings which have been approved by the Appropriations Committees?

FELLOWSHIPS

Mr. KEENEY. Yes, sir. The first activity was $750,000 for 100 fellowships to younger teacher scholars. Second was $300,000 for 200 summer fellowships for scholar-teachers in the same age bracket. The third was $750,000 for 50 grants to senior scholars.

I wrote the distinguished chairman of the committee on January 20, requesting reprograming to change the first figure, the hundred fellowships for younger scholars, to $860,000, reduce the number of summer fellowships to 130, and the amount to $250,000, to increase the number of grants to mature scholars to 55 or 60, and the amount changed to $790,000.

This was on the basis of experience with the applications. The cost of some of the programs was higher than we had thought. That of the other, lower.

Chairman HAYDEN. To my recollection, the committee approved that.

Mr. KEENEY. Yes, sir; and I thank you.

These fellowships have all now been awarded.

EDUCATIONAL TELEVISION AND RADIO

Then we had $100,000 for educational television and radio, which we granted to the WGBH Educational Foundation of Boston, to assess the present quality of humanities programs on instructional television, to indicate ways in which these might be improved, to make model presentations of the highest possible quality available through a national competition. We had no desire to duplicate the study that was in process by the Carnegie Commission. Their study dealt primarily with educational rather than instructional television.

We are not concerned with the technical aspects of television. We regard it and the other media simply as we regard print. It is a way of presenting the humanities to students and to the people.

"TALKING BOOKS"

The fifth and final program for which the committee appropriated funds is the talking books program, through which we have made a grant of $100,000 to Recordings for the Blind, to set up a pilot study at several hospitals in the use and value of taped and otherwise recorded talking books for patients who cannot read the printed book for reasons other than blindness; paralysis, for example. Participating in this study will be the Rhode Island Hospital, the Institute of Rehabilitation Medicine at the New York University Medical Center, Goldwater Memorial Hospital, Bellevue Hospital, and, hopefully, the Walter Reed Hospital.

We estimate that 1,600 books will be taped and made available in this way, in literature, history, philosophy, and the social sciences. These taped books will be made available to each of the hospitals, to play either by the bedside or over their internal radio systems to patients.

I have myself been in the position of these patients, and I think that if I had enough money and were in it again, and were subjected to the ordinary radio treat that you get, and had the alternative of listening to a good book read, that I might pay for part of the cost myself as a gift to the hospital. And I rather suspect that this program will become self-financing.

When the tapes are done, they will be given to the Library of Congress for duplication and circulation through its regional libraries. And since their recently enacted legislation enables them to broaden the distribution of talking books to a wider range of people, we will not continue this program after 1968. We do wish to participate in the continuing programs of the library, which is enthusiastic about our program, and which has been consulted from the beginning, feeling it would be very useful both to us and to them.

I would also say that one of the recording companies, RCA, learned about this through a conversation with me, and at their own expense, they are taping some of these volumes on the new cartridge tapes, and will distribute them to the hospitals.

RESEARCH AND PUBLICATION PROGRAMS

Chairman HAYDEN. With respect to your item for research and publication, I note a proposed $242,000 increase in the subitem "Support of Research." Would you please explain this activity fully?

Mr. KEENEY. Yes, sir. Much of what all Americans read and see on the screen or on the television set is based in the final analysis on basic research and in the humanities; for example, the historical presentations on television are based upon what scholars have found out about the ways of the past.

The presentations of dramas are likewise in part based upon the knowledge of how people behaved in the past. The same thing is true for historical novels, and, indeed, most books on nontechnical subjects.

EDUCATION AND BASIC RESEARCH

The education of all American students is affected profoundly by basic research in the humanities. A ninth-grade textbook in

American history has facts and interpretations in it. They came from the work of scholars doing basic research in the humanities, and in any given textbook, there is embodied the work of literally thousands of research scholars. Usually, the textbook writer gets at this work through a synthesis, made by a man who takes the research of several scholars, and puts it together. If we did not have basic research in the humanities, we would not have any accurate textbooks. We would instead be teaching from Hans Christian Andersen's fairy tales, which, by the way, were used in school when I was a boy.

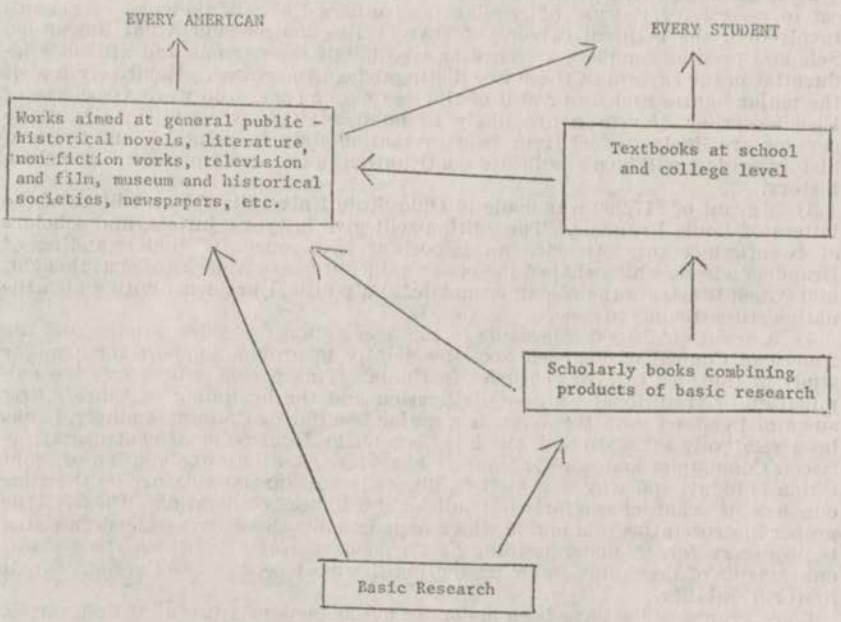
Chairman HAYDEN. Yes.

Mr. KEENEY. I have here a little chart, sir, which I would like to submit for the record, which shows how basic research affects scholarly works of synthesis, which affect textbooks, which affect every student. Basic research, through the various channels shown on the chart, affects television and radio and various forms of literature—reaching and affecting every American. And this, I think, shows rather neatly the place of basic research in the humanities.

Chairman HAYDEN. That will be included in the record.

(The chart follows:)

THE USES OF BASIC RESEARCH IN THE HUMANITIES


EVERY AMERICAN
EVERY STUDENT
Works aimed at general public - historical novels, literature, non-fiction works, television and film, museum and historical societies, newspapers, etc.
Textbooks at school and college level
Scholarly books combining products of basic research
Basic Research

FEDERAL SUPPORT OF BASIC RESEARCH

Mr. KEENEY. Now, we have figures which indicate that less than half a percent of all the money that the Federal Government spends on research is spent on research in the humanities. At present, the Federal support of basic research in the sciences totals $2.1 billion. In the humanities, it is less than $2 million. The private foundations, likewise, use a relatively small part of their resources for this purpose. Out of $281 million that the Ford Foundation spent in 1965, $824,000 was for humanistic research, and the same pattern shows up in other foundations.

I would like to submit for the record, sir, a description and explanation of a few of the research grants that we have made.

Chairman HAYDEN. That may be done.

Mr. KEENEY. If research grants are looked at separately, without looking at the whole picture, one may get the notion that they are trivial, and even frivolous. If you look at them as an effort to understand all of man's activities as they bear upon the present, I think you get a more clear picture.

(The explanation of research grants follows:)

RESEARCH GRANTS OF THE NATIONAL ENDOWMENT FOR THE HUMANITIES

1) A grant of $23,900 was made to the University of Wisconsin to support a study which proposes to examine systematically various historical examples of urban planning and urban design theories in order to arrive at a better understanding of what concepts of urban planning ought to be. In view of the growing Federal expenditure on urban problems, a grant to a distinguished scholar at a distinguished institution to attempt to find out what a city ought to be seems particularly appropriate.

2) A grant of $40,000 was made to the Columbia University oral history project to record for the use of scholars and others the reminiscences of persons involved in the political careers of Dwight Eisenhower and Adlai Stevenson. Scholars need as complete a record as possible of the persons and attitudes influential in the careers of these two distinguished Americans. Relatively few of the major figures and fewer still of the less major ones, who were associates of Eisenhower or Stevenson are likely to publish memoirs. Additionally, these persons are likely to feel freer in conversation than in print. Thus, the oral history project will be a significant contribution to the study of recent American history.

3) A grant of $17,200 was made to Ohio State University for an edition of the letters of Louis Brandeis. The edition will give lawyers, jurists, and scholars of twentieth-century America an important new source of understanding of Brandeis' views, which shaped in some significant areas American legal thought, and which illustrate the social, economic, and political problems with which the nation still attempts to cope.

4) A grant of $10,000 was made to the Association for Asian Studies and the American Council of Learned Societies jointly to provide support for a major study of the 14th to 17th centuries in China. This period, which was the culmination of traditional Chinese civilization and the beginning of China's first sustained contact with the West, is a major frontier of Chinese studies. It has been relatively little studied, but has become the focal point of controversy between Communist and non-Communist historians, since an explanation of what China is today, and why it is as it is, hinges in substantial measure on the view one has of what characterized traditional Chinese civilization. Clearly, the proper interpretation of a period which is undeniably the matrix of modern China is necessary for an understanding of the modern world in which the Chinese one-quarter of mankind is now presenting the most complex and serious threat to world stability.

Some grants which have been made are not as obviously useful at first glance, but they are in fact as likely to be useful in the long run:

1) A grant of $9,262 was made to the University of California, Santa Barbara, for support of a history of cartoons and comic strips. In illiterate or semiliterate societies, pictures with no words or few words are an important means of communication. Even in fully literate societies they are major sources of political and social comment. Thus, there have been front-page stories in most American newspapers about the comic strip published in Africa which deals with a super-woman who protects the "third world" (the African, neutralist

world) from the "evil machinations" of the great powers. Closer to home, there have been front-page stories about Al Capp's alleged satire of Joan Baez. When it is recalled that European and American society were semi-literate until the present century, and that some Americans still read the comics first, and then turn to the front-page news, an investigation of the history of this form of communication seems likely to provide new understanding of how they have affected and reflected public viewpoints.

2) A grant of $10,000 was made to the Institute of Medieval Canon Law for scholarly editions of the texts of the law of the medieval Christian church. These texts were influential in shaping attitudes of Western Europe toward many aspects of life that now have little to do with religion. (For example, the church laws relating to the taking of interest on loans were both argued for and argued against for centuries, and help explain the ambivalent attitude which many European nations had toward capital accumulation.) The church laws were useful to national governments as well, for they provided examples which the governments could borrow and put to their own use—this at a time when governments were groping toward some consistent way of organizing themselves. Not only did these texts help shape the civilization from which America primarily springs; they are also important in the immediate present, since the clearest possible understanding of them is important to an institution which is based upon them, yet which is in the process of dramatic change.

3) A grant of $25,000 was made to the American Oriental Society to help support the expense of holding the International Congress of Orientalists in the United States. One of the things for which this country is most criticized abroad is its lack of hospitality to international congresses of scholars, except in the sciences where funds are available for such meetings. We are, as everyone knows, engaged in a serious struggle with Red China. It is therefore important to us to develop the study of the Orient not only through support of American scholars, but through improving their relations with scholars of Oriental affairs in other countries.

4) Several grants were made to support archeological excavations. These grants were made in small amounts in areas where neither the National Science Foundation nor the Smithsonian Institution was able to provide support for various reasons. These archeological grants serve several purposes. They will increase our understanding of the remote past, but a remote past which shapes our lives. (The Greek and Roman view are still with us; and to a student Caesar is only slightly more remote than Hitler; and if we have no respect for the remote past, we shall have no respect for the immediate past—nor shall we learn from it.) They will train students in the classics to study and teach with greater knowledge and effectiveness. Perhaps above all, these grants pay the ultimate compliment to several of the nation's friends abroad. They say, in effect, to a foreign country, "This country and its scholars find your past interesting and important; they want to learn about you, not because of some sordid desire to use what they learn against you, but simply because what your country has contributed to the world is recognized as important by the United States." And since the scholars who carry out these archeological excavations have close ties with the scholarly communities in their host countries, they are paying the compliment to a highly influential group of foreign citizens.

SOURCE OF RESEARCH AND PUBLICATION FUNDS

Chairman HAYDEN. Were the funds expended for research and publication in fiscal year 1967 those included in the fiscal year 1967 appropriation or in funds made available prior to that year?

Mr. KEENEY. They were carryover funds from 1966, sir.

EDUCATIONAL PROGRAMS

Chairman HAYDEN. Please discuss the educational programs activity for the committee, indicating particularly the need for an increase of $318,000 over the amount which was available for fiscal year 1967.

Mr. KEENEY. Yes, sir. The reason for this increase is that we now have a sufficient staff and sufficient outside interest and applications to explore a range of suggested approaches to our mission, particularly through the schools. Up to now, we have stressed grants to individuals, since that kind of need was easiest to identify. We know that there is a great deal that we should and must contribute to restoring a sense of proportion to education, from the early grades through post-doctoral instruction, and we are probing to find out the best way to do it.

We would like to continue a few projects we have started in a small way. One of these is to send young university instructors who are very much research oriented into college teaching environments, where the emphasis is on teaching, to spend a year or so, in the hope that they will improve their teaching. Another is to improve cooperation between universities and colleges, and groups of colleges, which is very hard to do.

Then we would like to explore some new approaches, such as grants to departments and groups which have shown leadership in research and teaching, conferences to point out the most effective way to improve teaching in the humanities in the public schools and in the junior colleges, and trial programs in vocational, professional, and adult education.

EXPERIMENTAL EDUCATIONAL PROGRAM

By experimental programs, we mean some of the activities to which I have just referred—conferences, demonstration grants, pilot experiments, and other exploratory activities that will help us define our role and our function. We want to have some meetings and conferences to keep us honest; that is, to bring in outside opinions, so that we won't become hypnotized by our own ideas, which is a characteristic of foundation people.

We need to bring in imaginative people to advise us, without wanting anything themselves, and to stimulate us, and we don't want to abandon the role we have begun to exert on the humanistic quality of educational and instructional television, on the caliber of museum personnel, and on the content of recorded material.

Would you like me to give you a notion of one of the sorts of conferences that we would like to have, sir?

Chairman HAYDEN. Yes.

Mr. KEENEY. We would like to bring together various kinds of people who have ideas and experience that may be useful to us, and simply listen to them. We would like to bring together some imaginative teachers; some imaginative people who started to be teachers, and stopped; and some imaginative students who changed their fields, to see if we can get suggestions about how better the humanities might be presented.

Chairman HAYDEN. I believe that the experimental programs activity is a new one to be initiated in fiscal year 1968. What is planned under this activity?

Mr. KEENEY. This is the group of conferences of which I just spoke, and pilot grants and meetings with small groups of people from which to get ideas.

PLANNING AND DEVELOPMENT

Chairman HAYDEN. For planning and development in fiscal year 1968, you propose an appropriation of $150,000. I understand that this is in addition to the 3 percent of funds provided for activities under section 7(c) of your act for which you request legislative authority in order to devote the money to evaluation and program development. Please describe your expected activities.

Mr. KEENEY. This is the same money that is described in the two sections; 3 percent of $5 million is $150,000. We have just expressed it as an amount, as well as a percentage.

Now, here we intend to make thoughtful assessments of teaching of the humanities at various levels, studies that will suggest the dimensions of broad problems which face the educational community, and which will help us to plan our program in the broad context of national needs in the humanities.

MATCHING UNRESTRICTED GIFTS

Chairman HAYDEN. One item of the budget is $2 million to be available only for matching unrestricted gifts which are received during the coming fiscal year. For each of these endowments, how much in unrestricted gifts has been received?

Mr. KEENEY. Well, the Humanities Endowment has thus far received only token gifts, which are in lieu of honoraria for members of the staff who have spoken to groups that are unlikely to be applicants. We expect a substantial gift very shortly, which we intend to use to establish a commission on the humanities in the schools. This will seek to assess and define the proper role of the humanities in the schools, to identify general standards, and to find new ideas, which can really only be done by a nationally prestigious group. We have discussed it with the Commissioner of Education, who supports the proposal, and if I may, I will insert into the record a letter from him in which he endorses it.

(The letter follows:)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
OFFICE OF EDUCATION,
Washington, D.C., March 9, 1967.

DR. BARNABY C. KEENEY,
Chairman, National Endowment for the Humanities,
Washington, D.C.

DEAR BARNABY: Recently you asked for my opinion on the advisability of establishing a Commission on the Humanities. I feel that such a Commission could be of value generally, and particularly helpful to the Office of Education.

As you know I believe that the humanities should play a significant role in raising the level of educational effectiveness. The contributions which a Commission on the Humanities could make to this goal would be of great assistance.

If we can be of help in developing your plans, please let me know.

Sincerely yours,

HAROLD HOWE II,
U.S. Commissioner of Education.

GIFTS EXPECTED

Mr. KEENEY. We expect other substantial unrestricted gifts which will permit us to support programs which we cannot from our basic appropriations, and which are compatible with the purposes of the endowment.

One of these programs, we hope, will be the establishment of a national humanities faculty for the schools, to bring university teachers and scholars into fruitful contact with secondary-school teachers, thereby creating sustained enthusiasm and interest in contemporary scholarship in these fields, and tying together in a continuous way the schools and the colleges.

We have others likewise. We expect to provide indirectly advice to corporations, interested in educational and experimental media, such as those recording companies that put material of humanistic content onto tapes or records, by putting them into contact with distinguished humanists in the various fields.

I think you would like to have Mr. Stevens talk about theirs.

Chairman HAYDEN. I would. You may tell us, Mr. Stevens, about these unrestricted gifts.

ARTS ENDOWMENT UNRESTRICTED GIFTS

Mr. STEVENS. Mr. Chairman, we have received so far approximately $366,000 of unrestricted gifts, as well as an additional commitment of $60,000, covering the next 3 years. This is part of a $100,000 gift which was given to us by a foundation at $20,000 a year, beginning last year. The first two $20,000 installments are included in the $366,000, and we have got a commitment for the remaining $60,000, but of course, until the cash actually is received, we can't use it.

Mr. KEENEY. I think that next year, sir, when I will not be so occupied as I was this year setting up the program, that I can go out and raise a fair amount of money.

Mr. STEVENS. Mr. Chairman, I think we expect to, too.

USE OF DONATIONS

Chairman HAYDEN. For what have the donations been used?

Mr. KEENEY. Well, since we haven't any, I think Mr. Stevens had better answer that question.

Mr. STEVENS. We used this money for educational television programs, making grants to the Educational Broadcasting Corp., Channel 13, and to National Educational Television, known as NET, and also to—Mr. Stewart, what is the exact name of the other group?

Mr. STEWART. Educational Television Stations.

Mr. STEVENS. Educational Television Stations. They all have similar names, but they are slightly different, and we used all of the unrestricted gift money for that purpose.

GIFTS FOR SPECIFIC PURPOSES

Chairman HAYDEN. Well, have any attempts been made by donors to provide gifts for specific purposes?

Mr. STEVENS. There have been actually checks sent in to us for specific purposes, with stipulations that they be matched, and we have had to return them in those cases. The law calls for matching funds only if the gifts are unrestricted.

However, the Council passed a resolution stating that if unrestricted gifts came in, that we would use the money for certain purposes.

Last summer, the Council passed a resolution that the first unrestricted gifts that we received, we would match and make grants to the field of educational television. We have on record right now a resolution saying that if anyone gives us unrestricted gifts, that we will use the funds now for assisting the film institute.

Chairman HAYDEN. I see.

Mr. KEENEY. We had one would-be donor who wanted to give us money to do something that was outside of our purposes, and I told him to go away, and he did.

Senator BARTLETT. CIA?

Mr. KEENEY. No, sir; it was an old friend of mine.

We can accept restricted gifts under the legislation, if they come within the purposes of the act, but they don't get matched by the Treasury.

ADMINISTRATIVE EXPENSES

Chairman HAYDEN. For administrative expenses in the fiscal year 1968, you are requesting $1,620,000, as compared to $1 million which was provided in fiscal year 1967.

Would you please discuss this request indicating the number and distribution of additional positions requested, as well as advising the committee of increases in other activities which you believe are required?

Mr. KEENEY. Yes, sir; we had $1 million appropriated for fiscal year 1967 for administration, and we carried over $113,000. So the increase is smaller than it looks. It is $507,000; $370,000 of this increase is for an additional 26 positions: eight for arts, four for humanities, 14 to the shared staff.

ARTS ENDOWMENT STAFF

These will permit the arts endowment to keep pace with the expanding volume of proposals received and grants processed, and provide for the establishment of the planning and analysis capability.

HUMANITIES ENDOWMENT STAFF

The additional positions in humanities will provide staff to handle the increased workload due to the increased volume of applications and grants, and will provide for the establishment of a public information officer who is vitally needed to help the endowment carry out one of its purposes, which is defined in the act, to foster public understanding and appreciation of the humanities.

SHARED STAFF

The 14 increased positions in the shared staff reflect several considerations. The most important of these is that we have an agreement now with the National Science Foundation to do the bulk of our administrative work for us. This agreement expires on the 30th of June, and we have to develop our own accounting and personnel capacity. The four new positions requested in the administrative office will provide that capacity.

The grants office is understaffed to meet present needs sufficienty, and it will be particularly understaffed for the increased volume, and there are five positions requested there.

The five other new positions in the shared staff will increase the responsiveness of the office of general counsel and increase the inhouse library and research capacity of the foundation.

The total increase in personnel benefits for the 26 new positions is $21,000.

TRAVEL

We request a $56,000 increase for travel, to allow the two Councils to meet quarterly, and to permit their subcommittees to meet as necessary, to carry out their responsibilities under the act, to permit us to use consultants and experts on a scale commensurate with the increase in applications, and to permit the staff to conduct on-the-scene evaluations of proposals and funded projects, which was very severely handicapped this year.

I believe that this capacity will result in a saving of money, because you can often find that a grantee or an applicant who looks good on paper does not look very good at home, if you visit him and snoop around.

RENT, COMMUNICATIONS, UTILITIES

We request a $32,000 increase for rent, communications, and utilities, of which $20,000 is to pay the post office for postage in fiscal year 1967 and fiscal year 1968, which we haven't been paying. The remainder is for increased telephone service, for the rental of a more capable Xerox, which saves secretarial time, and for rent and alterations to house a larger staff.

PRINTING AND REPRODUCTION

There is a $14,000 increase requested for printing and reproduction, and one of $2,000 for supplies and materials, which reflect the cost of efficiently conducting a rapidly growing program, and presenting it to the public.

Then we need outside services, which we can purchase cheaper than we can develop staff capacity. We need information depth in certain fields, and we need technical information and expertise, which is central to studies, analyses, and evaluations. We request an increase of $56,000 for that.

We request an increase of $56,000 to provide bookkeeping equipment, typewriters, and collators, and punch and binding equipment, and there is a decrease of $25,000 in services of other agencies.

Roger, would you like to add to that?

Mr. STEVENS. Well, nothing, Mr. Chairman, except for the fact that we are dealing with all the States, in our State grants, and it is necessary to keep in contact with these State agencies. We are a national group. Our program involves every State in the Union in addition to the State arts council grants, and we have to keep in constant contact, and actually see what is going on, to do our job properly.

In addition to that, as I said previously, each one of the major categories of the arts requires panels, and while the members of the panels have been very generous with their time, they must come from all over the country to give us the proper perspective and the proper choices, and it seems unfair to expect them to serve without being paid for it. Because of the fact that our programs are spread throughout the country, what may seem a little high in the areas we are discussing is really very conservative.

We try to do the best we can, and we limit travel whenever possible. We aren't careless with it at all.

GENERAL COUNSEL'S OFFICE

Chairman HAYDEN. Among the increases requested for the shared staff is an attorney and a secretary for the office of general counsel. What are some of the examples of the legal problems which have to be met by the Foundation?

Mr. KEENEY. The counsel, the general counsel, advises both endowments. He advises both councils, each of which has unusual legal requirements. Also, he advises the Federal Council on the Arts and Humanities.

Since this is new legislation, and since this is the Federal Government's first venture into support of the arts and humanities on any significant scale, the majority of the legal opinions rendered by the general counsel are precedent-making, and in fact, develop administrative law.

It should be remembered, though, that in addition to rendering legal advice, the general counsel, at the request of the two chairmen, participates in a very significant way in the development of the Foundation's policies, and is very effective at that. The general counsel provides legal interpretations of the act, and of other statutes and regulations.

He negotiates and drafts all contracts. He reviews all grants for legal and policy aspects, and he works with the other administrative officers in the carrying out of their responsibilities.

He studies all legislation that has to do with the arts and humanities, which is quite a burdensome activity.

Some of the unusual activities he gets involved in are the incorporation of the film institute, and the obtaining of its tax-exempt status, negotiating with the Modern Language Association of America, a Humanities Endowment grantee, with respect to copyright and royalty matters, and establishing a legal relationship among the association, publishers, and the endowment.

He drafts regulations for the Foundation. For example, those relating to civil rights and conflicts of interest. The additional attorney is necessary to enable the general counsel to participate fully in all aspects of the endowment activities by relieving him of the day-to-day legal work.

NEED FOR MORE STAFF

Mr. STEVENS. Mr. Chairman, could I make one further comment on this increased staff?

Chairman HAYDEN. Yes.

Mr. STEVENS. We requested the increase because we really had not gotten fully under way in the previous year; so what may appear to be increases, sir, are really filling out the program and the staff that we originally were expected to have, but didn't because of the time problems. I think that the strength of our case can best be shown by the fact that the Bureau of the Budget allowed us to increase our job positions, even though they are very stringent on any such increases, as you probably know.

OFFICE OF ADMINISTRATION

Chairman HAYDEN. For the office of administration, four additional positions are requested. This will make a total of 10. What are the assignments of the present six personnel in the office of administration?

Mr. KEENEY. Shall I supply this for the record, sir, or would you like me to go through it now?

Chairman HAYDEN. Put it in the record.

(The information follows:)

Although we have six positions at present in the Office of Administration, only four are now filled because of our severe shortage of administrative money. The four currently filled positions are:

A Director of Administration responsible for planning, designing, installing and operating, or otherwise providing the full range of administrative activities.

An Administrative Assistant primarily responsible for handling day-to-day administrative work processing between the Foundation and the National Science Foundation.

A Secretary to the Director who, in addition to the usual secretarial duties, focuses on personnel matters.

A Mail Clerk-Messenger who also handles procurement, property, supply, duplicating, and related matters.

The vacant positions are:

A Mail Clerk-Messenger to assist our one employee now assigned to this work.

An Accounting Clerk to assist in the task of financial record-keeping.

PRESIDENT'S STUDY ON LIBRARIES

Chairman HAYDEN. What is the President's study on the libraries and how does the Endowment on the Humanities contribute to this study?

Mr. KEENEY. The President established the President's Committee on Libraries, and the National Advisory Commission on Libraries by Executive order last September, to appraise the role and adequacy of libraries now and in the future, as sources of scholarly research, as centers for distribution of knowledge, and as links in our communications network.

The Commission will make a final report to the President's Committee on Libraries, devoted to an evaluation of the policy and the programs and practices of public agencies and private organizations.

The Endowment has a responsibility under the Executive order which empowers the Commission to request assistance from any Federal agency.

The Chairman of the Commission, Dr. Douglas Knight, has been in to talk with us, and has requested our assistance, but has not specified his request as yet. We are in constant communication.

HUMANITIES AND LIBRARIES

Now, ultimately, the study of the humanities depends upon libraries, to an extent that is greater than that in any other field.

You cannot do humane teaching and research without great libraries. This country, by the way, is richer in libraries than any country in the world, and this is one of the glories of the country. The endowment is particularly interested in special libraries which have been built up over the years, such as the Houghton Library at Harvard, the John Carter Library at Brown, the Huntington Library, the Folger Library here, and the other great American repositories of research materials.

The findings and recommendations of the President's Commission will influence and affect the Endowment's program in the future, and whatever help we give it will be relevant to our purposes.

EQUIPMENT

Chairman HAYDEN. A portion of your $56,000 increase for purchase of equipment would go to providing furniture and office equipment for the new personnel requested. How much do you use in General Service Administration surplus stock to meet these requirements?

Mr. KEENEY. We have been able to obtain some furniture from them, and we continue to inspect their warehouse, to use any satisfactory items we can find.

Chairman HAYDEN. Dr. Keeney, I have a number of questions concerning the Endowment for the Humanities. I shall hand them to you and ask that you prepare responses. Both questions and answers will be printed at the end of this record. (See p. 1925.)

Mr. KEENEY. Very well, sir.

Chairman HAYDEN. Senator Bartlett.

Senator BARTLETT (presiding). Thank you, Mr. Chairman.

What is your travel appropriation for this year?

Mr. KEENEY. It is $35,000 for each endowment—a total of $70,000.

Senator BARTLETT. $70,000.

Mr. KEENEY. Yes, sir.

Senator BARTLETT. And this may have been explained while I was necessarily absent, but how many people are on your staff now?

Mr. KEENEY. We have a total of 24 on the Humanities staff as of March 12, out of 26 available positions. The two unfilled positions are secretarial. We have a total of how many on the Arts staff?

Mr STEVENS. We began with 32 positions available on the arts staff, but have curtailed to 28 to meet budget limitations.

Mr. KEENEY. Twenty-eight arts, 24 humanities, and 17 shared, sir.

Senator BARTLETT. And as you explained, the Bureau of the Budget has approved each of these increased appropriation requests?

Mr. KEENEY. Yes, sir.

"TALKING BOOKS"

Senator BARTLETT. In connection, sir, with the "talking book" program, you mentioned Goldwater Memorial Hospital. Where is it?

Mr. KEENEY. It is in New York.

Senator BARTLETT. In New York.

HUMANITIES GRANT

Mr. KEENEY. By the way, sir, these are some of the books that come out of the Center for American Editions which received a grant. Works of Emerson, Twain, Hawthorne, and Whitman. Many of these will be read onto those records.

Senator BARTLETT. Which books specifically are those with you?

Mr. KEENEY. Well, "Leaves of Grass," there is "The Scarlet Letter," there is one by Twain, "Which Was the Dream," and there is the "Journals of Ralph Waldo Emerson." Twenty volumes of these have appeared. There will be about 160 all told.

Senator BARTLETT. Have some of the books of this type been put on tape yet and used?

Mr. KEENEY. Not yet, no, sir, but they will be.

Senator BARTLETT. None. What is your assumption as to the reception of a book such as any one of those four as compared with a wild west story?

Mr. KEENEY. I think the reception of the "Journals of Ralph Waldo Emerson" would be very poor. I think that "Which Was the Dream" would not be very popular. It is a work that Twain discarded.

"The Scarlet Letter" would be, I think, very popular. That is a gripping book. The Walt Whitman poetry would appeal to a great many people, particularly when it is read.

Did you see that television program on Mark Twain the other night?

Senator BARTLETT. No, I miss all the good ones.

Mr. KEENEY. That was the best of the whole year. This was a great program. It was a recitation from Mark Twain's works.

Senator BARTLETT. I guess we will have a repeat on that.

Mr. KEENEY. I am sure it will be, sir.

Senator BARTLETT. Well, let us take "Leaves of Grass" by Walt Whitman, which is a big book. This won't all be read at one time?

Mr. KEENEY. No, sir. You know, you can stop these machines any time you want to, and that would fill several records or reels of tape.

Senator BARTLETT. You have to have people with especially good voices to record, I imagine.

Mr. KEENEY. And who understand what they are reading.

Senator BARTLETT. Two requisites there.

Mr. KEENEY. Yes. Now we also expect these books to go into popular editions, so that students can use accurate texts, inexpensively, and so that the general public can buy them in bookstores, or in airports, or railroad stations.

DECREASE IN BUDGET

Senator BARTLETT. I notice that while you have a good many increases proposed in your budget, Mrs. Hardy suffered a loss of over $100,000.

Mr. KEENEY. Yes, sir. Mrs. Hardy is so intelligent that she really does not need a great deal of money.

Senator BARTLETT. She didn't protest, then, because you explained that to her.

Mr. KEENEY. That is not exactly the way I put it, but, no, we had more in it this year, sir, because this was the year when we were really starting to make plans. Next year we can carry them on, with a little less money.

Senator BARTLETT. Do you regard your staff as being creative?

Mr. KEENEY. Most members of it; some are not.

Senator BARTLETT. Have you conducted any IQ tests?

Mr. KEENEY. I haven't. But I think I could make a fairly shrewd guess at them. I would say they range from about 125 to 160.

Senator BARTLETT. Well, we are going to disprove that other theory that high IQ and creativity don't go together then.

Mr. KEENEY. Well, I am a low one.

Senator BARTLETT. I have no further questions. I guess I have a lot more, but I won't go into them now.

Thank you very much, gentlemen, and Mrs. Hardy, for your appearance.

Mr. KEENEY. Thank you, sir.

RESPONSES TO QUESTIONS BY SENATOR HAYDEN

Actual and Anticipated Accomplishments

Question. Over the long run, what do you think the Humanities Endowment can accomplish for the nation? After approximately one year's activity, how much has the Humanities Endowment accomplished?

Answer. In carrying out its objectives, the Humanities Endowment will assist in the development of highly trained scholars and teachers for the colleges and the schools. Support of research will result in a much better understanding of our past and will help bring the past into the present as a resource through the improvement of teaching and of teaching materials for the schools and the colleges. Likewise, it should result in the development of a great deal of public information and public understanding. Ultimately if the Humanities Endowment is successful, our public and private citizens will have a better basis for making the great and small decisions which lie before us as individuals and as a society; for much of the material on which judgments of value must be based lies in the collection of works which we call the humanities—the experience of history, the moral and aesthetic judgments of literature, the formulative effect of art, and the practical wisdom of political science.

After approximately one year, the Endowment has gotten off to a good start in pursuing these objectives. It is fully staffed and very competently staffed for the most part. The program is soundly developed, and it is generally appreciated by the various constituencies of the Endowment, such as the members of colleges and universities and of school systems and the media of communication. It is a little too early to judge the actual effect of most of the grants, but in the case of the largest one, the Center for the Edition of American Authors is already producing books. Prior to our grant, this organization was in being, and some twenty volumes of the works of the greatest 19th century authors have already appeared—some of which contain material that has never before been published, whereas others contain for the first time since the author left it, the correct text. This important work will now move more rapidly and securely. We have made grants or awarded fellowships in 46 of the 50 states to persons in all sorts of educational institutions and to other persons and organizations that are outside educational institutions. We had about 1,500 applications this year, and the total amount requested was over $53 million. We have thus far committed $4,100,000 of the $4.5 million available to us at the beginning of the year, and we expect to obligate the rest before the 30th of June. As the Endowment becomes better known and its program more versatile, the volume of applications will increase greatly, as will the amount requested. It is indeed fortunate that in this first year the requested amount was more than ten times greater than the amount available, for this forced establishment of a very high standard of judgment and great selectivity among applications. It is my intention that these high standards will continue to be applied and that is certainly the intention of the Council.

Another way of putting it is that we have helped scholars and teachers learn and teach more about our society and how it came to be how it is.

FEDERAL SUPPORT JUSTIFICATION

Question. In the final analysis, why should the Federal government be involved in supporting the humanities?

Answer. It is of vital concern to the Federal government and to the people of this country upon whom it depends and who depend upon it that every citizen be as wise and understanding of himself, of his society, and of his government as possible. Many of our great advances of this generation have come as a result of Federal support of scientific and technological research. This harvest is just beginning to be collected. In 1967, the Federal expenditure for all kinds of scientific activities was $15.9 billion. In the fiscal years 1963–5, the physical sciences received 68 to 69% of all Federal support of basic research; the life sciences 26 to 28%; the social sciences about 2%; and all other fields less than 0.5%. The arts and the humanities, of course, fall in the other fields that received less than 0.5%. We have many situations, such as air pollution, in which we have a technological solution to an important problem, but we do not a social or political solution. Some of the solutions can be found through the study and application of the humanities and social sciences. Our society today is preoccupied with achieving justice for all. This, of course, has been a major concern of societies in the past—American, European, and Oriental. Much of the content of works of philosophy and political theory are devoted to the question of justice, and much can be learned from their study. Mistakes can be avoided by examining similar situations in the history of the past. Indeed, I think it is reasonable to say that our only chance of controlling the technology that we have created is through the applications of principles which can be found in the humanities and social studies. In 1965, the House Committee on Government Operations recommended as follows:

"The committee recommends that massively increased support for scholarship and for instruction in the humanities and the social sciences—by some combination of private means, or by Federal, State, and local government support—be accepted as an important national goal."

Five years earlier, the President's advisory committee on science had recommended a similar goal.

STUDIES

Question. Has the Endowment supported studies of the development of the American Republic and the development of democratic ideals?

Answer. Yes, indeed, 47 of the fellowships are directly concerned with American history; seventeen others are concerned with American literature and other aspects of American development. These range from the study of New England in the 17th and early 18th century to John W. Bricker. Of the research grants, 29 are concerned with American subjects ranging from a selection of records of American colonial courts, which will be useful to students of history and of the law, to an oral history of President Eisenhower and Stevenson. Others deal with literature, with art and music, and with government. In the Division of Education and Special Projects, 8 grants are directly concerned with American affairs; and many of the fellows and interns in the museum program and some of the young teachers in the teaching internship program will be concerned with acquiring and/or teaching a better understanding of American and democratic ideals. One of these grants is for an institute on the role of Alaska in the development of the United States. Another has to do with the American ideal as it is expressed in history, art, and literature; and a third will place on records or tapes for the disabled some of the greatest classics of American literature and thought, including some of the works being published through our grant to the Center for Editions of American Authors.

Question. You are coming before this Committee to request $5.0 million to conduct programs in support of the Humanities. What is the amount of federal support for science?

Answer. Federal support of science in the present fiscal year is estimated by the National Science Foundation to amount to $15.9 billion dollars, of which $5.6 billion will support basic and applied research.

Post-Doctoral Fellowships

Question. How does the number of post-doctoral fellowships available in the sciences compare with those in the humanities?

Answer. The following table shows that in 1967–68 post-doctoral fellowships total 2,911 in the sciences as compared with 486 in the humanities.

	Postdoctoral fellowships in sciences for 1967–68	Postdoctoral fellowships in humanities for 1967–68
Air Force Office of Scientific Research postdoctoral fellowships	15	
American Association of University Women		7
American Cancer Society research fellowships and grants	20–30	
American Council of Learned Societies		36
American Heart Association research fellowships	25	
Atomic Energy Commission fellowships	25	
Center for behavioral sciences	50	
Center for Hellenic Studies		8
Cerebral Palsy Foundation fellowships in brain research	5–10	
Folger Library		35
Ford Foundation faculty research fellowships in economics	20	
Fulbright-Hays research scholarships		75
Guggenheim Foundation (for 1966–67)	113	150
Huntington Library		2
National Academy of Sciences research associateships in Federal laboratories	146	
National Council to Combat Blindness research fellowships	16	
Labor Foundation awards	25	
NASA resident research associateships	124	
NSF postdoctoral, senior postdoctoral, science faculty, and NATO fellowships	350	
Office of Education		66
Population Council biomedical fellowships	30	
Public Health Service (NIH) postdoctoral and special postdoctoral fellowships	1,900	
Smithsonian visiting research associateships	12	5
Society for Religion in Higher Education		22
Social Science Research Council		20
SSRC and ACLS area studies grants		60
Helen Hay Whitney Foundation research fellowships	18–20	
Total	2,911	486

Fellowship Program Resources

Question. How does your fellowship program compare with resources presently available for fellowships in the humanities?

Answer. There are approximately *486* fellowships in the humanities available from other sources for 1967-68. The *287* Endowment fellowships and stipend awards thus make a considerable increase over the amount of support previously available.

Humanities endowment:	
Senior fellowships	57
Fellowships for younger scholars	100
Summer stipends	130
Total	287
Postdoctoral awards available in the humanities from other soures for 1967–68:	
Guggenheim	150
American Council of Learned Societies	36
Fulbright-Hays	75
Folger Library	35
Huntington Library	2
Social Science Research Council	20
American Association of University Women	7
Center for Hellenic Studies	8
Society for Religion in Higher Education	22
Smithsonian	5
Office of Education	66
SSRC & ACLS area studies grants (including many small grants)	60
Total	486

Even more significant than this general increase in the number of fellowships available in the humanities is the great increase in the number of awards available to younger scholars within five years of their full entry upon their professional careers. Approximately 55 fellowships will be awarded to such younger scholars for 1967-68 from the other major programs, to which the Endowment will add 100 fellowships and 130 summer stipend awards:

Guggenheim	30
American Council of Learned Societies	5
Fulbright-Hays	20
Total	55
Humanities endowment:	
Fellowships for younger scholars	100
Summer stipends	130
Grand total	285

Question. In view of the severity of the situation in Viet Nam, how can you justify expenditures not essential to the national security?

Answer. The situation in Viet Nam is the present manifestation of a struggle between democratic and authoritarian government that has been continuous throughout almost all of this century. It is in effect a struggle for the control of men's minds. It is therefore of essential importance that our people and our government have the intellectual capacity to conduct this struggle. Battles are won not by guns but by soldiers who use guns and bombs and all the other instruments of warfare. It has been our experience in this country that those soldiers who best understand their way of life fight best and longest. I remember vividly from the last war the great hunger for books among the troops. One day during the Battle of the Bulge, one of the men in my unit found a book; and in the evenings after that, we all read it. I read a page, tore it from the book, and passed it to another, who would in turn read it and pass it on, and so on. When the fighting was over, books became abundantly available; but it would have helped these men a great deal if they had had them when they needed them most. We are in the business of supplying the content for books but not simply for pleasure but in order that our people may develop their wisdom.

Another way of putting it is that the society which understands its liberties best, preserves them best.

This is a time of great decisions and of crisis. In time of crisis, we tend to forget our consciences. In a sense, the humanities contain our conscience, and can remind us that it is more important to be right than to be expedient.

Question. What are the fellowship activities of OE, NSF, and other Federal and private fellowship sources and is there overlap between their programs and yours? Why your program if there is?

Answer. The Office of Education has post-doctoral fellowship programs in "critical" modern foreign languages and in educational research. The former are so limited in scope that overlap with NEH is minimal; awards under the latter program do not overlap at all. NSF has three post-doctoral programs: Senior Fellowships, Science Faculty Fellowship, and Post-Doctoral Fellowships for younger scientists. Of the 65 Senior and 250 Science Faculty awards (only about one-third of the latter are at the post-doctoral level) announced in December, all except 16 were in natural sciences and engineering (viz.: economics: 8, history of science: 4, sociology: 3, linguistics: 1).

The major fellowship programs that overlap with ours are the Guggenheim (approximately 150 awards to humanists for 1967–68), the ACLS (36 awards), the Fulbright-Hays (about 75 research scholarships in the humanities), the Folger Library (35), SSRC (20), and OE (66 in critical foreign languages). There are also about 60 SSRC and ACLS Area Studies Grants, many of which are small grants. Altogether, roughly 480 such awards are available for 1967–68.

In spite of this overlap, NEH fellowships, fall far short of filling the needs of scholars capable of using fellowship support productively. If fellowships were to be awarded over a 5-year period to one-quarter of the approximately 13,000 young humanities faculty members who have completed doctorates within the past five years, 650 fellowships per year would be needed just for this purpose, yet other programs provide only 50 or 60 awards annually to such young people. If, in addition, ten percent of the 38,000 associate and full professors in the humanities (in four-year colleges and universities alone) were to receive fellowships within the same 5-year period, an additional 760 fellowships per year would be needed—a total of approximately 1,400 per year. That additional fellowships could be well used can be seen in the large number of distinguished scholars on the Senior Fellowship alternate list.

Question. What is the relation of your educational programs to those of the Office of Education, OEO, and NSF?

Answer. The National Endowment for the Humanities does operate and plans to continue to operate in areas generally under the federal responsibility of other agencies. We do so in order to restore a needed emphasis, in order to encourage the spread of ideas we think useful, and in order to influence the future planning of other agencies. We attempt to do this always for very special purposes and in full knowledge of and with the cooperation of, the agency involved.

For example, our program in curriculum dissemination was developed to complement the Elementary and Secondary Education Act. By disseninating new curriculum developments supported by the Office of Education. We are helping local schools and school boards to spread ideas which they have found effective.

We do not compete with OEO but simply encourage model programs which we hope will show how the subject matter of the humanities can become an important part of the experience of cultural enrichment.

In our junior college program, which has not even reached the planning stage, we have been in close consultation not only with the OE personnel involved, but also with the professional associations.

As for vocational education, as our 1967 budget justification pointed out, we seek merely to experiment through grants to interest schools and school boards with the concept of encouraging a richer background for students whose aim in going to school is primarily to make them employable at a semi-skilled level. We feel that it is just as important to make this group aware of the humanistic dimensions of life as it is with college and university students. While OE is devoting massive funding to one aspect of the problem, we can be experimenting with other aspects on a more selective basis.

As time goes on, we may wish to become more like the NSF in its relatively comprehensive concern with the teaching of scientific subjects in all contexts. At present, our means and experience dictate a policy of selective, experimental grants made only after a close study of existing needs and the activities and plans of other agencies, federal and state, public and private.

Question. What are other sources of research money in the humanities, either public or private? What are criteria in final choice? What is the process of final selection?

Answer. *Public sources of research support in humanities.—*

Federal research in the humanities, fiscal year 1967:	
NEH	$1,500,000
National Historical Publications Commission	350,000
Total	1,850,000

Federal support of research in areas allied to humanistic research, fiscal year 1967:	
Smithsonian (support of archeological excavation in excess-currency countries) (five post-doctoral fellows in history)	1,300,000
Office of Education (cooperative educational research)	[1] 300,000
Total	1,600,000

[1] Approximate.

The only other public sources of research money would be through the appropriations which state legislatures make for the general purposes of state-supported universities; and most of this does not support humanistic research.

Private sources of research support in humanities.—(1) Probably the largest aggregate amount would be from the colleges and universities themselves. However, a recent study showed that the average amount which these institutions make available yearly to their faculty for support of humanistic research is between $5-$6,000. At most colleges and universities, the absence of sponsored (i.e., Federally or industrially financed) research in the humanities aggravates the situation, as few institutions have large amounts available in any area; particularly in the humanities. (2) Private foundations do not spend substantial amounts on research in the humanities. For example, the Ford Foundation in 1965, made grants totalling $824,000 for humanistic research, including $750,000 for the national translation center. An appropriation of $500,000 was voted in 1965 for humanistic research and scholarship. The total FF grant budget for 1965 was $281.5 million. The Carnegie Corporation—out of a total amount spent in the U.S. in fiscal 1966, $11.2 million, approximately $720,000 was spent to support research projects identifiable as being in the humanities. (3) The ACLS, which is a recipient of private and public funds (including FF and Carnegie), spent in fiscal 1966 $202,500 on grants-in-aid support for research, computer-oriented research, travel to conferences and publications.

Criteria.—The criteria for the judgment of research projects are as follows: (1) Are the research proposals innovative; that is do they promise to break new ground in humanistic research or to provide new insights and suggest new directions of humanistic endeavor? (2) Will they result in a substantial addition to or recovery of humanistic knowledge? (3) Do they have value, either as scholarly projects in themselves, or as scholarly tools? (4) Are the designs of the projects adequate to the hoped for results? (5) Are the applicants competent to accomplish what is proposed? (6) Are the sums requested necessary, and is the amount requested proportionate to the value of the project?

Process of selection.—Naturally, it is impossible to apply these criteria in a mechanical or mathematical way. Individual persons or groups of people must measure each proposal and come to an assessment of its strength in meeting each of these criteria. Therefore, the process of review of applications is framed to provide the Endowment with as much informed judgment about each application as our funds permit. The following steps make up our review process: (1) All proposals are reviewed by staff, which gives them a preliminary screening. Staff may reject proposals for technical reasons: they are not within the programs of the Endowment; they duplicate earlier proposals; or the applicant is ineligible. (2) Proposals about which there are doubts or which the staff lacks the competence for preliminary screening are sent to individual scholars or experts—usually two and sometimes three—who send in their judgments on forms devised for the purpose. (3) When these judgments are in, the proposals are sent to the panelists, who are acknowledged experts in their fields, and who later meet as a body and bring their thinking to bear on the proposals. (4) As a body, the panelists come to a specific judgment on each proposal, for consideration by the National Council on the Humanities. (5) By law, the Council, which is appointed by the President of private citizens in all fields of life, must make a recommendation to the Chairman of the Endowment on each proposal before a grant can be made. (6) The Chairman may then make the grant. Although he is not required by law to follow the Council's recommendation to approve or reject an application, in fact all grants made thus far have been approved by the Council in their recommendation to the Chairman.

DISTRICT OF COLUMBIA PROJECTS

Question. Has the Endowment supported any activity here in Washington which could exemplify some of its aims and interests?

Answer. One example is very close at hand: 314 A Street, N.E. This is the Museum of African Art and the Frederick Douglass Institute, which received one of our earliest grants. This Institute is still small and rather unpretentious. It is run by one or two capable people who give meaning to the word "dedicated." On a very small budget they have begun to assemble objects and books which will eventually connect the history of the Negro in Africa with his history in Colonial America and the United States. The collection is both a library and a museum. It is a focal point for larger collections nearby at the Library of Congress and the Archives.

We are happy with the way our grant has been used for a number of reasons: (*a*) the Institute has prepared traveling exhibitions which make its resources mobile and which allow its message to be presented all over the country; (*b*) the facilities of the Institute have been concentrated on education to the extent that regular visits to its premises are now undertaken by classes ranging from elementary school children through the highly educated trainees at the Foreign Service Institute; (*c*) the grant we made became seed money in the best sense: i.e., it allowed this struggling enterprise to raise itself to the level where it could compete for and receive funding from more affluent sources. It now has a good-sized grant via the District of Columbia Board of Education which will expand its educational function; it is in the process of submitting an application for a large grant from a private foundation whence it has been led to expect support; (*d*) finally, in a loose way, this grant symbolizes a concern of ours that the Endowment play its part in involving all Americans in the stream of our mutual humanistic past and particularly involving those groups which have often been overlooked.

SUBCOMMITTEE RECESS

Senator BARTLETT. The subcommittee will recess until 10 a.m. Wednesday, March 15, when the National Capital Transportation Agency and the Division of Indian Health will come before the committee.

(Whereupon, at 11:40 a.m., Tuesday, March 14, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, March 15, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

WEDNESDAY, MARCH 15, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senator Bartlett.

NATIONAL CAPITAL TRANSPORTATION AGENCY

STATEMENT OF WALTER J. McCARTER, ADMINISTRATOR; WARREN D. QUENSTEDT, DEPUTY ADMINISTRATOR; HOWARD W. LYON, DIRECTOR, OFFICE OF ENGINEERING; WILLIAM I. HERMAN, DIRECTOR, OFFICE OF PLANNING AND FINANCE; OWEN J. MALONE, GENERAL COUNSEL; CODY PFANSTIEHL, DIRECTOR, OFFICE OF PUBLIC INFORMATION AND COMMUNITY SERVICE; AND J. NEAL TOMEY, DIRECTOR, OFFICE OF ADMINISTRATION

BUDGET REQUEST FROM UNOBLIGATED BALANCE

Chairman HAYDEN. The subcommittee will be in order.

For "Salaries and expenses" in fiscal year 1968 the National Capital Transportation Agency requests that $400,000 of an unobligated balance of last year's appropriation be reappropriated to remain available during fiscal year 1968. I will place in the record the justification statement in support of the congressional action requested.

(The justification follows:)

GENERAL OBJECTIVES AND BUDGET YEAR PROGRAMS

The National Capital Transportation Act of 1965 authorizes the Agency "to design, engineer, construct, equip, and take other action * * * to provide for the establishment of the system of rail rapid transit lines and related facilities" in the Nation's Capital.

The system, as presently authorized, will be 24.9 miles long, with double-track throughout, and will include 29 stations. About half (13.1 miles) will be underground, 7.5 miles will utilize existing rights-of-way, and the balance of 4.3 miles will occupy other exclusive rights-of-way.

The total cost of constructing and equipping the proposed system is estimated to be $431 million to be provided by direct appropriations of $150 million ($100 million by the Federal Government and $50 million by the District of Columbia) and $281 million to be derived from the public sale of bonds to be repaid out of the revenues of the system.

Within the amounts authorized, funds, totalling approximately $19.6 million were appropriated in Fiscal Years 1966 and 1967 under the appropriation "Construction, Rail Rapid Transit System" and the unobligated balances of these funds are currently financing the major engineering and architectural programs of the Agency.

For Fiscal Year 1967, funds in the amount of $1.4 million were appropriated under the appropriation "Salaries and expenses, NCTA" to finance the administrative expenses of the Agency such as the salaries of personnel, personnel benefits, travel, planning and financial studies, and related support costs. These funds would provide for 66 full-time positions as well as part-time personnel to be compensated on a "when-actually-employed" basis.

The Washington Metropolitan Area Transit Authority was created, effective February 20, 1967, by Interstate Compact by and between Maryland, Virginia, and the District of Columbia, pursuant to Public Law 89–774, approved November 6, 1967. The Authority's primary function is a plan, develop, finance, and provide for the operation of a rapid rail transit system serving the Washington Metropolitan Area Transit Zone. The legislation provides for the transfer of functions and duties of the National Capital Transportation Agency to the Washington Metropolitan Area Transit Authority on September 30, 1967.

In view of the provision for the transfer of functions and duties on September 30, 1967, the Agency is requesting funds only for the period from July 1, 1967 to the date of transfer on September 30, 1967. This budget request of $400,000 would provide for the continuation of the currently authorized staff of 66 positions, related expenses necessary to the functioning of the Agency for this 3-month period and certain expenditures in connection with the transition to the interstate Authority.

Schedules and narrative justification material to explain the estimates follow.

Summary of estimates by budget activities

[In thousands of dollars]

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
1. Engineering direction	104	182	80
2. Traffic and system financial planning	231	405	170
3. Architectural design	24	71	20
4. Real estate acquisition and relocation assistance		27	10
5. Executive direction and administration	277	315	120
Total	636	1,000	400

[In thousands of dollars]

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
1. Engineering direction	104	182	80

The Office of Engineering is responsible for the preparation of engineering plans, estimates of cost, specifications and supervision of construction of the rail rapid transit system. The various elements comprising the total system include basic subway, aerial and other open construction; trackwork, train control, power distribution and related wayside facilities; stations, parking lots and bus transfer facilities; the rolling stock and associated equipment; and right-of-way requirements for the various items of construction. The estimated cost for these facilities totals $431,000,000 phased over a seven-year period. The design and construction phases of the Transit Development Program must be coordinated with the programs of other agencies and jurisdictions.

The authorized strength for the current year is as follows:

Civil engineer, GS-16 (Director)	1
Civil engineer, GS-15	1
Civil engineer, GS-14	1
Electrical engineer, GS-14	1
Right-of-way engineer, GS-13	1
Electrical engineers, GS-13	2
Equipment engineer, GS-13	1
Civil engineers, GS-13	2
Civil engineer, GS-12	1
Electrical engineer, GS-11	1
Utilities engineer, GS-11	1
Civil engineer, GS-11	1
Specifications engineer, GS-11	1
Technician, GS-9	1
Civil engineer, GS-7	1
Electrical engineer, GS-7	1
Draftsman, GS-7	1
Secretary, GS-7	1
Secretary, GS-6	1
Draftsman, GS-5	1
Secretary, GS-5	1
Total	23

During the current year the Office of Engineering is concentrating on establishing standards and criteria to the level of refinement required to award final engineering design contracts for portions of the system scheduled for early construction. Final design activities are being initiated. In addition, equipment development efforts are being emphasized as well as further soils exploration projects.

The Agency will expand its final design activities during Fiscal Year 1968 and by the end of FY 1968, it is expected that final design contracts representing approximately 30 individual construction segments or activities could be underway by the Agency or Authority. Detailed monitoring of these design contracts and increasing public works coordination efforts will be the responsibility of the Civil Engineering Division.

The Office of Engineering, through its Division of Equipment, will undertake the development of criteria and specifications and the monitoring of engineering and construction activities in the areas of electrical facilities (including traction power), electrical work for rolling stock, and facilities for the maintenance of rapid transit vehicles.

These estimates include $80,000 to provide for 23 full-time positions and related support costs during the first three months of Fiscal Year 1968.

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
2. Traffic and system financial planning	$231,000	$445,000	$170,000

The Office of Planning and Finance is responsible for all functions which affect operating costs, traffic, fares and revenues, and financial plans for the proposed system. It is also responsible for the coordination of rapid transit planning with other area-wide transportation planning and land use planning.

Its responsibilities include: preparing operational patterns and specific service schedules; forecasting traffic; negotiating for the provision of feeder bus services and determining an equitable allocation of fares between bus and rapid transit operators; developing a fare schedule and a fare collection system; providing for non-fare box revenues; preparing programs to provide financial support for the construction and operation of the system including the type or types of bonds to be issued, the scheduling of the bond issues, and the underwriting provisions; developing depreciation policies and schedules; determining, in coordination with the Office of Engineering, specific rapid transit routes and station locations; coordinating with all local planning highway, and public works agencies; planning for the development of areas close to rapid transit stations; and developing a plan for the external flow of traffic in station areas.

The authorized staff of the Office of Planning and Finance for the current year is as follows:

Financial economist, GS-16 (Director)	1
Urban planner, GS-15	1
Urban planner, GS-14	1
Traffic engineer, GS-14	1
Transit operations analyst, GS-14	1
Economist (public finance), GS-14	1
Industry economist, GS-13	1
Traffic engineer, GS-11	1
Transportation financial specialist, GS-10	1
Urban planner, GS-9	1
Economic statistician, GS-7	1
Statistical clerks, GS-4	2
Highway engineering aid, GS-4	1
Secretary, GS-7	1
Clerk-stenographer, GS-5	1
Total	16

Prior to the transfer of functions to the Washington Metropolitan Area Transit Authority it will be necessary for the Office of Planning and Finance to initiate certain projects in order to complement the phasing of the Agency's final design schedule. Two such studies, totalling $30,000, were included in the original estimates to the Bureau of the Budget and consist of:

UPTOWN CENTERS STUDIES

The construction of the rapid rail transit system will provide increased accessibility to many parts of the city, thus providing a potential for centers of increased activity. Such activity could include shopping centers, office buildings, light industrial area, apartments or educational facilities.

The Uptown Center Studies will be developed cooperatively with the District of Columbia Government and other agencies. They will develop data on:

1. Impact on transit ridership, revenues and operations.
2. Additional bus transfer and parking facilities required.
3. Additional transit station facilities needed.

It is anticipated that there will be at least four critical station areas to be analyzed so that the results can be used as inputs to the Agency's final design program during the first quarter of F.Y. 1968. The estimated cost of these studies is $20,000.

NONFARE BOX REVENUE FACILITIES

The Agency contemplates limited use of convenience type concessions within some of its station areas as well as controlled advertising within the transit facilities. Final design of stations must accommodate the space requirements of these facilities. Thus, decisions on those stations included in the early final design phase must be made promptly.

The project will develop needed information in the following areas:

1. The types of concessions which would be appropriate and profitable at selected station sites.
2. The development of specific advertising concepts and programs.
3. Space and special requirements at specific stations for the provision of such facilities.

It is estimated that this project will cost $10,000.

Other projects included in the original estimates which do not now have the same high priority or will be financed by the Washington Metropolitan Area Transit Authority instead of the Agency, are:

Fare collection system and fare structure	$25,000
Financial and operational study	40,000
Transportation Planning Board specialized studies	10,000
	75,000

(NOTE.—Although funds for these three projects may not be required by the Agency, the amounts are included in the totals for this budget activity to conform with the schedules contained in the President's budget document and should be retained to cover contingencies incident to the termination of the Agency's activities.)

These estimates include $170,000 to provide for 16 full-time positions, consultants and experts to be compensated on a "when actually employed" basis and related support costs for the three months' activity in Fiscal Year 1968. As indicated, $75,000 of this amount may not be needed for the purpose originally proposed.

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
3. Architectural design	$24,000	$71,000	$20,000

The Office of Architecture is responsible for the quality of design of all visible features of the rapid transit system, e.g., stations and transfer terminals, with their furnishings and equipment, and all exterior structures. In large measure, the future patronage of the system will depend on its attractiveness and the excellence of its design. The impact of the system on its surroundings will require the most sensitive design treatment in order that the amenities of affected neighborhoods may be enhanced.

The architectural-design program is governed by the requirements of the construction schedule, prepared by the Office of Engineering, and is intended to implement that schedule. It has two phases:

1. System-wide "concept" design, including criteria and standards and preliminary drawings for the various stations and structures and for continuing control of work to be performed in the second phase.
2. Production of plans and specifications for actual construction and supervision of construction, to be guided by design policies established during the first phase.

In the first phase, consultants are employed to extend the Agency's staff, enabling the necessary range of design talents to be applied quickly and economically, as required. In this phase, the scope of work for final design of stations and structures is determined so that the latter can be performed under fixed-fee contracts, to the advantage of the government. At the same time, criteria are established for controlling the subsequent design program. During this phase, close coordination is maintained with the Office of Engineering, with the Office of Planning and Finance, and with various agencies of the Federal, and District of Columbia governments. Exhibits and models for submission to these agencies and for public presentations will be prepared by the consultants, whose product will be monitored continually by the Office of Architecture.

In the second phase, Architect-Engineer firms will be employed to produce final plans and specifications (bid documents) for actual construction of portions of the system. This work will be monitored jointly by the Office of Architecture and the Office of Engineering. Design controls for this work, established during the first phase, consist of general plans and directive drawings and standard details and specifications.

The authorized strength of the Office of Architecture for the current year is as follows:

Senior architect, GS-15 (Director)	1
Architect, GS-14	1
Architect, GS-12	1
Architect, GS-11	1
Secretary, GS-5	1
Total	5

During the first half of Fiscal Year 1967, the Office of Architecture has been concerned with system-wide conceptual design and the preparation of preliminary drawings for stations scheduled for early construction. Coordination of these drawings with other government agencies, including approvals when required, is a necessary but time-consuming process which must be completed before final-design contracts can be negotiated. Final design contracts are to be initiated at a steadily increasing pace during the second half of Fiscal Year 1967.

These estimates include $20,000 for this activity to provide for 5 full-time positions, and related support costs during the first three months of FY 1968.

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
4. Real estate acquisition and relocation assistance		$27,000	$10,000

The construction program of the Agency will require the acquisition of certain easements to permit the subway tubes or boxes beneath the surface of private property and the purchase of other property for the operation of the system. Authority is contained in the basic legislation of the Agency for condemnation of property but it is also provided that no action in condemnation of any property shall be commenced in behalf of the Agency until a reasonable effort has been made to negotiate with the owner of the property. All negotiations and negotiated purchases will be handled by the Agency. Condemnation litigation will be conducted by the Department of Justice on behalf of the Agency

The acquisition program for Fiscal Year 1966 included purchase of one parcel at a cost of $1,150,830. The program for Fiscal Year 1967 involves over $5 million and the program for Fiscal Year 1968 will be in excess of $11 million involving the leasing of 10 parcels, acquiring easements on 54 parcels, and purchasing segments of parcels along the B&O Route in the District of Columbia and Maryland. In addition, the Agency will be involved in the readjustment and/or relocation of public utilities interfering with construction activities.

The Office of Real Estate Acquisition and Relocation Assistance has the responsibility for the implementation of these programs in collaboration with the Office of Engineering and the Office of General Counsel.

For the current year the authorized strength of this Office is:

Realty specialist, GS-14	1
Real estate negotiator, GS-11	1
Secretary, GS-4	1
Total	3

These estimates include $10,000 for three full-time positions and related support costs for the 3-month period of activity in FY 1968.

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Estimate, fiscal year 1968
5. Executive direction and administration	$277,000	$315,000	$120,000

This activity provides for (1) the Offices of the Administrator and Deputy Administrator, (2) the Office of the General Counsel, (3) the Office of Public Information and Community Services, and (4) the Office of Administration.

(1) Office of Administrator and Deputy Administrator

The Office of the Administrator and Deputy Administrator is concerned with the overall policy and executive direction of the Agency. The Deputy Administrator also serves as the principal Contracting Officer for the Agency in addition to other supervisory responsibilities.

The authorized strength of the Office for the current year is as follows:

Administrator (statutory position)	1
Special assistant for congressional liaison, GS–16	1
Confidential assistant, GS–11	1
Deputy Administrator (statutory position)	1
Contract specialist, GS–13	1
Secretary, GS–9	1
Total	6

These estimates include $40,500 for six full-time positions and related support costs for the three months in Fiscal Year 1968.

(2) *Office of General Counsel*

The General Counsel is the principal legal advisor of the Administrator and the chief law officer of the Agency. Under his direction, the Office of the General Counsel is responsible for all of the legal work of the Agency including consideration of legal problems relating to the broad policy aspects of the Agency's programs, the issuance of opinions on legal questions arising in the administration of agency program, the preparation and review of administrative rules and regulations, analysis and drafting of proposed legislation, the preparation and interpretation of contracts, leases, deeds and similar documents, representation of the Agency in administrative proceedings or quasi-judicial hearings held in connection with the administration of the Agency's program and arising out of its contracts or otherwise, assistance to the Department of Justice in the preparation of civil litigation cases arising out of the Agency's work, including eminent domain and other proceedings.

The authorized strength of the Office of General Counsel for the current year is as follows:

Attorney-advisor, GS–16 (General Counsel)	1
Attorney-advisor (procurement), GS–15	1
Attorney-advisor (real estate), GS–14	1
Secretary, GS–7	1
Secretary, GS–5	1
Total	5

These positions are needed to handle the workload of the Office in providing legal services respecting the preparation of necessary contracts, and their administration including legal services relative to change orders, claims, disputes, etc. This Office is also engaged in numerous projects involving proposed legislative recommendations and in a variety of matters concerned with the transition of the Agency from Federal status to the interstate compact organization.

These estimates include $33,100 for five full-time positions and related support costs for the three months in Fiscal Year 1968.

(3) *Office of Public Information and Community Services*

The Office of Public Information and Community Services is responsible for the public information and public relations programs of the Agency as well as the internal information facilities. The office also maintains the necessary liaison with the various media—press, radio, and television as well as the general public. In this latter function, the Office of Public Information and Community Services deals with federations and groups representing more than 500 organizations in the National Capital region.

The authorized strength of the Office for the current year is as follows:

Information officer, GS–15 (Director)	1
Information specialist, GS–9	1
Secretary, GS–6	1
Total	3

Because the Agency's program is local in application it will affect physically, financially, and personally every citizen of the region. There is a high degree of interest in the project. In consequence, the Agency's public information and community service work is *in response* to demands from media, organizations, and the general public for personal briefings and information concerning station design, routes, proposed service, location of facilities, effects and timetables of construction, and similar matters. In the spirit of the President's increased efforts to better the Government's service to the public, it is incumbent on the Agency to provide detailed and personal information services.

In the process of participating in this relationship of the Agency with the community, this office is able to relieve the technical and executive staff of the tasks which develop, resulting in more efficient operation of the total staff. There is, of course, the further advantage that close relations with the community through this office assure that Agency staff is aware of public reactions to the Agency's Programs with regard to transportation problems.

Because architectural and engineering plans, including initial construction activity, will become specific in FY 1968, the workload and requests for services can be expected to increase greatly. In addition, the Office is now furnishing services to the Washington Metropolitan Area Transit Authority in response to the directive by the Congress that NCTA cooperate with the Authority.

These estimates include $15,600 for three full-time positions and related support costs for the three months in Fiscal Year 1968.

(*4*) *Office of Administration*

The Office of Administration is responsible for all management services including personnel, budget planning and execution, accounting and fiscal activities, mail and records, space, equipment, and similar matters.

The authorized strength of the Office of Administration for the current year is as follows:

Administrative officer, GS-15 (Director)	1
Personnel assistant, GS-13	1
Staff assistant, GS-12	1
Administrative clerk, GS-5	1
Clerk-stenographer, GS-5	1
Total	5

The Agency has an agreement with the General Services Administration to provide certain services such as payroll, purchasing, printing and reproduction, machine accounting and related "housekeeping" functions. The Agency reimburses GSA for these services.

These estimates include $30,800 for five full-time positions, and other expenses of this office for the three-month period in Fiscal Year 1968 including $3,750 for reimbursement to the General Services Administration for agency-wide "housekeeping" services and $1,000 for maintenance agreements for the existing laborsaving devices in the Agency.

SUMMARY OF ESTIMATES BY OBJECT OF EXPENSE

11 *Personnel compensation.*—The estimate of $244,000 includes $239,000 to finance 66 full-time positions and $5,000 for the employment of consultants and experts to be compensated on a "when actually employed" basis.

12.0 *Personnel benefits.*—The estimate of $17,000 includes funds to cover benefits authorized by law including retirement contributions, health benefits, life insurance, and Federal Insurance Contribution Act taxes. The estimate is based on a percentage of the net personnel costs. The estimate also includes $350 for reimbursement to Bureau of Employees' Compensation, Department of Labor pursuant to the 1960 amendments to the Federal Employees' Compensation Act (5 U.S.C. 785).

21.0 *Travel and transportation of persons.*—Includes $3,000 to cover official travel expenses and per diem costs for the regular full-time staff and consultants and experts employed on an intermittent basis.

23.0 *Rent, communications, and utilities.*—Includes $5,000 for rent, communications and utilities. The principal item of expense in this account is telephone services.

24.0 *Printing and reproduction.*—The estimate includes $4,000 to cover miscellaneous printing and reproduction services including the cost of printing an annual report as required by the authorizing legislation.

25.1 *Other services.*—Includes $121,000 for special contractual services for the following type studies and projects:

1. Uptown Centers Studies.
2. Non-Fare Box Revenue.
3. Graphics and special presentation materials.
4. Maintenance contracts on mechanical equipment.

(NOTE.—Other projects, totalling $75,000, in the original submissions to the President are not now included in the work programs of the Agency. The amount is included in the total in order that the schedules will conform to the President's budget.)

25.2 *Services of other agencies.*—The estimate of $4,000 includes $3,000 for payment to the General Services Administration for miscellaneous administrative services provided on a reimbursable basis and $1,000 for reimbursement to the Public Health Service to cover medical services and to the General Services Administration to cover miscellaneous charges for building management services.

26.0 *Supplies and materials.*—Includes $2,000 for consumable drafting, engineering and clerical supplies.

PREPARED STATEMENT

Chairman HAYDEN. Mr. McCarter, you will please file your written statement in the record, and summarize it for the committee.

Mr. MCCARTER. Thank you, Mr. Chairman.

(The statement follows:)

Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before you today to support NCTA's appropriation request for Fiscal Year 1968.

This year, the Agency is in a posture quite different from that of previous years.

During its last Session, the 89th Congress enacted Public Law 89–774 giving the Congress' consent to the Washington Metropolitan Area Transit Authority Compact among Maryland, Virginia and the District of Columbia. The compact creates a new tri-state organization, the Washington Metropolitan Area Transit Authority, empowered to take over and continue the work begun by NCTA, and to develop and carry out plans and financial arrangements for a regional rail rapid transit system.

Under Section 3(a) of the Compact Consent Legislation, the Agency's functions and duties—namely, NCTA's responsibility for the basic subway system approved in the National Capital Transportation Act of 1965 (P.L. 89–173)—will be transferred to the new Authority effective September 30, 1967—about seven (7) months from now.

This means that NCTA's funds requirement for Fiscal Year 1968 is limited to the first three months of the new period—next July, August and September.

The request before the Subcommittee now is for $400,000 of administrative funds to carry the Agency over this three month period. Unlike previous years, there is no request pending for funds under the appropriation "Construction, Rail Rapid Transit System". During the three months involved, the Agency will be winding-up its affairs and will have no need for additional engineering and design funds, or for construction appropriations.

In effect, we are not asking for new money. Because of the advent of the compact it will not be necessary to obligate all the administrative funds the Subcommittee provided the Agency for the current year, so we are requesting a reappropriation of $400,000 out of the remaining 1967 funds.

Section 3(b) of the Compact Consent Legislation provides that effective September 30, the Department of Housing and Urban Development and the Government of the District of Columbia will be authorized to seek the necessary construction funds through the appropriate Subcommittees of the Appropriations Committees, for payment to the new Authority.

Until the transfer date, NCTA will remain responsible for moving the subway program forward. There will be no slackening of activity. To assure that the basic program is not delayed, the new Authority has indicated its desire to take over the present NCTA staff. While employment decisions are going to have to be made on an individual basis, it is hoped that the bulk of our trained people will stay with the project.

The funds being requested today will permit the Agency to continue at its presently authorized strength of 66 full-time positions and will provide the related support costs for the three month period. They will also enable the Agency to initiate two planning projects that will be needed as part of the Agency's final design program during the first quarter of Fiscal Year 1968.

The first is an "Uptown Centers Study". The new rapid rail system will greatly improve accessibility to many parts of Washington. It will encourage development of new centers of increased activity such as shopping centers, office buildings, light industry, and apartments within the service area of the transit stations.

This Uptown Centers Study will be undertaken cooperatively with the District of Columbia Government, the National Capital Planning Commission, and other interested agencies. It will provide important data concerning:

1. The impact of such development on transit ridership, revenues and operations.
2. Requirements for additional bus transfer and parking facilities, and
3. Requirements for additional transit station facilities.

The other special project is a study of "Non-Fare Box Revenue Facilities". The transit system will include a number of convenience type concessions and controlled advertising within its stations. The project will develop necessary information concerning (1) appropriate types of concessions at particular station locations, (2) specific advertising concepts, and (3) the space and any other special requirements needed to accommodate such activities.

All these matters bear importantly on station design, and the results of these two studies will be needed as part of the final design activity that will be underway before next September.

This present request for a re-appropriation of $400,000 under the Salaries and Expenses appropriation will fund these activities, and is needed to meet the Agency's other requirements during the three month period involved.

Turning now to the program itself, I would like to bring the Subcommittee up-to-date on the status of our work.

During the past year, the Agency has concentrated on the task of preparing the construction standards, design criteria, specifications, and general plans needed in order to let final design contracts on the portion of the system to be constructed first. The engineering work has included a definitive subsurface soils investigation and testing program along the routes of the system to develop detailed recommendations as to design criteria, and foundation underpinning and construction techniques and procedures.

On the architectural side, as the President requested, we've conducted a worldwide search for design concepts and ideas that can be used to make the Washington system attractive as well as useful. The Agency's consulting architects have surveyed all the major systems in other countries. They have developed conceptual designs for handsome, brightly lighted, spacious, unobstructed stations. Their concept envisages a consistent basic style throughout the system, but also provides for variety among individual stations, so as to reflect the special needs of each neighborhood as well as the engineering necessities.

I am pleased to say that all of the engineering and architectural work has been moving forward satisfactorily.

As I think the Subcommittee is aware, under the National Capital Planning Act of 1952 the Agency's plans must be reviewed in successive stages by the National Capital Planning Commission. At this point, the Commission has reviewed and approved the platform locations and access points for the transit station at Judiciary Square and three of the stations on upper Connecticut Avenue. The platform locations of the three downtown stations beneath G Street, N.W. have also been approved, and our architectural concepts have been approved in principle by the Commission of Fine Arts.

The next phase in the work is final design. The Agency will soon be in a position to begin letting final design contracts covering approved elements of the system. The first actual construction project is expected to begin during the Summer of 1968.

Another matter of special interest is the Agency's up-to-date traffic study. During its hearings in September, 1965 and last year the House Subcommittee expressed great interest in having an independent analysis made of the patronage and revenue potential of the authorized rail rapid transit system. Such a study has been done, and included a complete origin and destination survey of all bus riders in the National Capital Area. The new estimate of 1980 traffic is within 2½ percent of the Agency's original forecast.

In other respects, however, the new study has produced some unanticipated results.

For example, it demonstrates that the Columbia Heights Route of the authorized system is a very weak traffic generator and will produce less than one-half the passenger volume originally forecast. It raises such serious questions concerning the economic justification of the Route, that the Agency is prepared to recommend its deletion from the system.

The new data also show that the number of rail transit riders who will use bus transportation at both ends of their rail trip is going to be considerably greater than was originally estimated.

These are the passengers who will arrive at outlying rail transit stations by bus, ride the system to Downtown G Street, and then transfer again to buses for the final leg of their trip to work.

Contrary to earlier expectations, the new study shows that with the present downtown alignment—all downtown stations are in G Street—there will be an unusually heavy volume of bus traffic between the G Street subway stations and the federal employment area in Southwest Washington. Assuming 70 passengers per bus, it is estimated that during the peak hour 50 buses will be needed at the 8th and G Street Station and 75 at the 12th and G Street Station to accommodate transferring passengers, the bulk of whom will be destined for or coming from the Southwest Area.

This Southwest situation is the most striking change that has come about since the plans for the present system were prepared. Prior to the 1965 Act, the National Capital Planning Commission estimated that there would be some 46,000 people employed south of the Mall in 1980.

There has been a radical change. It is now estimated that by *1971* or about the time of the first subway operations—an estimated 85,000 jobs will be located in this part of downtown Washington alone, a downtown daytime population larger than the entire downtown populations of such cities as Seattle, Pittsburgh and Baltimore.

These changed conditions and the new traffic data emphasize the desirability of early subway transit service to the Southwest area. In the Agency's view, the need is such that a line south of the Mall should be built as part of the basic system.

Consequently, NCTA has developed a plan that would modify the presently authorized system in two major respects. First, in view of the new traffic data the proposal would eliminate the present Columbia Heights Route. Second, it proposes that service be provided the Southwest employment area by extending the present Benning Route west from Second Street, S.E. to Canal Street at the foot of Capitol Hill. From there, the line would bend south of Independence Avenue to the vicinity of 7th and D Streets, S.W., then northwest to 12th Street and Independence Avenue, and north along 12th Street through the Federal Triangle to Eye Street, N.W. where the line would join and become a part of the present Pentagon Route. The new alignment would include three stations in Southwest and one in the Federal Triangle.

With the deletion of the Columbia Heights Route, the proposed change would add an estimated $41.5 million to the overall cost of the basic system. The traffic data show, however, that in 1980 with the Southwest alignment, the modified system will attract some 22,300,000 additional passengers a year, and added annual revenue of approximately $3.5 million. Assuming a 5½ percent interest rate, this would be sufficient to fund the added cost of the change over a 40 year period.

My opinion is that the modified basic system would produce a better overall system in terms of operating efficiency and flexibility. It would eliminate a number of complex and difficult engineering problems presented by the present alignment. And it would provide a much better framework on which to build the regional system.

Mr. Chairman, since 1960 this Subcommittee has provided all of the planning money and the bulk of the program funds that have sustained and advanced the Transit Development Program. It is because of your continued interest and assistance that the subway system is to become a reality for the Nation's Capital. Since NCTA will be going out of existence next September, this is probably our last appearance before the Subcommittee. I want you to know that the Agency appreciates all of the assistance the Subcommittee and its very able Staff has given it over the years. And I want to add my personal thanks for the many courtesies extended to me and my staff. The Subcommittee has always been eminently fair in its consideration of the Agency's requests.

This Transit Development Program is essential for the orderly development and preservation of the Nation's Capital. By moving it ever closer to fulfillment, you have done a great service to the *Nation*—not just the residents of the Washington area.

My staff and I are grateful for all you've done.

We are available to provide any additional information the Subcommittee may desire in connection with our present request.

Thank you, Mr. Chairman.

SUCCESSION OF WASHINGTON METROPOLITAN TRANSPORTATION AUTHORITY

Mr. McCARTER. I appreciate the opportunity to appear before you. This agency is in a different situation than previously. As you know, the 89th Congress, late in the last session, adopted Public Law 89–774, granting its consent to an interstate compact, creating the Washington Metropolitan Area Transportation Authority. The Authority became legally effective on February 20 of this year, and under the legislation the National Capitol Transportation Agency will go out of business on September 30 of this year, to be succeeded by the Authority. So we are asking for administrative funds to carry us to the September 30 date, for the 3 months July, August, and September.

SALARIES AND STUDIES

The amount requested is $400,000 and in addition to funds for salaries, it also includes money for two studies, which relate to essential planning activities. One is an uptown center study, which would be done in cooperation with the National Capital Planning Commission. As you know, as a subway station is constructed, it affects the surrounding area, and the National Capital Planning Commission wants to coordinate the development of the community around each subway station in relation to the way the subway station is designed.

The other study is for non-fare-box revenue facilities which also relate to station design. In other words, what kind of commercial activities and advertising are you going to put in, and things of that nature. As we design the subway stations, we want to make a study of what appropriately can be put in the station for non-fare-box revenue, and still follow the President's directive that we build the finest stations in Washington of any place in the world. As a matter of fact, he suggested that we examine all of the subways of the world, to be sure that we were building the very best.

ARCHITECTURAL SURVEY

The architects that we engaged made a survey of all the subway operations in the world. I personally went on a trip last summer with a national transit group, in a workshop session, where we went to Moscow, Stockholm, Berlin, Milan, Paris, and London, to see if they have anything better than systems in this country.

INDEPENDENT TRAFFIC STUDY

The Interior and Related Agencies Subcommittee of the House Appropriations Committee requested that we have a new independent traffic study of the basic system to determine whether or not the previous studies and projections that had been made were proper, and whether or not we had made the right estimates of the amount of traffic, the amount of income, and so forth. That study has just been completed, and it indicates that there ought to be certain changes in the basic system.

One of the things that we found was that with only a G Street subway line downtown, the feeder buses from the central downtown line to Southwest Washington, would create excessive bus congestion. There would be so many feeder buses that it would almost be more buses downtown than there are now. In contrast with the original plans, which estimated that by 1980, there would be 46,000 employees in Southwest Washington, they now predict that there will be 85,000 by 1971. So I have suggested two things with respect to the basic system. I have suggested that the Columbia Heights line, which did not show up as a good traffic producer, be eliminated, and that we have a line in the vicinity of Independence Avenue, to serve this growing Government complex in Southwest.

Such a modification would cost a net of $41 million more than we had anticipated for the basic system, but the extra passengers and revenue as a resut would more than amortize the extra cost and the additional bonds that would be necessary to finance it.

COOPERATION WITH AUTHORITY AND BASIC SYSTEM CONTINUANCE

Now I say again that the compact authority is to take over on September 30. In the meantime, pursuant to the compact consent legislation, the Agency is required to cooperate with the new Authority, and give them services, so that there will be a proper transition. Those services are being provided on a reimbursable basis. In other words, as our present staff does a job for the Authority, it is done on a reimbursable basis, so that we are gladly working with them, but in the meantime, we are continuing full speed ahead on the basic system.

Thank you.

TRANSFER OF FUNCTIONS TO WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Chairman HAYDEN. Thank you.

The Washington Metropolitan Area Transit Authority has now been created, and its existence was announced on February 20. Is the Authority going to assume all of the functions, duties, and responsibilities of the National Capital Transportation Agency when the Agency goes out of existence on September 30?

Mr. MCCARTER. Yes; the legislation provides that the President, as of that date, will transfer all of the functions to the Authority, except the personnel, which he couldn't transfer, but they have indicated that they want to take the personnel over.

Chairman HAYDEN. Will the functions absorbed by the Authority include the actual construction of rapid rail transit systems?

Mr. McCARTER. Yes.

PREPARATION AND SUBMISSION TO CONGRESS OF REGIONAL TRANSPORTATION PLAN

Chairman HAYDEN. Is it expected that insofar as the activities of the National Capital Transportation Agency are concerned the Washington Metropolitan Area Transit Authority will operate in essentially the same manner?

Mr. McCARTER. Well, it is a tristate agency, and they are to prepare a regional transportation plan. You see, the plan that we had was just what I call a basic transportation system. The Authority is to prepare a regional transportation plan, determine the cost, determine the net project cost, determine how it would be financed, and then come back to Congress with that plan.

ANTICIPATED 1967 FUNDS OBLIGATIONS

Chairman HAYDEN. I see.

Obviously, you do not expect to obligate the $400,000 which you indicate should be reappropriated, but how much of the other $1 million appropriated for fiscal year 1967 do you actually expect to obligate before June 30 of this year?

Mr. McCARTER. I will ask Mr. Tomey to answer that.

Mr. TOMEY. We anticipate that substantially most of the $1 million will be obligated by June 30, Mr. Chairman. As of February 28, we had obligated approximately $500,000, or about half, so on a pro rata or monthly basis, we are about 2 months behind, but we do have some activities that we think may utilize most of those funds. Some of the costs will be offset, of course, by reimbursements from the Authority for the work that we perform for them, so the net obligation may be somewhat less than a million dollars, but not too much less, sir.

TRANSITION EXPENDITURES

Chairman HAYDEN. In an early part of your justification, you indicate that the $400,000 which you request will cover "certain expenditures in connection with the transition to the interstate authority." What are these particular expenditures?

Mr. TOMEY. The precise amounts have not been identified, sir, but in connection with the transition, there are a variety of legal problems affecting the transfer of the assets of the agency, the active contracts, and leading up to the transition of personnel. In addition, the working programs of the Agency, engineering architectural and planning activities, will also be transferred, but they are not identifiable in a specific dollar amount.

AUTHORIZED, FILLED, AND UNFILLED POSITIONS

Chairman HAYDEN. All right.

All of the authorized personnel strength which you list in your justifications statement are those which you requested in your fiscal year 1967 budget. Have all of the positions which you requested last year been filled at any time since last July 1?

Mr. TOMEY. No, sir. The budget contemplated a staff of 66 full-time positions, and at the present time, we have 42 position filled, so there is a lag of 24 positions, and many of these very likely would continue into fiscal year 1968.

UNBUDGETED SEVERANCE PAY AND TERMINAL LEAVE

However, I would point out that while there may be a savings as a result of not reaching full strength; there are two rather sizable unbudgeted items, of severance pay and terminal leave, which we think could offset any savings. As a matter of fact, they would more than offset any savings resulting from not reaching our full strength, sir.

ACTIVITY PERSONNEL

Chairman HAYDEN. Will you please submit tabluations to show the actual positions filled as of today for each of the activities listed in your budget justifications?

Mr. TOMEY. Yes, sir. We will be glad to do that, sir.

(The information follows:)

Employment by activity (as of Mar. 15, 1967)

	Permanent	Temporary	Total
Office of Engineering	11		11
Office of Planning and Finance	8	2	10
Office of Architecture	2	1	3
Office of Real Estate Acquisition and Relocation Assistance	1		1
EXECUTIVE DIRECTION			
Office of Administrator and Deputy Administrator	5		5
Office of General Counsel	4		4
Office of Public Information and Community Services	3		3
Office of Administration	4	1	5
Total	38	4	42

HIRING PERSONNEL FOR AUTHORITY ON REIMBURSABLE BASIS

Chairman HAYDEN. If the various offices are not up to personnel strength, do you believe that you can hire adequate personnel for a period of 3 months or less?

Mr. MCCARTER. Mr. Chairman, I might say that what hiring we are doing now is being hired for the compact on a reimbursable basis. I think you are right, that we couldn't hire the people for such a short period, if they thought they were only going to work for the Agency, but if they are hired on the basis that they will work for the compact, then they can be hired.

AUTHORITY ABSORPTION AND PAY OF NCTA STAFF

Chairman HAYDEN. In the press release of February 20, 1967, announcing the establishment of the Board of Directors of the Washington Metropolitan Area Transit Authority, it is stated that, "To insure uninterrupted progress in the development of the complete system the Authority expects to absorb the NCTA staff of 40 on or before September 30." Do you know yet which of your personnel will be absorbed in this manner, and, if they are so absorbed, who will then pay their salaries? You or the Authority?

Mr. McCarter. If they are absorbed by the Authority, of course, they will be paid by the Authority. Now the number that they will absorb will depend on several factors. You see, our employees are all Federal employees. They have certain Federal benefits. If they go with the Authority, it is a non-Federal agency and each employee will have to determine as an individual basis whether or not to go with the Authority or whether to seek other Federal employment. These decisions will depend somewhat on the personnel plan which the new Authority is developing, particularly the various benefits. They are working diligently on a personnel plan to try to attract our employees. But no employee yet has committed himself as to whether he is going to go with that agency, or whether he is going to try to get another job with the Federal Government.

1967 TASKS

Chairman Hayden. Last year in presenting your justifications for a salaries and expenses appropriation you indicated the number of tasks to be accomplished during this year. How have you progressed on those?

Mr. McCarter. We have progressed on all the major tasks except final design. We have not gone into final design yet, although we are ready to go into final design on certain sections. We are still discussing with ourselves and others whether or not we want to go into final design on sections, with certain other sections left open. However we are ready, now, on several sections, to go into final design.

Chairman Hayden. In the statement dated January 27, 1967, Messrs. Quenstedt and Lyon indicated that it was expected that the National Capital Transportation Agency would start the first of many final-design projects by March of this year.

Mr. McCarter. Yes.

Chairman Hayden. What final-design projects have you underway at this time?

Mr. McCarter. We have none underway. We are ready now, but we have none actually underway.

SALE OF REVENUE BONDS

Chairman Hayden. What, if any, progress have you made with respect to sale of revenue bonds?

Mr. McCarter. Well, the revenue bonds would come in after you have used all of the grant money. Now it was expected before the compact was formed that this agency would be coming back to Congress for authority to issue revenue bonds, and it was anticipated that NCTA would have been converted to a Federal corporation, before any bonds were issued. Now, instead of that, the compact authority was formed and it would be the organization to issue the bonds. But such revenue bonds would not be issued until after the $150 million in grant money was expended. The authority is just about to employ financial consultants to advise on the floating of the bonds.

STUDIES ON UPTOWN CENTERS AND NONFARE BOX REVENUE FACILITIES

Chairman HAYDEN. I note under your outline of needs for traffic and system financial planning a request for $30,000 to conduct studies relating to uptown centers and to nonfare box revenue facilities. Have you done nothing on these two subjects since your existence?

Mr. MCCARTER. No, that is provided for in next year's budget, the uptown centers, will depend on how fast the National Capital Planning Commission works, because we will work with them, and the nonfare box revenue will depend on how far along the architects are on their stations, and so forth.

Chairman HAYDEN. Do you feel it would be possible in the space of 3 months for you to initiate and complete these studies?

Mr. MCCARTER. Well, we expect them to be completed but if they are not, they would be taken over by the compact authority, as they take over all of our functions.

SEVERANCE PAY AND TERMINAL LEAVE

Chairman HAYDEN. With respect to the same planning, you indicate that $75,000 may not be required during the 3 months of the appropriation period for other studies but should be retained to cover contingencies incident to the termination of the Agency's activties. Indicate the nature of these contingencies.

Mr. TOMEY. These are the items I adverted to previously, Mr. Chairman, severance pay and terminal leave. Our calculations at this time indicate that these requirements could be as much as $165,000. Now to partially offset that, we recognize we will have a savings in personnel by not having reached our full strength. This, I calculate to be about $80,000, plus $2,000 for benefits. Then the $75,000 we will not need for studies would provide $157,000 to apply against these unbudgeted items. We think this is close enough, the estimate of $165,000 could be off, so we would ask for this flexibility in appropriating the full $400,000 to cover this contingency, sir.

Mr. MCCARTER. I was surprised to learn that when an agency is discontinued, and the employee is not eligible for retirement, as a result of that, there is quite an amount of severance pay. It is quite a large amount of money.

STATUS OF CONCEPTUAL DESIGN

Chairman HAYDEN. What is the status of the systemwide conceptual design and the preparation of preliminary drawings for subway stations?

Mr. MCCARTER. We have, I think, the conceptual design completed from Rhode Island Avenue through Judiciary Square, G Street, and up Connecticut Avenue, and in some respects, for the entire system, because we have taken soil samples, and we have mapped the entire system, but leading up to final design, we are almost ready from Rhode Island Avenue to Van Ness on the Connecticut Avenue route.

PLANNING COMMISSION STATION APPROVALS

Now the stations are quite well along, and the Planning Commission has approved four stations on Connecticut Avenue, has approved Judiciary Square, has approved the location of the other two stations on G Street, but not the entrances, because we are working with the District of Columbia Redevelopment Land Agency to determine the nature of the area around those stations, and hoping that the redevelopment and the station entrances can go along side by side. An early proposal was to make G Street a pedestrian street, which we did not adopt. Then the next plan was to put in sidewalk entrances, which aren't as desirable as we would like them to be, so now we are working with RLA to try to find better entrances to those stations.

TRAVEL FUNDS REQUISITE

Chairman HAYDEN. In view of the short period of time for which this appropriation is requested and the probability that there will be fewer employees than the authorized strength, is $3,000 actually necessary for travel and transportation of personnel?

Mr. MCCARTER. Well, the staff that will go with the compact must keep up to date on what is going on in the field. For instance, and that is not in next year's appropriation, but the finest new system on this continent is in Montreal, Canada. Some members of my staff and most of the board of the authority are going to a rail transit meeting in Montreal, the first week in April, to make a real workshop study of that operation, where they do have beautiful stations, where the riding was double what they had anticipated, and so forth, it is essential to go to such places to look at new developments, periodically and even this staff, and they are going to be a continuous staff, would have to do some of that.

1967 LAND ACQUISITION AND CONSTRUCTION FUNDS

Chairman HAYDEN. Last year, in this bill, $9,055,000 was provided for land acquisition and construction. In addition 50 percent of that amount was made available in the District of Columbia appropriations bill. What, actually, have you been able to accomplish during the past year with those funds?

Mr. TOMEY. Those appropriations, coupled with fiscal year 1966 funds, Mr. Chairman, provide a total availability of $19.5 million. As of February 28, we had obligated $4,476,000, of which $1,150,000 was for procurement of one parcel of land. The balance had been used for contracts, essentially in the development of our systems standards, criteria, specifications, architectural conceptual activities and soil testing programs.

ACCOMPLISHMENTS UNDER CONSTRUCTION APPROPRIATIONS

Chairman HAYDEN. Would you put in the record a list of accomplishments under you construction appropriations since the beginning of the National Capital Transportation Agency?

Mr. Tomey. Yes, sir.

(The list follows:)

Summary of accomplishments with construction funds

Appropriation title	Fiscal year	Amount of appropriation	Obligations	Action
Land acquisition and construction.	1962	$1,000,000	$89,000	Projects included an engineering study of land acquisition costs and a reimbursement to the Virginia Department of Highways for costs of wider bridges on Route 66 at beltway interchange.
Do	1963	400,000		
Construction, rail rapid transit system.	1966	6,000,000	2,660,630	Development on a systemwide basis of the surveying, mapping, design standards and criteria, standard specifications for construction and definitive subsurface exploration program. Initiated work on general engineering plans on segments scheduled for early construction. Acquisition of 1 large parcel of real estate. Scheduling for design and construction phases.
Do	1967	13,582,500	1,815,650	Continuation of conceptual engineering and architectural programs to a point permitting an imminent start of final design activities. Subsurface explorations have continued on schedule.

Note.—Unobligated balance of appropriation transferred as follows:

Fiscal year	Amount	Transferred to—
1965	$500,000	Salaries and expenses, NCTA.
1966	490,000	Do.
1966	321,000	Construction, rail rapid transit system.

ANTICIPATED OBLIGATION OF CONSTRUCTION FUND

Chairman Hayden. How much of your construction fund do you expect to have obligated by the time you go out of existence on September 30?

Mr. McCarter. Frankly, that is a question I can't answer. It will depend on how much final design is entered into, and the President said in his message on the compact that the new compact board was to be my advisers. I will consult with them. Any final design contract that we would let now would have to be a final design contract that carried over, and there will be legal questions, as to how such contracts may be transferred from NCTA to the new authority. We expect to start some final design, but I can't say how much yet. I don't know.

CONSTRUCTION FUND EXPENDITURES

Chairman Hayden. Of your construction funds, what is the total amount you have expended thus far?

Mr. Tomey. If you mean expenditures, I do not have that figure available. May we supply it for the record?

Chairman Hayden. You can put it in the record.

(The information follows:)

As of February 28, 1967, expenditures under the appropriation "Construction, Rail Rapid Transit System" totalled $2,794,596.

CONSTRUCTION FUND OBLIGATION

Chairman HAYDEN. Of your construction funds, what is the total amount which you have obligated thus far?

Mr. TOMEY. $4,476,000.

ANTICIPATED CONSTRUCTION CONTRACTS

Chairman HAYDEN. What construction contracts do you expect to let between now and September 30, to whom, and in what amounts?

Mr. MCCARTER. Those will be final design contracts. To whom, we don't know. When a final design contract is proposed, a contractor evaluation board will be established to examine the qualifications of many engineering firms, and the procedure is that they make a recommendation of three, in order of preference. That is referred to me. I either select the first or second or third, refer it to Mr. Quenstedt, who is our contracting officer, for negotiation, and then we award the contract.

Chairman HAYDEN. Any questions?

SEVERANCE PAY AND TERMINAL LEAVE

Senator BARTLETT. Just a few. Not very many, Mr. Chairman, because you have covered the ground so thoroughly, and have gone so far, both on the surface and beneath the surface, that I don't have many questions.

But I do want to ask this: If the severance pay and terminal leave exceed your available funds, what procedures do you intend to follow to come into possession of the needed money?

Mr. MCCARTER. We anticipate that the $400,000 would cover those, as Mr. Tomey has said. If there isn't enough money, I don't know what happens.

Mr. TOMEY. That would raise a serious fiscal problem. I assume that we would have to ask Congress for relief. This relief might be to make available certain unliquidated obligations of prior year appropriations.

Senator BARTLETT. But this may be a little bit chancy.

Mr. TOMEY. That is correct, sir. Of course, our estimate has been made on the liberal side. I have anticipated the maximum amounts of severance pay and terminal leave, and if any of our employees do not accept positions with the Authority but continue in Federal employment, then they would not be entitled to severance or terminal leave payments, so this would reduce the estimate that I have given, sir.

INVOLUNTARY SEPARATION FROM FEDERAL SERVICE

Senator BARTLETT. Now if an employee has been with the Federal Government long enough to have had retirement privileges, and leaves the job involuntarily, he or she gains important advantages in respect to the person who retires under normal circumstances, is that right?

Mr. TOMEY. Well, there are two situations, Senator Bartlett. One is where the person is eligible for an immediate annuity, and the other is where the employee is entitled to a deferred annuity. In the first situation, if they have been forced to retire, I don't know what special advantages they have except that they are eligible for 20- or 25-year discontinued service retirement. There may be a reduction by virtue of being underage, and the lesser number of years affects the amount of the annuity.

Senator BARTLETT. I think it goes further than that. I think involuntary retirement gives certain special monetary benefits to those retiring.

Mr. MCCARTER. I don't know what they are, but we did have a civil service specialist look over the record of each employee, and advise them exactly what their rights are. For instance, my secretary, who is eligible for retirement, she knows now exactly what her retirement would be under these circumstances. Now I don't know what it would be under other circumstances.

Senator BARTLETT. I can inform you that involuntary retirement gives advantages. And I will add that for a few frightful hours on a November day last year, I thought I was going to be involuntarily retired without any of those advantages.

Mr. MCCARTER. I see.

[Laughter.]

ABSENCE OF TRANSPORTATION ROUTES IN LOWER INCOME AREAS

Senator BARTLETT. Now this morning the Washington Post carried a full-length column on the lack of planning routes into the low-income areas, such as Shaw and Adams-Morgan, and made the argument that all or most everything that is being done is being done for the middle-class and upper-income groups.

MIDDLE-OF-WASHINGTON ROUTE

Mr. MCCARTER. We do not have a route up through what I call the middle of Washington, through the area where I live, for instance. In long-range planning, the Planning Commission and our staff have indicated that there should be a route up through that area but that doesn't mean that it is just for middle-income people. As a matter of fact, the heaviest route, according to our traffic engineers, will be the Benning route, which serves Anacostia and the Northeast area. Now in all of these areas, there must be bus feeders to the rapid transit system. I think there ought to be one up through the area in question, but we couldn't provide for it in the original program. The compact may be able to do that, but a rapid transit system must serve large concentrations of people. It is not like a busline. A rapid transit line must have adequate bus feeders, so that the rapid transit line will become even more useful to the people who use bus feeders.

COLUMBIA HEIGHTS LINE

We were told by the traffic engineers when we were considering the Columbia Heights line, that people headed for downtown would not get on the Columbia Heights line and to come in by rapid transit via a circuitous route, because the bus would take them in just as fast by a more direct route.

Rapid Transit Line Bus Feeder Service Requisite

Now there must be bus feeder service for rapid transit lines, we have one route on the B. & O. route and one on the Connecticut Avenue. There must be crosstown buses, for people who are going to destinations on the rapid transit, and as a matter of fact, I think the traffic survey indicated that substantially over 60 percent of the riders on rapid transit will have used buses to get to the rapid transit.

Now in Chicago, I found out that there were very few what I called walk-on rapid transit stations. In other words, every rapid transit station has to have a bus feeder, or a parking lot, or a place for what I call "kiss and ride," where the wife brings the husband or the husband brings the wife to the rapid transit, and I was surprised to find in Chicago that as many husbands bring their wives to rapid transit, because the wives work downtown and the husband works out in a factory some place, but you must have those combinations for a viable rapid transit station. You just can't afford a rapid transit station for what you call walk-ons, except in the heavy employment areas.

Anticipate Combination Bus and Rapid Transit Fare

Senator **Bartlett**. Even so, is there the possibility that in the situation here, you may force the lowest income groups into paying for the rapid transit ride plus the bus ride?

Mr. **McCarter**. Well, our plan was that the combination ride would be the same as a single ride. In other words, in making our studies, although we have had no negotiations with the bus company, we have assumed that a person using both bus and rapid transit would pay 25 cents. The person using rapid transit would pay 25 cents, and then in our studies, the allocation of income was 12½ cents to the bus, and 12½ cents to the rapid transit in that combination ride.

Now, in effect, that is what we have in Chicago. We have universal fare, and we keep the accounting records there the same way. We allocate to rapid transit that which is collected on rapid transit, allocate to buses that which is collected on buses, which comes to the same thing as half and half, you see.

Now some people argue that this allocation isn't fair, because they take a longer ride on rapid transit than they do on a bus, but that's the way we did it, and that's the way we had planned to do it here.

INTERRELATION OF FINAL DESIGN AND FINAL ROUTING

Senator **Bartlett**. Now one final question, or at least, I think the final one. Can you efficiently and fairly go into final design of the system, or even a part of it, until the final routing is known and approved?

Mr. **McCarter**. Well, that is a question that we have discussed with the Budget Bureau and the Advisor to the President on National Capital Affairs. We do know that certain parts of the basic system are fixed. Now, the parts that we don't know about are the junctions, which I am trying to eliminate and where the station will be on the Capitol Grounds. We are still negotiating with the Architect of the Capitol, and having some difficulties, but the Connecticut Avenue route, down to Farragut Square, is fixed. And the B. & O. route is also fixed. However, if we went into final design now, on the G Street portion, it would be spotty final design. It would be this section, then skip another section, then go to a third section, but these could be connected later, and it is easier if we don't have the junctions. If we have the route that I propose to serve Southwest Washington, and in effect, have two separate lines, one beginning at Connecticut Avenue and Van Ness coming down across G Street and out the B. & O. route to form a U-shaped line. The other one comes from Benning across the southeast area below the Capitol and up across 12th Street, and over to the Pentagon, with a major passenger transfer at 12th and G Streets and a passenger transfer at Farragut Square. It improves the financial viability of the system and improves the operation. I think it improves it in every respect, and it serves 85,000 employees that we hadn't been serving.

Now I have to come back to Congress with that modification, and they are still debating whether I do it, or whether we can let the compact do it.

Senator BARTLETT. Thank you very much. That's all, Mr. Chairman.

Chairman HAYDEN. Thank you for your appearance, sir.

Mr. MCCARTER. Thank you.

WEDNESDAY, MARCH 15, 1967.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

DIVISION OF INDIAN HEALTH

INDIAN HEALTH ACTIVITIES

STATEMENT OF DR. ERWIN S. RABEAU, DIRECTOR; ACCOMPANIED BY KAZUMI KASUGA, DEPUTY DIRECTOR, HENRY V. CHADWICK, EXECUTIVE OFFICER, CHARLES C. JOHNSON, CHIEF, OFFICE OF ENVIRONMENTAL HEALTH, AND SOL ORDEN, CHIEF, FINANCIAL MANAGEMENT BRANCH, DIVISION OF INDIAN HEALTH; JAMES D. NEIFERT, STAFF ARCHITECT, DIVISION OF BUILDINGS AND FACILITIES; CARRUTH J. WAGNER, DIRECTOR, SAUL R. ROSOFF, EXECUTIVE OFFICER, AND RALPH BAHN, FINANCIAL MANAGER, BUREAU OF HEALTH SERVICES; LEO J. GEHRIG, DEPUTY SURGEON GENERAL; G. R. CLAGUE, ACTING CHIEF FINANCE OFFICER; AND HENRY A. NEIL, DIRECTOR, DIVISION OF BUDGET, OFFICE OF THE SECRETARY

BUDGET REQUEST

Chairman HAYDEN. The subcommittee will now consider the budget justifications for the Public Heauth Service estimate of $82,133,000 for Indian health activities during fiscal year 1968. The justification statements will be printed in the record.

(The justifications follow:)

HIGHLIGHT STATEMENT

INTRODUCTION

The Division of Indian Health has the responsibility of providing total medical care services to approximately 385,000 Indians and Alaska Natives. These health services are of a comprehensive type including prevention, treatment and rehabilitation on an individual, as well as community, basis.

Services in 1968 will be provided through a system of 51 hospitals, their outpatient clinics, 46 health centers (which include centers at larger Bureau of Indian Affairs boarding schools) and at about 300 other locations which include health stations and satellite field clinics. Services will also be provided through contractual arrangements with non-Federal hospitals, private physicians, dentists, and state and local agencies.

Despite the steady improvement in the health status of the Indian and Alaska Native beneficiaries, they still bear excessive burdens of disease, illness, accumulated disability and premature death. The health status of American Indians and Alaska Natives is comparable to that found in the general population of a generation ago.

Most illnesses and 13 percent of the deaths are due to infectious diseases and their residuals. These diseases include gastroenteritis, dysentery, influenza, pneumonia, tuberculosis, otitis media, trachoma, and common communicable diseases of childhood.

Health problems among these people reflect the extreme hardship of their physicial environment, social isolation, varying levels of education and limited economic opportunity in the places they live.

Gross insanitary conditions, poor and crowded housing, lack of available safe water supplies, inadequate nutrition based on improverished socio-economic status and the emotional problems inherent in a cultural transition support the high rates of infectious diseases, emotional problems and mental illnesses.

The latest available data (1964) indicates significantly higher mortality rate among Indians and Alaska Natives than among the general population. Indian mortality rates for selected causes as compared to those for all races, are as follows:

Infant deaths per 1,000 live births:
  Indian excluding Alaska Native: about 1.4 times higher.
  Alaska Native: about 2 times higher.
Infectious diseases (mortality rates per 100,000 population):
  Tuberculosis:
    Indian excluding Alaska native: about 5 times greater.
    Alaska Native: about 5 times greater.
  Gastroenteric diseases, Indian: over 4 times greater.
  Influenza and pneumonia:
    Indian excluding Alaska Native: about 2 times greater.
    Alaska Native: nearly 3 times greater.

Incidence rates for many of the infectious diseases show even greater disparities:

Tuberculosis (new active):
  Indian: nearly 7 times higher.
  Alaska: about 20 times higher.
Dysentery (amebic and bacillary), Indian: about 45 times greater.
Measles-Indian: about 3 times greater.

These health deficiencies and the need for resources and methods for nurturing acceptable health practices to overcome the existing problems are recognized by both the Public Health Service and its Indian and Alaska Native beneficiaries. Their growing recognition of the benefits of modern medicine and health practices is amply demonstrated by their increasing use and acceptance of available health services and the more active participation of Tribal councils and individual members in health affairs.

HOSPITALIZATION AND CLINIC SERVICES

Hospital admissions continue at a high rate and reached about 92,000 in 1966. Leading reasons for hospitalization, outside of the Alaska Native hospitals are: (1) deliveries, (2) respiratory conditions, (3) accidents, (4) diseases of the digestive system, and (5) nervous system and sense organ diseases. In Alaska, respiratory illnesses rank first, deliveries second, and accidents third.

Pediatric workload is high, comprising between 35 and 40 percent of the general hospital discharges. Readmissions, especially among the very young children up to 5 years of age, are high (attributed to a great extent to the home environment, lack of sanitary facilities, exposure to reinfections, malnutrition, neglect, accidental injuries). Of the pediatric discharges from Indian General Hospitals, 70% involve hospital episodes of children under 5 years of age.

Outpatient visits and workloads at all hospital clinics, field health clinics and stations are increasing, especially the immunization workloads.

In March of 1966 the Division of Indian Health completed its program plan for F.Y. 1968. This was initiated at the service unit level and consolidated into a comprehensive plan with Indian cooperation and consultation.

The Indian Health program is comprehensive for all age groups and both sexes including preventive treatments and rehabilitative and curative services.

In developing the 1968 plan an attempt was made to group together those diseases that were amenable to similar preventive and treatment methods.

It was found that these disease groupings were very similar to those of the groupings of the International Classification of Diseases. The Division therefore adopted the seventeen I.C.D. disease classifications for the development of the program plan.

The Division's objectives and plans for 1968 to combat the seventeen health problems among Indians and Alaska Natives are contained in the 1968 budget as follows:

HEALTH PROBLEM

I. Infective and parasitic diseases

Objective

Reduction of mortality rate from an estimated 38 to 36 per 100,000 population in 1968.

Plan of action

1. Bring under medical supervision 75% of the children under one year of age by attendance at three well-baby clinics.

2. Complete immunization on 80% of the children under one year of age and 75% of children before entering school.

3. Give annual physical examinations to all children enrolled in BIA schools, and beneficiaries in Office of Economic Opportunity Headstart Program.

4. Provide instruction in good health practices for prevention and spread of infective and parasitic diseases to adult outpatients and inpatients.

5. Improve recording and reporting in clinics and outpatient departments to obtain reliable statistical data for program planning and evaluation.

6. Place more emphasis on education in health matters in all facilities, and in the home and community contacts by motivating hygienic practices, providing clinics on feeding of children, interpreting relationships of healthful living and child care to incidence of frequently occurring infective and parasitic diseases.

7. Make available basic sanitation facilities so that an additional 9% of the homes serving beneficiaries will be provided with safe water and proper facilities for refuse and excreta disposal.

8. Train recipients of basic sanitation facilities under PL 86–121 in the beneficial use, maintenance, and repair of such facilities.

(*a*) Construct sanitation facilities for 800 housing units constructed under Federal programs.

9. Conduct follow-up surveys of completed sanitation facilities.

10. Render technical assistance to beneficiaries to reduce insanitary conditions in their environment.

11. Render environmental health services to Federal Institutions, and facilities serving Indian and Alaska Natives.

12. Perform trachoma screenings of total population where incidence is higher than 1,000/100,000, and examine each family contact.

13. Screen all children within 3 months after entering school for first time in areas where the trachoma incidence rate is less than 1,000/100,000.

14. Provide a TB screening activity which will test each student annually; reactors will receive a chest X-ray. All hospital admissions will be X-rayed.

15. Maintain an area-wide TB control register.

16. Provide treatment and related health services for all patients with infective and parasitic diseases.

17. Provide medical care in 50% of the Division of Indian Health hospitals in accordance with standards recommended by the American Academy of Pediatrics and published in Care of Children in Hospitals and in the Manual of American Standards in Obstetric—Gynecologic Practice published by the American College of Obstetricians and Gynecologists, 1965.

II. Neoplasms

Objective

Reduction of mortality rate from an estimated 73 to 72 per 100,000 population.

Plan of action

1. Provide organized health education to the target population re the prevention and/or early detection of cancer.

2. Provide prompt diagnostic work-up of 100% of persons with symptoms of malignancy.

3. Provide for early detection of cervical cancer in women over 30 years of age by doing cervical smears in 75% of the adult female population, and lung cancer in persons over 15 years of age.

4. Provide medical treatment to all diagnosed cases of malignancy.

5. Provide related services including counseling and supportive services for emotional and social problems to all cancer patients and their families.

III. Allergic, endocrine system, metabolic and nutritional diseases

Objective

Reduction of mortality rate from an estimated 24.0 to 23.5 per 100,000 population.

Plan of action

1. Provide nutrition training for medical and paramedical staff of 75% of the Service Units.
2. Provide nutrition education to all hospitalized patients.
3. Conduct screening:
   (*a*) PKU blood screenings for all infants in the first week of life.
   (*b*) Diabetes—Routine tests will be run on 75% of the outpatients, and 100% of all inpatients hospitalized.
4. Provide treatment and related services to all patients with diagnosis of allergic, endocrine, metabolic and nutritional diseases.

IV. Diseases of the blood and blood-forming organs

Objective

Hold mortality rate at the same level of one per 100,000 population.

Plan of action

1. Provide for inclusion of testing for hemoglobin or hematocrit level on all children age 1–4 years.
2. Provide blood testing on all inpatients.
3. Routine blood testing on 50% of the outpatients.
4. Provide nutrition counseling for all patients with iron deficiency anemia.

V. Mental, psychoneurotic and personality disorders

Objective

Hold mortality rate at the same level of 10.6 per 100,000 population.

Plan of action

1. Collect community baseline mental health data at three Service Units.
2. Place emphasis of the three Service Units on early detection, diagnosis of mental disorders, treatment, and rehabilitation.
3. Incorporate in physical examination of children and youth of each Service Unit, observations and evaluation of emotional and mental growth and development.
4. Training—(*a*) Train a limited number of medical and paramedical personnel in early detection of psychoneurotic, and personality disorders; (*b*) Instruct all mothers through child health conferences on mental health concepts related to child care.
5. Provide for evaluation studies in each Service Unit of all emotionally ill persons.
6. Arrange for individualized inpatient care for acutely ill mental patients.
7. Develop an outpatient psychiatric service where different levels of treatment are available for patients who are not acutely ill, and are problem drinkers.

VI. Diseases of the nervous system and sense organs

Objective

Reduction of mortality rate from 72 to 71 per 100,000 population.

Plan of action

1. Incorporate in all examinations of children early detection of brain damage, eye defects, and hearing impairment.
2. Include screening for glaucoma in all physical examinations performed on persons 40 years of age and over.
3. Give annual vision and hearing examinations to all children enrolled in BIA schools and provide treatment for each child with defects.
4. Continue to utilize all available resources such as crippled children's services, state medical care programs, rehabilitation centers and Vocational Rehabilitation Administration Program.

VII. Diseases of the circulatory system

Objective

Hold mortality rate at 150 per 100,000 population. Even though the age of the beneficiary is gradually increasing, this will not have an impact in 1968.

Plan of action

1. Incorporate in all health examinations early detection of diseases of the circulatory system by:
   (*a*) Doing electrocardiograms on 40 percent of male inpatients and outpatients over 40 years of age.
   (*b*) Providing electrocardiograms to 25 percent of the female population over 40 years of age.
2. Provide continuous prophylaxis for all persons with rheumatic fever.
3. Provide organized health education that will reach 70 percent of persons 10–45 years of age about smoking and heart disease.
4. Provide family-centered nutrition counseling for all obese persons.
5. Provide treatment and related services for all diagnosed cases of circulatory diseases.

VIII. Diseases of the respiratory system

Objective

Reduction of mortality rate from an estimated 84 to 82 per 100,000 population.

Plan of action

1. Provide completed flu immunizations and boosters for all boarding school children, dormitory personnel, pregnant women, chronically ill, and persons over 65.
2. Provide health education to mothers attending well-baby clinics about personal hygiene, nutrition and early treatment.
3. Provide treatment and related services for all diagnosed cases of disease of the respiratory system.

IX. Diseases of the digestive system

Objective

Reduction of the mortality rate from approximately 72 to 70 per 100,000 population.

Plan of action

1. Provide instruction in good health practices to 90 percent of adult inpatients and outpatient seen at DIH facilities.
2. Provide treatment and related services for all patients with diseases of the digestive system.
3. Provide family-centered nutrition counseling to all patients having diseases of the digestive system seen at DIH facilities.
4. Reduce the abnormal loss of teeth from an average of .32 to .29 per person by preventing and treating dental decay and periodontal diseases by:
   (*a*) Examining and treating the beneficiary population in ages 3–17 years.
   (*b*) Providing corrective treatment to 90% of the carious teeth found.
   (*c*) Providing a prophylaxis to 85% of beneficiaries over 18.
   (*d*) Treating 85% of the persons found to have overt periodontal disease.
5. Reduce the incidence of dental decay by preventing new decay in persons less than 18 years of age by:
   (*a*) Providing topical fluoride treatment to 87% of persons examined annually in the direct and contract services program.
   (*b*) Adding fluoride to 50% of the community water supplies provided under PL 86–121.
   (*c*) Adding fluoride supplements to the diets of 16% of the beneficiary population under the age of nine which are deficient in fluoride.
6. Provide 100% of required extraction services.

X. Disease of the genito-urinary system

Objective

Hold current mortality rate at 20 per 100,000 population for 1968

Plan of action

1. Provide instruction in good health practices to 90% of adult inpatients and outpatients seen at DIH facilities.

2. Provide for early detection of genito-urinary infection in children and adults. Urinary analysis will be made of those attending well-child clinics, and each inpatient; also 50% of the outpatients.

XI. Deliveries and complications of pregnancy, childbirth and puerperium

Objective

Reduction of mortality rate from 2.7 to 2.6 per 100,000 population and the overall complications of pregnancy from 27% to 24%.

Plan of action

1. Intensify and expand educational efforts to bring 55% of expectant mothers under medical supervision before the third trimester.
2. Increase number of hospital deliveries to 98%.
3. Increase number of postnatal medical examinations to 60%.
4. Provide public health nursing service to 50% of postnatal patients.
5. Provide nutrition counseling on diet and breast feeding to all women during the maternity cycle.

XII. Diseases of the skin and cellular tissue

Objective

Reduction of the annual incidence of skin disease by 7.5%.

Plan of action

1. Provide sanitation facilities to an additional 9% of the beneficiary population.
2. Educate each mother attending well-child clinics concerning the need for personal hygiene to prevent skin disorders in children.
3. Instruct all school children in personal hygiene.
4. Provide treatment and related services for all patients with skin diseases.

XIII. Diseases of the bones and organs of movement

Objective

Maintain as a minimum an incremental increase of 52 hospital discharges over the 1,598 hospital discharges anticipated in 1967. Increased acceptance of health services by older Indians resulting from the educational activities of the program will bring about a continually increasing demand for health services for this disease category as the life expectancy of the beneficiary population increases.

Plan of action

1. Provide all known cases with treatment and instruction in methods to prevent deterioration.
2. Teach all known cases the proper use of medications for home treatment of the disease.

XIV. Congenital malformations

Objective

Reduction of mortality rate from approximately 17 to 16 per 100,000 population.

Plan of action

1. Ensure early recognition of congenital malformations by thorough examination of each child before leaving the hospital, and during each year of life prior to entering school.
2. Treat and, whenever possible, correct each congenital malformation.
3. Provide early counseling to parents of all malformed children on growth, development and rehabilitation.
4. Provision of preventive services:
   (*a*) All pregnant women to be seen early by a physician.
   (*b*) All Service Units to have organized programs to reach 60% of women 15 years of age and over with education on value of early prenatal care.
   (*c*) Fifty per cent of pregnant women to be enrolled in mother and baby care classes.
   (*d*) Genetic counseling to be provided to all persons 15–19 years of age.

XV. Certain diseases of early infancy

Objective

Reduction of mortality rate for such diseases from approximately 61 to 59 per 100,000 population.

Plan of action

1. Provide health instructions to all mothers before discharges from hospital on proper care and feeding.
2. Provide public health nursing follow-up within one week of discharge.
3. Provide treatment and related services for all newborns (0–28 days of life) with diarrhea and pneumonia.
4. Provide treatment and related services for all infants found to have nutritional maladjustments.
5. Provide medical care and related services to all premature infants.
6. Provide an improved environment to an additional 9% of the beneficiaries through sanitation facilities construction.

XVI. Symptoms, senility and ill-defined conditions

Objective

Reduction of mortality rate from 48.0 to 47.5 per 100,000 population.

Plan of action

1. Train medical and paramedical personnel in more accurate diagnosis.
2. Provide nutrition services on request to nursing homes with Indian patients.
3. Provide planned nutrition services for adults over 55 years of age living alone.
4. Screen patients with labile, ill-defined conditions for stressful or anxiety provoking conditions in the home, work or school.
5. Provide treatment and related services to all patients in this category.

XVII. Injuries, accidents, and adverse effects of chemical and other causes

Objective

Reduction of mortality rate from approximately 195 to 191 per 100,000 poulation.

Plan of action

1. Establish an accident prevention program in all Area Offices to facilitate the establishment of the use of a standardized system for reporting the circumstances and causes of accidents.
2. Reduce the mortality and the extent and severity of morbidity and residuals of accidental injuries by:
    (*a*) Identifying most frequent sources of first aid and strengthening first aid education.
    (*b*) Continuing to develop in-service training programs for DIH personnel on effective care and treatment of injuries at the scene of the accident and at hospitals and clinics.
    (*c*) Initiating programs in cooperation with BIA tribal groups and law enforcement officials with emphasis on driver education programs.
    (*d*) Assisting in the development of accident prevention program in schools.
    (*e*) Establishing adequate rehabilitation services through use of DIH facilities, other Federal hospitals, and available state and local resources.
3. Reduce accidents in hospitals and other health facilities by strengthening safety programs in DIH installations,

Appropriation, 1966 (adjusted)	$67,527,000
Total amount available	67,527,000
Appropriation, 1967	73,671,000
Transferred to "Operating expenses, Public Buildings Service" (80 Stat. 674)	−12,000
Transferred from "Economic opportunity program." Office of Economic Opportunity (180 Stat. 1063)	800,000
Proposed supplemental for civilian pay raise	1,190,000
Proposed supplemental for military pay raise	177,000
Proposed supplemental for wage board increases	498,000
Total amount available, 1967	76,324,000

SUMMARY OF INCREASES AND DECREASES, 1968

Hospital health services: To provided for mandatory increases ($713,000), and program increases ($2,157,000) for additional staff; establishment of operations research program, direct operation of medical facilities on Pribilof Islands, supervisory food service training program, pediatric and pharmacy residency programs, and continuation of COSTEP training program; additional maintenance of facilities and new and replacement equipment	+$2, 870, 000
Net change, hospital health services	+2, 870, 000
Contract medical care: To provide for mandatory increases ($780,000), and a program decrease (−$980,000) due to anticipated effect title XIX medicare	−200, 000
Net change, contract medical care	−200, 000
Field health services: To provided for mandatory increases ($222,000), and program increases ($3,098,000) in the preventive health activities of sanitation, dental, public health nursing, health education and field medical services	+3, 320, 000
Net change, field health services	+3, 320, 000
Special assistance to the Menominee Indian people: To provide for decrease in special assistance to the Menominee Indian people due to nonrecurring construction of sanitation facilities	−450, 000
Net change, special assistance to the Menominee Indian people	−450, 000
Administration: To provide for mandatory increases ($39,000), and program increases ($230,000)	+269, 000
Net change, administration	+269, 000
Net change, 1968	+5, 809, 000
Budget estimate, 1968	82, 133, 000

Analysis by activities

Activity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
Hospital health services	$39, 668, 768	$43, 900, 000	$46, 770, 000	+$2, 870, 000
Contract medical care	12, 647, 678	14, 106, 000	13, 906, 000	−200, 000
Field health services	13, 033, 051	15, 631, 000	18, 951, 000	+3, 320, 000
Special assistance to the Menominee Indian people		800, 000	350, 000	−450, 000
Administration	1, 880, 879	1, 887, 000	2, 156, 000	+269, 000
Unobligated balance lapsing	296, 624			
Total	[1] 67, 527, 000	[1] 76, 324, 000	[1] 82, 133, 000	+5, 809, 000

[1] Excludes reimbursements as follows: 1966, $836,300; 1967, $501,000; 1968, $496,000.

1. Hospital health services

Hospital health services:

Amount available, 1966	$39, 668, 768
Amount available, 1967	43, 900, 000
Estimate, 1968	46, 770, 000
Increase	2, 870, 000

The estimate of $46,770,000, an increase of $2,870,000, consists of the following:

Statutory salary promotions	$583, 000
FICA rate increases	9, 000
Annualization of 1967 wage board increases	121, 000
Total mandatory increase	713, 000
Program increase (182 positions)	2, 157, 000
Net increase	2, 870, 000

Need for increase

The increase of $2,870,000 is requested for the following:

1. Funds for additional staff to improve the quality of medical care. Improvement of inpatient and outpatient employee/patient ratios.
2. Funds for operation research program.
3. Funds for direct operation of medical facilities on Pribilof Islands.
4. Funds for additional training.
5. Funds to meet maintenance and repair requirements.
6. Funds to meet equipment requirements in terms of backlog, normal replacement and new equipment.
7. Funds to cover mandatory increases.

Additional staff to improve inpatient and outpatient employee/patient ratio (132 positions and $967,000)

Considerable attention has been given for many years to the strengthening of the on-going medical care program. The continued improvement in facilities through new and modernized buildings will permit the achievement of an improved quality of medical care. A measure of this is found in the increasing number of facilities meeting the minimum health and safety structural standards of the Joint Commission on Accreditation of Hospitals.

However, there remains significant obstacles to overcome in achieving an improved quality of medical care. These have been documented in the Division's annual review of problems and deficiencies. Concern has been expressed in previous hearings regarding the quality of medical care in DIH hospitals and the need to meet the standards of service now being met in community and other Federal hospitals. Deficiencies noted in Joint Commission surveys are largely attributable to staffing limitations. These limitations are portrayed in the following table which compares the Division of Indian Hospital employee patient ratios with those of other short-term general hospitals:

	Employee per 100 patients	Average length of stay
All short-term hospitals:[1]		
Federal	176	19.1
Non-Federal	245	7.8
DIH Indian-General hospitals[2]	153	9.3

[1] Source: Aug. 1, 1966, Guide Issue, Journal of American Hospital Association.

[2] Fiscal year 1966 data (provisional).

Evaluation of these ratios should include consideration of the following factors:

1. DIH hospitals have more acutely ill patients, and a higher percentage of female and pediatric patients than the community hospital. A higher ratio of employees to patients is required for these types of patients.
2. Because of isolation and severe climate conditions, our hospitals require more than the normal number of supporting staff to provide community-type utility services to the hospital and quarters.
3. The need to provide services regardless of the size of the workload requires a minimum staff excessive to the average employee patient ratio.

Twenty-six of the 51 DIH hospitals in FY 1966 had an ADPL less than 30. Limitations of overall ratio of employee to patients resulted in limited hours of nursing coverage and care, dietary services, housekeeping and maintenance services, laboratory and X-ray technician services, and medical record services. In addition to the overload placed on the available employees, highly skilled professionals are required to spend time on less skilled activities. Attempt to attain accreditation for hospitals and to attract and retain professional health care personnel have been severely handicapped.

The application of the staffing methodology studies (developed for various hospital departments by the University of Michigan) in the six GM&S DIH hospitals over 100 beds is expected to be of significant assistance in meeting specific departmental staffing needs. The implementation of completed studies will be initiated in 1968.

An increase of $967,000 is required to finance the 132 positions that are requested. The utilization of personnel requested in terms of improved employee/patient ratio is reflected in a following table which groups hospitals in our system by size and/or mission and relates to each group the employee/patient ratios for 1966, 1967 and 1968.

Operations Research (*increase of 19 positions and $240,000*)

It has long been recognized that the Division of Indian Health is in the unique position of operating one of the few truly comprehensive health programs in the Nation for a discrete population group. The Division has responsibility for planning and implementing comprehensive health services for the American Indian and Alaska Native, both of whom are geographically and culturally isolated from the dominant white society. More than 380,000 beneficiaries of the program are eligible for the widest range of curative, rehabilitative and preventive health services, including hospital medical care, maternal and child care, dental care, public health nursing, disease surveillance and control, nutrition, health education, and sanitation facilities construction.

The efficient and effective management of available resources including men, money, materials and facilities, must be achieved through decision-making and resource allocations based upon firm scientific data, and planning data which permits predictability of results. Since the needs of the beneficiaries far exceed the resources available to meet those needs, the maximization of available resources takes on a particular significance.

Comprehensive community health must successfully compete with all other demands for the tax dollar. Less-than-objective justifications for fiscal support are poor substitutes for quantified measures of specific health problems; for quantified measures of priority; for comparative cost estimates of alternate courses of actions designed to alleviate or eliminate priority health problems; and for quantifiable measures of program effectiveness and efficiency.

The Division of Indian Health is confident that the planning and implementation of restorative, rehabilitative and preventive health services can be systemized—that the many factors and facets which contribute to the total yield of such services can be identified and measured—that there are, and there can be developed more practical and more accurate methods and procedures for measuring a community's health status and problems—that evaluation systems can be developed which will truly reflect the results of any specific program or combination of programs—and finally, that the Division can develop mathematical allocation models which will enable it to predict the changes which may occur in the health status of a given community when a specified program package is systematically administered and/or altered.

While the complexities of administering Public Health programs are great, some knowledge is already available regarding the many variables involved in planning and implementing a comprehensive health program. Unfortunately, the majority of our knowledge is fragmentary, having been gained through studies conducted by and for monodiscipline groups. These studies have been usually designed to eliminate or hold constant the interaction of other professional disciplines. Consequently, the interrelation of public health program effects is not definable in quantitative terms. The fact of the matter is, that the Division really cannot begin to describe the total effects of a given program action within a community structure. It does not have quantitative models for determining the most prudent distribution of limited resources, either in terms of various community health problems, or in terms of program effectivenss. The operation Systems Analysis Module proposes to place and to analyze public health systems within their total context.

The benefits in increased program efficiency through systematic planning and implementation would not accrue to the Division of Indian Health and its beneficiaries alone. Direct translation and application to any organization, agency or county would be possible. Since all major variables will have been quantified and incorporated in mathematical models, the interested agency may well only need to insert the proper quantities and observe the predicted results.

Because of the broad implications of Operation SAM, and recognizes the unique opportunity enjoyed by the Division of Indian Health to provide a "laboratory" for the development, testing, and refinement of administrative concepts which could be utilized both nationally and worldwide, the Division is particularly pleased with the enthusiastic endorsement of the proposal by the American Public Health Association, the American Academy of General Practice, the American Academy of Pediatrics and the Association of State and Territorial Health Officers.

Mission and objectives

Stated succinctly, the mission of Operation SAM is to improve efficiency and effectiveness of DIH comprehensive health programs through applied research in program planning and implementation.

From the long-range point of view, the Systems Analysis Module will be involved in the following operations, among many others, in order to achieve the projects mission:

1. Determination of the best methods and procedures for development and implementation of community health plans.
2. Evaluation of community and program data to determine types and specificity of data required for meaningful planning and evaluation of program.
3. Development of methods and procedures for management data collection, storage, retrieval and analysis, feasible for service unit implementation.
4. Development of statistical models for use in program planning and evaluation.
5. Development of methods and techniques for assessment of priorities for action on community health problems.
6. Development of a comprehensive cost-benefit analysis system for application to community health problems.
7. Development of a prototype service unit operations manual.
8. Development of "DIH Operations Criteria Series" planning and evaluation documents utilizing the program package approach.
9. Development of improved methods and procedures for orientation and skills training of service unit staff.
10. Serving as an orientation and training unit for DIH staff and visiting Officials.
11. Improvement of methods and procedures for the operation of the hospital as the center of community health services and the Service Unit Director as the manager of comprehensive health services.
12. Determination of optimum levels of expanded functions for supporting staff, and techniques for appropriate training.

Initial staffing pattern

The interdisciplinary team approach is not accidental. One of the major reasons for a systems analysis team is to bring the most advanced scientific procedures to bear on the problem at hand, or to develop new and more fruitful procedures. The idea is that no mind can hold all the potentially useful scientific information, but a "team mind" may. Since most man-machine systems have physical, biological, psychological, sociological, economic and engineering aspects, these phases of the total system studied can best be understood and analyzed by those trained in the appropriate fields. A mixed team increases the number of aspects of the operation which can be examined in detail and the pool of possible approaches to a program's growth. To bring to bear this multidiscipline approach the following positions are being requested—1 Director, 1 Hospital Administrator, 1 Biometrician, 1 Econometrician, 1 Operations Research Analyst, 1 Visual Aide Technician, 1 Social Worker, 1 Sanitarian, 1 Public Health Nurse, 1 Health Educator, 1 Maintenance Man, 1 Laborer, 3 Secretaries, 1 Epidemiologist and 3 Clerks. This group will provide the foundation or core of highly trained personnel and it will be expanded only as a demonstrated need indicates the addition of professionally related discipline.

As the experience and the needs of the DIH systems analysis team dictate, and as fiscal resources permit, additional competencies related to the social sciences, health education, public health nursing and environmental health, as examples, will be added to the research team.

Initial program plans

The initial primary objective of Operation SAM is: "The design and preliminary implementation of an integrated and comprehensive management information system based on service unit planning and evaluation needs."

This objective is of prime importance in order to develop baseline management data, utilizing the Papago Reservation as the operational community. Basic management information is the elementary requirement for accomplishing all the stated objective related to planning and evaluation, and particular attention will be placed on developing methods of data measurement as well as methods for data collection.

The information system will take into consideration the health services input, the individual in his environment, and the results of the services.

Specific areas to be developed are:

(*a*) Physical environment of the individual.
(*b*) Social environment of the individual.
(*c*) Community environment of the individual.
(*d*) Health level of the individual.
(*e*) Services and treatments received (including self-treatment).
(*f*) Services and treatments available but not utilized.
(*g*) Cost of services and treatments.

A secondary initial objective of Operation SAM is to develop the capability for orienting and training DIH staff in the system analysis approach.

Direct Operation of medical facilities on the Pribilof Islands (8 positions and $117,000)

Public Law 89–702, Section 205, effective November 2, 1966, charges the Secretary of Health, Education, and Welfare with providing medical and dental care to the natives of the Pribilof Islands and on a reimbursable basis to Federal Employees and their dependents and tourists and other persons in the Pribilof Islands. The Public Health Service has been delegated this responsibility by the Secretary.

These health services had been furnished by personnel of the United States Public Health Service, Division of Indian Health, on a reimbursable agreement with the United States Fish and Wildlife Service, Department of the Interior.

An increase of 8 positions and $117,000 are requested in order to provide for the direct health services necessary for the proper and effective implementation of Section 205 of Public Law 89–702.

Training (increase of 23 positions and $323,000)

In order to elevate the health of Indian and Alaska Natives to the highest possible level, it is necessary to make a comprehensive assault on the adverse factors affecting Indian Health and to provide appropriate preventive, curative and rehabilitative services.

To achieve these results, it is necessary that a highly trained and competent staff be developed at all levels and in a wide variety of medical fields including all the medical and surgical specialities, dentistry, nursing, pharmacy, dietetics and nutrition, medical social workers, health record personnel, medical educators, sanitarians and others.

The largest single obstacle to providing high quality care in the past has been the scarcity of trained personnel in all these specialties. As part of the Division's long range plans, it has been determined that it will be necessary to develop programs to train personnel since those sufficiently interested and motivated to obtain their training in the Division are far more likely to remain in the program. Even those who leave the program after a few years will contribute to the overall pool of medical resources available to the nation.

Specific improvements can be effected through residency and other training programs in order to accelerate the elimination of the following pressing health needs and deficiencies of the beneficiary population.

Infant deaths.—The death rate for children under one year in 1955, the year of transfer of health responsibilities to the Public Health Service, was 61.2 per 1,000 live births for Indians and 74.8 per 1,000 live births for Alaska Natives.

At the present time, this has been reduced to 35.9 and 54.8 per 1,000 live births among Indians and Alaska Natives, respectively. In some areas in Alaska it still remains over 100 per 1,000 live births. This rate, which is still more than three times the current U.S. all races rate, can only be reduced to approximate that of the general population through an expanded pediatric and family centered health program. This program can be accelerated through the enlistment of physicians specifically trained to handle the Indians' and Alaska Natives' individual and community health problems.

Childhood diseases.—When the Indian child reaches school age, immunization programs directed through the school provide protection against the effects of polio, dyphtheria, measles, whooping cough, and other such infections. In the pre-school ages, however, where these diseases are most prevalent, effective immunization programs have been limited. Further progress is dependent upon increased emphasis on home-centered, physician-directed, community health programs. In the absence of this type of expanded program, the incidence for measles among Indian children is six times that of the non-Indian; whooping cough more than eight times; and streptococcal infections approximately seven times. The incidence of measles among Alaska Natives is four times that of the non-Indian. Whooping cough occurs ten times more commonly than the U.S. all races rate. In addition, the death rate and complications due to these diseases, as well as pneumonia and diabetes, are much higher in the Indian and Alaska Native child. A fully effective and efficient program requires the direction of properly oriented physicians to conduct therapeutic and preventive service through the hospital and the home.

Child hospitalization.—The infant Indian and Alaska Native child will require two to four hospitalizations during the first year of his life. During the next four or five years, he will require hospitalization three to four times as often as the non-Indian child. This accounts for the fact that over 35 percent of the hospitalizations in Indian hospitals are pediatric as compared to a little over 17 percent for the population in general.

It is known that health educational programs conducted by the physician and his health team can have a marked effect upon those conditions which cause hospitalization through an appreciation and practice of good hygiene and health.

Facility utilization.—The Division of Indian Health facilities are constructed and equipped to provide a wide range of medical and surgical services. However, the experience and training of the young physician staff does not permit their fullest utilization.

A significant proportion of the physician staff are serving in the program directly after internship (79%) and have not had adequate educational exposure nor the special training necessary to permit such expanded activities as are required. Residency training in pediatrics and general practice would materially offset this deficiency and provide a more useful, better-trained, well-rounded and oriented physician to serve in the capacity of family physician to the Indian and Alaska Native and his community.

Longevity of staff tenure.—At the present time, the rate of retention of entering physicians for careers in the Public Health Service is 16 percent. The establishment of residency programs will not only increase the number of men remaining in career service but will also have a substantial effect on recruitment of additional numbers of promising physicians with a desire for performing these specialities in pediatrics and general practice.

The initiation or continuation in 1968 of the following training programs is requested:

Phoenix Pediatric Residency Training Program, 13 positions and $112,000.

Alaska Pediatric Residency Training Program, 4 positions and $65,000.

The present shortage in the United States of physicians who are certified as specialists in pediatrics and the expanding need for these qualified professionals in the Division of Indian Health program has prompted the Division of Indian Health to provide residency programs in pediatrics at the Anchorage, Alaska and Phoenix, Arizona Medical Centers. These programs, accredited by the American Medical Association and the American Academy of Pediatrics, are a planned two-year continued program which consists of training and supervised experience in general pediatric care with emphasis on child growth and development with provision for an optional third year of graduate study at a school of Public Health or preventive medicine in the field of maternal and child health. Training and supervision would be primarily at the Phoenix and Alaska Medical Centers and their incident field areas.

Four residents and nine supportive positions and $112,000 are requested for the Phoenix Pediatric Residency Training Program.

Two residents and two supportive positions and $65,000 are requested for the Alaska Pediatric Residency Program.

Supervisory Food Service Training, 2 positions and $92,000: Funds in the amount of $92,000 are requested in 1968 to support a training program designed to train food service supervisors for Division of Indian Health hospitals. Food service supervisor training courses suitable for the Division's needs are virtually nonexistent. From 1961 to 1966 six Division food service workers completed a training course offered once a year by Michigan State University. While some aspects of this course are reasonably suitable for Division of Indian Health requirements, overall the course is not compatible with the academic and experience backgrounds of Division of Indian Health candidates and the responsibilities of food service supervisors in the Division's hospitals. Moreover, the limited enrollment of 40 students for the course selected primarily from Michigan and adjoining states restricts severely the number of Division students who can be accepted. The majority of potential candidates for food supervisors cannot meet the academic requirements for enrollment in the two-year training program at Phoenix College. Here again, the College program is not designed to fill the specific needs for hospital food service supervisors in the Division of Indian Health. Costs of college level training programs are considerably greater than those in the proposed Division training program.

This budget provides for a four months training course for food service supervisors with a maximum of 8 students per class. Two classes will be graduated each year. The curriculum will be designed to include the study and application of all principles of management and control in the supervision of hospital food service departments. Laboratory facilities will include the major elements of a small hospital food service department for practical experience in the application of the principles presented. Field observation and experience in a 200 bed hospital and in small hospitals with dietitians will be scheduled. The training program director will provide follow-up evaluation and consultation for the trainees when they have completed the course and returned to duty.

Criteria for admission to the course shall be prior institutional cooking experience, potential for leadership and supervision, present employment in a DIH hospital (exception will be made for Indians or Alaska Natives who otherwise meet the requirements) and a minimum of a tenth grade education with preference given to high school graduates. Long-range training plans include a course in food preparation and related subjects for food service workers below the food service supervisor level. The same personnel and facilities will be utilized in conducting this program.

The Director of the Food Service Supervisors Training Program will be a professional dietitian with teaching experience as well as administrative and clinical experience in dietetics.

An increase of 2 training staff positions and $92,000 is requested for the funding of the personnel compensation and related supporting costs for the teaching staff (Director and Secretary), food service relief positions, living costs, travel, equipment and rental of space.

Gallup Pharmacy Residency Program, 4 positions and $29,000: Two hospital pharmacy residency positions and two supporting staff are requested at Gallup, New Mexico. These residencies must meet established standards and will be accredited by the American Society of Hospital Pharmacists. The residencies are for one year each.

The establishment of hospital pharmacy residencies in the Division was recommended by the Pharmacy Advisory Committee to the Division Chief in a report submitted March 6, 1964. It was also recommended by the American Pharmaceutical Association's Committee on Governmental Pharmaceutical Services on its recent trip to the Gallup Hospital.

Most states require a year of internship or residency training for licensure.

The Indian Health pharmacy services are unique in that they are comprehensive and cover both preventive services and treatment services. The needs of the Indians are so different from the rest of the population because of their beliefs, customs and cultural background that special techniques and procedures must be used in providing pharmacy services.

The residency program would provide the young pharmacist with training in a comprehensive public health, preventive and treatment pharmacy service program and meet the standards required for accreditation and licensure.

An addition of two persons to the pharmacy staff is required to provide the necessary training and instruction to the two residents and to provide the pharmacy services. Additional equipment for a control laboratory is also needed.

Four positions and $29,000 are requested to initiate the Pharmacy residency program in 1968.

COSTEP—Advanced Professional Training, $25,000: This increase will permit an expansion of the Commissioned Officer student training extern program which provides a sucessful mechanism for training, recruitment and career development of new officers in the Service.

The COSTEP program provides training opportunities in a professional environment for students in health related studies and stimulation of interest by promising students in Public Health Service careers and continues to serve as an effective recruiting technique for helping to meet the manpower requirements of the Public Health Service. The requested increase will permit an increase of 17 students at a cost of $1,470 per student.

Maintenance and repair ($200,000)

To maintain and to make minor repairs to the Division of Indian Health real property and related equipment in Fiscal Year 1968 will cost $1,535,000 which is an increase of $200,000 over the 1967 level. The basis for this requirement of funds is the projected total area of 4,947,543 square feet of building to be maintained; the maintenance of the boiler plants, electrical generators, sewage disposal systems and the utility services for electricity, water, steam, and communications systems; the inspection and correction of deficiencies of elevators, boilers, sterilizers; the procurement of tools and special instruments to accomplish the above work; and the minor repairs which can be accomplished within this funding.

Included in the maintenance responsibility of the Division of Indian Health are 891,428 square feet of building space constructed prior to 1936 requiring extensive repairs, steam boilers in service far beyond their normal operating age that should be replaced, deficiencies in our older hospitals that should be corrected to provide reasonable standards of health services, and a large backlog of minor structural repairs and painting that should be accomplished without further delay.

The increase in maintenance and repair funds is necessary due to (1) cost escalation of contract labor, equipment, materials and supplies, (2) increased square foot of floor areas which will be acquired and (3) increasing unmet needs.

Maintenance costs in Alaska are approximately 78 percent higher than in other areas. There are now 51 hospitals of which 34 hospitals were constructed prior to 1946 and 3 of these prior to 1916.

Area of buildings to be maintained:

60 or more years old; 91,048 sq. ft. or 1.84%.
40 to 59 years old: 279,340 sq. ft. or 5.65%.
20 to 39 years old: 2,042,496 sq. ft. or 41.28%.
Temporary buildings: 157,152 sq. ft. or 3.18%.
Trailers: 7,914 sq. ft. or 0.16%.
Permanent Buildings less than 20 years old: 2,369,592 sq. ft. or 47.89%.
Total: 4,947,542 sq. ft. or 100.00%.

The backlog of unmet needs for major repairs and for repairs and for replacement of obsolete and deteriorated building services equipment is estimated at $5,000,000.

The 1968 maintenance and repair funding was determined through a modified University of Oklahoma formula for building maintenance utilizing modifying factors similar to those used by the Veterans Administration.

The Oklahoma University formula fixes annual building maintenance costs as a percentage of current building replacement costs, i.e., 1.75% for wood frame construction, 1.30% for combination masonry-wood construction, and 1.10% for combinations reinforced concrete, steel, and masonry construction. An "Adjusted Use Factor" is added which considers the intensity of use of a structure. Other plant management costs such as janitorial services, maintenance of roads, walks, outside utilities, collection and disposal of wastes, plant operation, etc., are computed separately by category.

The Veterans Administration has modified the Oklahoma University formula by computing all buildings maintenance on the basis of 1.10% of the current replacement cost and an adjusted use factor of 50% (increase) for hospitals. The derived figure equals 70% of their maintenance and repair budget. The other 30% is a blanket amount for maintenance of grounds, utilities, etc.

Equipment (Increase of $310,000)

An increase in equipment funds in the amount of $310,000 is requested for 1968 exclusive of $14,000 for the Supervisory Food Service Training Program; $1,000 for the Pharmacy Residency Program, and $13,000 for the Operations Research Program. Of the 1968 total of $1,680,000, $1,059,000 will be applied against the current large equipment backlog and replacement requirements. $152,000 will provide for Groups II and III (portable) equipment requirements related to new construction, $8,000 will provide for vehicle replacement purchases, $433,000 will provide for additional and non-capitalized equipment requirements, and $28,000 will provide for the above mentioned new programs.

The following table sets forth the Hospital Health Services current equipment backlog and the replacement and other requirements and estimated acquisitions for 1967 and 1968:

Backlog as of 7/1/66 (Beginning F.Y. 1967)		$1,465,000
1967 Replacement Requirements	$824,000	
1967 New and Non-Capitalized Requirements	348,000	
1967 Other Requirements including construction	161,000	+1,333,000
1967 Estimated Replacement Acquisitions	833,000	
1967 Estimated New and Non-Capitalized Acquisitions	348,000	
1967 Estimated Other Acquisitions	161,000	−1,342,000
Backlog as of 7/1/67 (Beginning F.Y. 1968)		1,456,000
1968 Replacement Requirements	559,000	
1968 New and Non-Capitalized Requirements	433,000	
1968 Other Requirements including construction	188,000	+1,180,000
1968 Estimated Replacement Acquisitions	1,059,000	
1968 Estimated New and Non-Capitalized Acquisitions	433,000	
1968 Estimated Other Acquisitions	188,000	−1,680,000
Backlog as of 7/1/68 (Beginning F. Y. 1969)		956,000

Program summary

For 1968 an appropriation in the amount of $46,770,000 is requested for the hospital health services activity, to cover (1) the operation of 51 Public Health Service Indian hospitals and attached outpatient clinics (2) a nurse training program associated with Public Health Service Indian hospitals and (3) the maintenance of all Public Health Service Indian Health facilities consisting of hospitals, health centers, stations, school clinics and staff quarters.

The hospitals operated by the Division of Indian Health vary in size from 6 to 381 beds and in complexity from primary medical care facilities to comprehensive referral centers. The 42 facilities eligible for survey by the Joint Commission on Accreditation of Hospitals are being improved to meet and maintain these minimal standards as resources become available. At the present time 17 have accreditation and another 9 are preparing for a survey. Seven hospitals were accredited in 1966.

The replacement hospitals at Lawton, Oklahoma and Belcourt, North Dakota will be in full operation in 1968. The modernized outpatient department at Wagner, South Dakota will be in full operation in 1967. The Mescalero, New Mexico replacement hospital will be completed in 1967.

A new program is being initiated to provide direct services on the Pribilof Islands.

An operations research program located at Tucson, Arizona, utilizing the Papago Reservation as the operational community will be directed toward the design and preliminary implementation of an integrated and comprehensive management information system based on Service Unit planning and evaluation of needs.

Expected workloads for the total program are shown on the following table:

HOSPITAL HEALTH SERVICES

Workload data

Average daily patient census by type of patient (excluding newborn)	1966 actual	1967 estimate	1968 estimate	Change (+) or (−)
Total average daily census	2,149	2,120	2,120	0
General patients	1,891	1,900	1,920	+20
Tuberculosis patients	258	220	200	−20
United States excluding Alaska	1,604	1,585	1,595	+10
General patients	1,431	1,425	1,445	+20
Tuberculosis patients	173	160	150	−10
Alaska	545	535	525	−10
General patients	460	475	475	0
Tuberculosis patients	85	60	50	−10
Total admissions (excluding births)	67,053	67,100	67,500	+400
Total births—All Public Health Service Indian hospitals	9,008	8,500	8,300	−200
OUTPATIENT VISITS FOR MEDICAL THERAPEUTIC AND PREVENTIVE SERVICE AT HOSPITAL FACILITIES				
Total visits	788,466	810,000	820,000	+10,000
United States excluding Alaska	699,465	714,000	722,000	+8,000
Alaska	89,001	96,000	98,000	+2,000

Employee patient ratios and average daily patient loads, by type of hospital

Type hospital	Number	Average daily patient load	Employees per 100 patients		
			1966	1967	1968
United States excluding Alaska:					
General	2	120-190.0	141	152	154
Do	6	46-100.0	162	168	171
Do	14	25- 45.0	138	143	144
Do	18	5- 24.0	179	185	185
Subtotal	40		153	159	161
Tuberculosis	2	80- 95.0	98	106	113
Alaska:					
General	2	100-350.0	155	157	174
Do	2	40- 60.0	152	159	162
Do	3	10- 25.0	189	191	195
General (Pribilof)	2	.8	(1)	(1)	(1)
Total	51		150	156	161

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[1] Not available.

Itemization of estimate

	Actual, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
Obligations by objects:				
11 Personnel compensation	$27, 251, 620	$30, 410, 000	$32, 312, 000	+$1, 905, 000
12 Personnel benefits	2, 307, 649	2, 568, 000	2, 755, 000	+184, 000
21 Travel and transportation of persons	1, 028, 959	1, 009, 000	1, 112, 000	+103, 000
22 Transportation of things	591, 204	595, 000	651, 000	+56, 000
23 Rent, communication, and utilities	1, 623, 215	1, 570, 000	1, 632, 000	+62, 000
24 Printing and reproduction	111, 490	112, 000	112, 000	
25 Other services	1, 879, 860	2, 780, 000	2, 903, 000	+123, 000
26 Supplies and materials	4, 316, 516	4, 214, 000	4, 313, 000	+99, 000
31 Equipment	1, 227, 975	1, 342, 000	1, 680, 000	+338, 000
42 Insurance, claims, and indemnities	2, 000			
Subtotal	40, 340, 488	44, 600, 000	47, 470, 000	+2, 870, 000
Deduct quarters and subsistence charges	671, 720	700, 000	700, 000	
Net obligations	[1] 39, 668, 768	[1] 43, 900, 000	[1] 46, 770, 000	+2, 870, 000

[1] Excludes reimbursements as follows: 1966, $836,300; 1967, $407, 000; 1968, $402,000.

2. Contract Medical Care

Contract medical care:

Amount available, 1966	$12, 647, 678
Amount available, 1967	14, 106, 000
Estimate, 1968	13, 906, 000
Decrease	200, 000

The estimate of $13,906,000 provides a net decrease of $200,000 consisting of:

1. An increase of $775,000 for rising costs of program operation.
2. An increase of $5,000 to provide for statutory pay increases.
3. A decrease of $980,000 and 54 patients a day resulting from the anticipated effect of Medicare legislation (Title XIX) on the Indian Activities Contract Medical Care program.

Need of increase

An analysis of the rates negotiated in agreements with the various hospitals, clinics, physicians, and dentists with which the Division of Indian Health has current formal contracts, indicates a steady upward trend of at least 5% annually. Published continuing surveys of health care costs corroborate this trend and reveal an even higher nation-wide rate of increase. In order to maintain the amount of services required under this program it is necessary to plan for this added cost, and request funds sufficient to cover the increase. An increase of $775,000 is requested in 1968 for the rising costs in contract rates necessary for program operation.

An increase of $5,000 is requested to provide funds for statutory within grade increases.

A decrease of $980,000 and 54 average daily patient load are reflected in the 1968 estimate resulting from the anticipated effect of Medicare legislation on the Indian Health Activities contract medical care program.

Plan of work

The request of $13,906,000 is for the purchase of medical care through contractual arrangements and is an essential element of the Public Health Service Indian Health program. Formal agreements are entered into with community hospitals, private physicians and clinic groups, dentists and providers of ancillary health services to assure that quality care is obtained. Through this mechanism health services are practically and effectively provided for the widely scattered and small groups of Indian beneficiaries who urgently need such service. In addition, the use of contract services makes possible special diagnostic and therapeutic services which many small and intermediate sized Public Health Indian hospitals cannot provide at economical costs. Emergency hospitals and medical care services are frequently required at locations not readily accessible to health facilities directly operated by the PHS Indian Health program. This Division does not operate any in-patient facilities equipped to provide psychiatric care to Indian beneficiaries and therefore this type of service must be procured through contracts.

The following table indicates the distribution of funds under the various items requested for the 1968 program. It also shows how 1966 funds were obligated and the plan of funding for 1967 operations. The actual experience of average daily patient loads are reported for 1966 together with expected levels for 1967 and 1968.

Contract medical care

	1966 actual			1967 estimate			1968 estimate		
	Average daily census	Rate	Amount	Average daily census	Rate	Amount	Average daily census	Rate	Amount
Hospitalization:									
General	473	34.34	$5,928,629	507	36.16	$6,691,600	463	37.93	$6,427,200
Tuberculosis	227	18.78	1,555,620	221	19.70	1,589,100	211	20.67	1,596,300
Neuropsychiatric	188	7.32	502,429	200	7.55	551,200	200	7.78	569,500
Total	888		7,986,678	928		8,831,900	874		8,593,000
Patient and escort travel			316,716			300,000			300,000
Professional field supervision			190,178			235,000			240,000
Physicians' services (inpatient fees, office visits, consultation services)			2,846,006			3,277,000			3,277,000
Dental services (emergency services, dental laboratory, prothesis)			463,524			510,000			546,000
Other costs (laboratory and X-ray services, pharmaceuticals, proprietary drugs for inpatients and outpatients, prosthesis and burials)			844,576			952,100			950,000
Total			12,647,678			14,106,000			13,906,000

3. Field health services

Subactivity	Amount available, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
(*a*) Sanitation	$2,106,138	$2,448,000	$3,198,000	+$750,000
(*b*) Dental	2,137,182	2,406,000	2,855,000	+449,000
(*c*) Public Health nursing	1,877,672	2,227,000	2,480,000	+253,000
(*d*) Health education	673,802	811,000	959,000	+148,000
(*e*) Field medical services	6,238,257	7,739,000	9,459,000	+1,720,000
Total	13,033,051	15,631,000	18,951,000	+3,320,000

Summary of change

Statutory salary promotions	$214,000
FICA rate increase	8,000
Program increase (273 positions)	3,098,000
Net increase	3,320,000

(*a*) *Sanitation*—The estimate of $3,198,000 provides an increase of $750,000 and 65 positions consisting of:

Statutory salary promotions	$33,000
FICA rate increase	1,000
Program increase:	
Regular program (27 positions)	336,000
Construction program (38 positions)	380,000
	716,000
Net increase	750,000

Need for increase

Lack of basic sanitary facilities, gross insanitary practices, and inadequate understanding of modern health and sanitation in the Indian and Alaska Native home and community continue to exist despite increasing attention being given to these problems by Indian Tribes and their members. Surveys made during the period 1957 to 1964, on Indian reservations representing more than 10 percent of the total beneficiary population, showed that: (1) one-half of the Indian families (average 5.5 persons per family) lived in one and two-room houses, (2) more than 70 percent obtained their domestic water from potentially contaminated sources and haul or carry it, (3) more than 75 percent had grossly inadequate facilities for sanitary waste disposal. These environmental conditions, together with lack of understanding of modern health practices, in large measure are responsible for the high incidence of preventable diseases and needless premature deaths, particularly among Indian infants. Diarrhea, dysentery, and respiratory ailments continue to cause a significant patient load on Public Health Service hospitals, clinics, and contract facilities. Other environmental conditions, including insect and wild rodent vectors, continue to result in sporadic epidemics on Indian reservations.

A continuing program of consultation and services is made available to Indian Tribes, groups and families for the purpose of helping them to improve and maintain a healthful home and community environment. These basic services are concerned with improving sanitation conditions at the home, at Indian celebrations, and at trading posts and other commercial establishments serving Indians. Consultation is also provided on sanitation problems associated with Tribal economic development projects, including the rapidly growing tourist industry. Particular emphasis is placed on the adoption of sanitation codes by Tribal governing bodies. Considerable effort is expended in follow-up surveys of completed sanitation facilities projects to assure that maintenance and care are being furnished and that the facilities are being properly used.

Minimum criteria for basic sanitation services and consultation coverage provide that: (1) home premises surveys and individual family consultation be given each Indian household every other year; (2) plans for all new Tribal enterprises are checked from a sanitation standpoint; (3) all trading posts are surveyed at least semi-annually; (4) all celebrations are under surveillance to minimize the opportunity for epidemic outbreaks; and (5) all completed sanitation facilities are surveyed at least twice during the first year of operation and at least annually thereafter.

In the provision of these basic services the Indian and Alaska Native sanitarian aides are key members of the staff who help bridge the gap of cultural differences to bring modern environmental sanitation practices to Indian communities and groups. These aides are trained by the Service in the basic elements of sanitation and they in turn impart this knowledge to their own people. Ninety sanitarian aides are currently employed on Indian reservations and in Alaska native villages. The present Indian and Alaska Native sanitation aid staff represents about one-half of the known need for such personnel.

In addition to the foregoing the basic environment health activities incorporate a consultative service to assure that a high level of environmental sanitation is maintained in Federal facilities serving Indians. It is considered desirable that all government facilities serving Indians and Alaska Natives have a comprehensive environmental health survey once every two years and a survey of their food service operations semi-annually.

A review of the basic environmental health activities for fiscal year 1966, using the minimum criteria herein cited, suggests that 53 percent of these essential services were provided. It is anticipated that this level of operations will be increased to approximately 58 percent during fiscal year 1967.

The sanitation facilities construction activity complements the basic environmental health activity by providing tangible support in those situations where the need for facilities exceed the available resources of the beneficiaries. The Service is authorized to provide this assistance under Public Law 86–121, the Indian Sanitation Facilities Act. The activity employs a coordinated Tribal-Federal attack to correct gross deficiencies in individual and community water supplies, waste disposal, and other sanitation facilities. Staffing to implement this work is supported under this subactivity.

In the construction activity, Indians participate in project planning and construction and assume responsibility for the operation and maintenance of the completed facilities. The staff effort is devoted to project engineering, technical support and motivation and training of Indian families and groups. Indian participation in the construction activity in the form of men, money, and materials approximates one-third the total value of construction.

Since the beginning of this activity seven years ago, through fiscal year 1966, a total of 511 sanitation projects have been undertaken. These include: 393 construction projects (61 of which serve Federal housing projects) and 118 engineering investigations, emergency works and other special projects. Of these 367 are completed or in operation, and 127 are underway as of June 30, 1966. The remainder are projects to complement new Federal Housing construction and are in the final stages of planning and negotiation with the Indian tribes.

Educational and motivational efforts that comprise the basic environmental health activities and the tangible support provided by the sanitation facilities construction activity complement each other so as to present a most salutary result. This is suggested by the indicated trend in the reduction in mortality and incidence rates from diarrhea and dysentery and in infant death rates. Before 1964, gastroenteritis was the leading notifiable disease entity among Indians. In 1964, this disease had dropped to second place. During the 10 year period 1954 to 1964, the death rates of gastroenteritis had declined from 56/100,000 population to 19.3/100,000 population. Another barometer of improved conditions may be viewed in the infant death rate which declined from 65.5/1,000 live births in 1954 to 35.9/1,000 live births in 1964. It is also noted that infant death rate in the postneonatal group has decreased from approximately six times to approximately three times that of the general population. These changes in some measure reflect the increased emphasis given to improving the environmental conditions surrounding Indian homes and communities.

During fiscal year 1967 the Service continued to cooperate with the Public Housing Administration and the Bureau of Indian Affairs by providing sanitation facilities for new Indian housing construction. In addition similar assistance is being rendered to other Federal Agencies and Tribal housing organizations.

The Fiscal Year 1968 request for the construction of Indian Health Facilities includes $8,000,000 for 65 sanitation facilities construction projects and $2,464,000 for assistance to Federal and Tribal housing programs. This will enable new or improved sanitation facilities to be made available to approximately 8,000 Indian and Alaska Native families in more than 80 different geographical locations.

Plan of work

Twenty-seven of the additional positions requested are for basic environmental health activities. These include eleven Indian sanitarian aides, seven professional sanitarians, six sanitary engineers and three clerks. They will be employed to meet the additional "follow-up" workload of training beneficiaries in operation, maintenance, and utilization of complete sanitation facilities serving an additional 6,000 Indian and Alaska Native homes. They will extend basic environmental health services on nine Indian reservations and in various communities in Alaska and Oklahoma to an additional beneficiary population of 45,000.

These services will include in addition to providing follow-up services to recipients of completed sanitation facilities comprehensive environmental health surveys at Indian homes, inspections of trading posts and other commercial facilities on Indian reservations, and institutional sanitation and food service coverage at Federal installations serving Indians. An increase of 8 percent above present level of such services is programmed.

Thirty-eight of the additional staff positions requested will implement the increase in level of sanitation facilities construction under P.L. 86-121. These positions provide engineering and support capability in the development of projects, negotiation of agreements, securing tribal participation in the work, logistical support and supervision of the installation of facilities and provide essential training to the Indian people in operation, maintenance and care of completed facilities. The construction activity requested will permit an additional 9 more percent of the known need to be met.

(*b*) *Dental.*—The estimate of $2,855,000 provides an increase of $449,000 and 42 positions consisting of:

Statutory salary promotions	$41,000
FICA rate increase	1,000
Program increase (42 positions)	407,000
Net increase	449,000

Status of program

Dental caries, periodontal disease, missing teeth, orthodontic conditions and complications of these conditions continue to be major health problems afflicting the Indian and Alaska Native populations. These problems are greatly magnified by the continuing backlog of need and by the inability to increase the dental resources necessary to keep up with the tremendous growth in the child population. During Fiscal Year 1966, 125,819 examined patients received 570,779 dental services. The group of beneficiaries examined represents 33.1 percent of the total beneficiary population. Only 22.9 percent of the estimated services required by the total population were provided and the children were the recipients of most of this limited care.

Although the dentist to general population ratio is about 1 to 2,000, in the Indian Health program there is one clinician to about 3,700 people.

Recent years have shown a marked increase in corrective and preventive services provided. For example, during 1966, topical fluoride treatments were provided to 82,729 patients as compared to 18,930 in 1962 and 3,139 in 1958. The number of filled teeth per person examined has increased from 0.9 in 1958 to 2.9 in 1966. Much of this improvement is due to increased efficiency through expanded and improved use of auxiliary personnel, improvement of the clinical facilities and training in efficient management of the dental clinic.

The Dental Branch requires 14 dentists including 1 long-term trainee for a dental public health residency, 27 dental assistants and one clerk to increase its program of bringing beneficiary children to a maintenance level of dental care. Some of these new positions are required to staff new facilities constructed during 1967. Health education and other preventive services will continue to be emphasized. In line with the requested increase, the following table sets forth major planned accomplishments in the direct services program during 1968 as compared to 1966 and 1967.

	1966	Estimate, 1967	Estimate, 1968
Oral health levels:			
Decay experience, persons ages 6 to 17	5.70	5.59	5.48
Periodontal disease, per 1,000 [1]	284	282	278
Dentures required, per 1,000 [1]	217	210	207
Workload estimated to produce above improvements:			
Beneficiaries examined	110,117	114,000	126,000
Total services provided	502,710	517,000	577,000
Topical fluorides	74,368	76,000	86,000
Dentures provided	2,053	2,200	2,600
Additional resources requested to accomplish above workload:			
Dentists, assistants, etc	----------	----------	42
Funds	----------	----------	$449,000

[1] Crude health level data derives primarily from examination of children and does not adequately reflect more severe disease among adults.

(*c*) *Public health nursing.*—The estimate of $2,480,000 provides an increase of $253,000 and 25 positions consisting of:

Statutory salary promotions	$30,000
FICA rate increase	1,000
Program increase (25 positions)	222,000
Net increase	253,000

Need for increase

The public health nurse is the focal point and a major resource in the extension of health services from the hospital into the Indian home and community. The activities of the public health nurse in the home, school, and community, coupled with her knowledge and understanding of the Indian family and way of life enable the DIH program to provide greater depth and quality of service. The need for adequate home follow-up of patients discharged from the hospital, early case finding, teaching of good health practices, and prevention and control of acute infectious and chronic diseases, requires additional staff, both professional and supportive.

The gradual increase in the past few years in the number of non-professional staff and the increasing numbers of community health aides being employed through OEO programs necessitates an increase in the number of supervisory level staff. There is need to train, supervise, and closely coordinate the efforts of the various levels of personnel contributing toward the provision of public health nursing services.

Plan of work

The program increase of $222,000 for 1968 provides $13,000 in additional funds to cover contract services with States and $209,000 to permit the addition of 25 public health nursing personnel to the staff. This includes 4 public health nurse supervisors, 7 public health nurses, 9 nursing assistants, 1 driver-interpreter and 4 clerks.

The additional staff will allow for the extension of services to approximately 1,500 additional families. Efforts will be intensified in providing care to pregnant women during the maternity cycle; to infants and preschool age children including those health services associated with Head Start Programs; to provide instruction in good health practices to individuals and families; to assist school personnel with the integration of health teaching in the curriculum; to increase participation in community health education programs aimed at high risk groups to reduce morbidity and mortality resulting from accidents, heart disease, cancer, and diabetes.

(*d*) *Health education.*—The estimate of $959,000 provides an increase of $148,000 and 10 positions consisting of:

Statutory salary promotions	$10,000
Program increase (10 positions)	138,000
Net increase	148,000

Need for increase

Deficiencies in health education are evident in individual, family and community health behavior among the beneficiary groups.

Lags in health behavior are implicit in three of the leading causes for hospital admissions among children—respiratory infections, gastroenteric infections, and accidents. Problems made up of these causes have their beginning in unfavorable health behavior (attitudes, practices, ignorance, and misunderstanding), which mitigates against health improvement and conservation. The incidence of gastroenteric infections which in the main are brought about by poor personal hygiene and home sanitation practices, in the final analysis can be reduced only through changes in behavior that will lead to the proper care and full utilization of whatever facilities may be available. Accidents to children in the home—burns, falls, poisonings—can generally be attributed to improper human behavior. Malnutrition, alcoholism and poor oral health are other areas of concern which reflect improper attitudes toward recommended health practices and scientifically correct health knowledge.

In addition to the above deficiencies in individual and family health practices, there is unwillingness on the part of the beneficiary group to accept collective responsibility for carrying out measures to improve and to protect their health. This manifests itself in: (1) An inability to utilize resources other than those provided by the Indian Health Program; (2) Failure to follow prescribed treatment or preventive measures; (3) Limited participation in health education and promotional activities.

The health education staff must, therefore, concern itself with an organized approach to this latter deficiency as well as with those educational deficiencies related to specific diseases and health and safety hazards. In addition to the above activities, specialized staff are also needed to provide direct health education services to other DIH staff and to Indian groups in order to overcome program deficiencies. The major deficiencies in program are: (1) Inadequate capitalization on the educational potentials present in the program; (2) Limited assistance to Indian leaders and groups in planning and carrying out health educational and promotionl activities; and (3) Lack of complete involvement of other agencies and organizations that have potentials for contributing to improving the health of the beneficiaries.

Plan of work

An increase of 10 positions composed of five education specialists, one community health education assistant and four secretaries will permit the extension of professionally guided health education activities to five additional service units.

(e) *Field medical services.*—The estimate of $9,459,000 provides an increase of $1,720,000 and 131 positions consisting of:

Statutory salary promotions	$100, 000
FICA increase	5, 000
Program increase (131 positions)	1, 615, 000
Net increase	1, 720, 000

Need for increase

The increase of $1,720,000 is requested for the following:

1. Funds for additional staff to expand preventive health services.
2. Funds to provide for additional fee-basis physicians (consultants).
3. Funds for additional training.
4. Funds to expand mental health program.
5. Funds to cover mandatory increases.

Increased workload and expansion of preventive health services.—Current facilities have continued to experience an increased demand for services as a result of better acceptance of care by the Indian beneficiaries. The 1968 estimate of 680,000 outpatient visits for therapeutic and preventive services at Indian Health Centers, Health Stations, Schools and Satellite Field Clinics, exceeds by 50,000 visits the 1967 estimate. Plans have been made to expand the preventive activities of the ongoing programs particularly in the intensification and expansion of services directed toward the prevention of infective and parasitic diseases, nutritional diseases, mental disorders, complications of pregnancy and certain diseases of early infancy.

These expanded services will also be directed toward the early identification and treatment of tuberculosis, cancer, diabetes, mental disorders, eyesight and hearing problems, heart and related diseases, and congenital malformations.

To meet both the increased workload and the expansion of programs an increase of $1,066,000 is requested to cover the cost of drugs, medical supplies and laboratory services ($54,000) groups II and III construction equipment for newly constructed health centers and stations ($152,000) new replacement and non-capitalized equipment ($53,000) as well as salaries and related costs of additional professional and supporting staff which include 13 medical officers, 8 pharmacists, 7 nurses, 4 social workers, 5 nutritionists, 3 practical nurses, 11 nursing assistants, 2 health records clerks, 32 clerks-clerk typists, 7 maintenance men, 5 medical technicians and 1 administrative assistant (98 positions and $807,000).

Fee basis physicians consultants (increase of $50,000)

There is a need for more consultants to visit health centers and satellite clinics to provide specialty care and advice. This will improve the quality of medical care offered to beneficiaries, improve the morale and confidence of the young medical officer operating clinics, provide broad medical coverage for beneficiaries and generally improve the quality and quantity of care provided. At the present time only minimum emergency and limited consultant services are available. There is a need for the services of more radiologists, pathologists, neurologists, orthopedists, internists, opthalmologists, urologists, and other specialists. Fifty thousand dollars is requested in 1968 for this purpose.

Training (increase of 23 positions and $349,000)

A coordinated and comprehensive training program in specialty professions of preventive health is essential to providing thoroughly trained staff with the tools necessary for combating health problems unique to the Indians and Alaska Natives. The proposed increases in training for preventive health activities are as follows:

Alaska Community Health Aide Training Program, 4 positions and $95,000.

The high incidence of disease and the inability of professional health personnel to travel between Alaska villages because of time, distance, and—even more important—weather conditions, make it imperative that some other source of service be provided. Due to the problems unique to Alaska this service can best be provided by sub-professionals functioning as an assistant to, and under the direction of, health professionals. At least 150 villages in Alaska vitally need this service.

A brief summation of factors contributing to the vital need for community health aides includes:

I. Available professional and supporting staff are grossly inadequate in number to met the demands. Consequently village visits are infrequent.

II. The vast geographic expanse and uncertain weather conditions often create conditions of complete isolation. Communications with the "outside" is frequently only by radio for such periods.

III. Language and cultural problems create a barrier between the health staff and the beneficiary, making adequate communications difficult.

IV. The unique fishing and hunting economy of the small villages results in a socio-economic level which precludes supporting locally available health facilities and personnel.

V. Beneficiaries very often are not "aware" of the health deficiencies extent.

VI. The beneficiaries' understanding of health matters is minimal due to such factors as:

(*a*) low level of academic education;
(*b*) dearth of health education; and;
(*c*) a lack of motivating factors.

The objectives of the planned 15 week initial program of training are to impart the knowledge and skills necessary to satisfactorily perform the duties assigned the aides. Additional training and refresher courses will be conducted periodically within the funds requested.

Approximately 201 aides for regular duty are needed in the 150 villages under consideration. An additional 24 aides are needed as replacements. These figures are based on one aide per 200 population. It is planned that alternate aides be trained for those communities with only one aide. This would require an additional 104, resulting in a total of 329 aides to be trained.

Four additional staff and $95,000 will be required tc carry out the training program for 45 aides the first year.

Preventive Medicine Residency Program, 3 positions and $30,000.

The present shortage of physicians in the United States who are certified as specialists in preventive medicine and the expanding need for these qualified professionals in the Division of Indian Health program prompted the Division of Indian Health to establish a residency program in Preventive Medicine and Public Health with the University of Oklahoma. This program, accredited by the American Medical Association and the Board of Preventive Medicine is a planned three-year continued program which provides for three preceptors, one coordinator and three residents in each one of the three years. The above increase will provide for the additional three residents required in the third year of the program at an increased cost of $30,000.

Medical and Allied Speciality Long-term Training, 4 positions and $60,000.

Public health and medical services in this country are undergoing a rapid evolution which will eventually make available to the Indian and Alaska Native population modern, high-quality health services of every description. While it is neither possible nor necessary to predict the exact forms and methods of medical care in the future, there are certain well-defined indications of the direction in which health services are moving. These various trends point clearly to considerable modifications of the methods and plans of administering the facilities, personnel, and programs.

Broad problems must be evaluated and studies made if adequate beneficiary health services and programs are to be carried out effectively—the improvement and expansion of out-patient services; the more effective use of home medical care; the development of adequate laboratory, diagnostic, and therapeutic units properly located to serve the increasing beneficiary population; recognition of necessary specialization and of the grouping of skills and talents of specialists into various forms of group practice; and the pronounced influence of preventive medicine on the Indian Health program.

The diversified nature of public health and the corresponding scarcity of trained personnel makes it necessary to develop competent personnel with the advanced administrative and technical knowledge peculiar to the field of public health in several areas of specialization, including the following: public health administration, hospital administration, medical care administration, behavioral sciences, health education, maternal and child health administration (including school health), environmental health administration, public health laboratory, public health engineering, sanitary science, epidemiology, biostatistics, occupational health, public health nursing administration, public health nutrition and public health social work.

Four positions and $60,000 are requested for out-of-service training for personnel with medical and allied professional specialties in order to develop advanced competency in the administrative and technical disciplines in public health.

Social Work Associates Training, 7 positions and $50,000.

A goal of the social work program is to provide the Division with trained and experienced personnel who can—

(1) assist Indians individually and in groups to solve personal and environmental problems that interfere with the attainment of a high level of health.

(2) provide technical consultation within DIH and to outside groups to improve quality of services to Indians.

(3) maintain effective liaison with related social agencies to achieve program coordination and maximum efficiency.

There is a manpower crisis in social work which makes it unlikely that this Division will be able at any time within the foreseeable future to employ enough trained social workers to provide an adequate level of profesisonal social services for all Indian patients who need them. The HEW social workers manpower study currently conducted under Under Secretary Wilbur J. Cohen's direction revealed that there were in this country 10,000 unfilled, budgeted vacancies for qualified social workers in 1964.

In 1964 the social work program reached less than 20 percent of the 48,000 general medical patients in DIH and contract facilities, 60 percent of the 1,150 tuberculosis patients and 6 percent of the 187,000 persons who sought attention as outpatients. Social work studies among less deprived groups of patients have shown that each general medical and surgical patient requires four hours of total social work time and each tuberculosis patient 18 hours. Assuming that the outpatient number encompasses all inpatients, DIH would need to increase its staff ten fold to provide even brief casework services to Indian patients who are under severe personal or socioeconomic pressure.

It is proposed to set up an apprenticeship type system for the training of social work associates. Specific objectives will be to provide inservice training and preceptorship to:

(*a*) Extend the potential of the present staff by extending the effect of their knowledge and skill to more patients.

(*b*) Free professional personnel from routine but necessary tasks thus enabling them to handle more of the complex situations, and more time on program consultation, and program planning activities.

(*c*) Strengthen the program by training and utilizing as social work associates carefully related and qualified Indian—Eskimo college students.

Although it is planned to give preference to Navajo and Eskimo speaking recruits, the total Indian Health Program can benefit from the training and the utilization of other Indians and non-Indians to reach the unmet social service needs of beneficiaries.

Many Indians and Alaska natives are interested in working with the problems of their own people. Traineeships for Social Work Associates will provide an opportunity for these Public Health Service beneficiaries to contribute to the reduction of Indian Health problems.

Seven positions and $50,000 are requested to initiate this program in Fiscal Year 1968. These funds will provide for a supervisory social workers training instructor, four social worker associate trainees, and two clerks essential to the implementation of this program.

COSTEP, Advanced Professional Training, $14,000.

This increase will permit an expansion of the Commissioned Officer student training extern program which provides a successful mechanism for training, recruitment and career development of new officers in the Service.

The COSTEP program provides training opportunities in a professional environment for students in health related studies and stimulation of interest by promising students in Public Health Service careers and continues to serve as an effective recruiting technique for helping to meet the manpower requirements of the Public Health Service. The requested increase will permit an increase of approximately 10 students at a cost of $1,420 per student.

Division of Indian Health Training Center, 5 positions and $100,000.

Discussed below is a plan for relocation and expansion of the Division of Indian Health Training Center from Phoenix to Tucson, Arizona.

The nature of the Division's mission—that of providing direct medical and health services to almost 400,000 beneficiaries—and the makeup of the personnel required to carry out the mission, militates for the conduct of continuing intensive, manifold training programs and activities.

A significant part of the training needed to keep the health professional and technical complement of the staff, which constitutes over one-half of the total, abreast of rapid changes in technology can be provided by training resources either outside the Government or with other Government agencies. However, because of the dispersed nature of operations—5,380 personnel functioning in at least 300 different locations—the cost of providing all needed training following traditional methods wherein staff members are sent individually to various training locations is prohibitive.

Additionally, this type of training, even if financially feasible, would not meet all Division training needs for several reasons:

1. Loss of services while in training.
2. Unique factors inherent in providing services for a culturally-different, language-impeded, disadvantaged beneficiary.
3. Various aspects of the Division's operations itself, which is singular among all non-Government and Government organizations in its structure and comprehensiveness of program.

The extent to which the Division is now involved in various types of training is illustrated by the following.

Each year the Division sends approximately 400 persons outside the government for training. From 4,000 to 5,000 are annually trained within the Government. Of the latter, 90 percent are provided training within the Service or Division itself.

The present training program fragments the available resources of men, money and materials for training activities, resulting in a multiplicity of space, facilities, personnel, equipment and services. Even more important, it has resulted in a disparity between the needs of the individual training programs and the services which their allotted funds will provide.

The staffing of the present training center at Phoenix has been limited to a Director, an acting assistant director and an education specialist (audio visual) who have had the responsibility for epidemiology training, health records training and audio visual services for training, information and health education. This staff is presently developing programs of training in the areas of management, laboratory and housekeeping.

As can be seen from the foregoing discussion more effective means must be found to provide the training necessary to maintain and improve the capabilities of staff in order that the health of the beneficiaries may be elevated.

In order to develop such an effective training program and assure that the funds being expended for inservice training are expended in the most judicious, effective and profitable manner possible, it is proposed that the Division Training Center be expanded.

A nucleus of 12 professional training personnel supported by the professional personnel of the operations research project and health center will be capable of providing training or training materials of practically any type and scope needed to meet existing and future specific needs of the Division.

New and improved training methods will be researched and developed in conjunction with the operations research project so as to provide even more efficient and effective training.

It is anticipated that established and additional new types of courses will be conducted at the Tucson facility such as were conducted regularly at Phoenix and Albuquerque and sporadically at other locations, both by Center personnel and by Area and Service Unit personnel.

Certain well-defined training programs or activities now being conducted or proposed, which lend themselves to location at, or conduct out of, a common facility have been or will be drawn together for more effective utilization of resources.

These programs include:

1. Epedimiology Training, formerly at the Training Center, Phoenix Area Office Facility.
2. Environmental Health Training Phoenix Environmental Health Special Projects Group Facility.
3. Health Records Training, formerly at the Training Center, Phoenix Area Office.
4. Medical Social Services Training, including Associate Training (Proposed).
5. Food Service Supervisor Training (Proposed).

In addition to these established or proposed formalized training programs, there are a number of Division-wide conferences, workshops and seminars held annually or more often which could be far more effectively conducted at a well equipped and staffed facility. Examples are workshops held by the Environmental Health and Nursing Programs on a variety of subjects, and mixed discipline workshops on such subjects as plague, hospital cross-infection control, accidents, enteric diseases, and dental health.

A major function of the operation will be the development and use of programmed learning materials. These can be either self sufficient or used in conjunction with workshops, conferences, seminars or formalized classroom follow-up training. It would appear, until research develops better methods, that the programmed learning technique is the most feasible method which DIH can use to reach the numbers needing training with a variety of subjects. With proper motivation of the learners almost any subject can be learned through programmed instruction. Some subjects, of course, lend themselves much more successfully to this method than do others.

Converted first floor space at the partially vacated former tuberculosis sanitarium at Tuscon will accommodate six training officers, six secretaries and provide two classrooms. Potentially available space will permit expansion as required.

Five positions and $100,000 are requested in Fiscal Year 1968 for initial staffiing and equipping of the Division of Indian Health Training Center at Tucson, Arizona.

Mental health (increase of $150,000)

The pressures of modern day living have precipitated in the Indian people a diversity of social and personality conflicts and mental illnesses that are resulting in high rates of suicides and accidents, excessive use of alcohol, family disorganization, child neglect, school dropouts and unemployment. The Division intends to combat these manifestations of maladjustment through a planned comprehensive mental health program designed to implement and to integrate community mental health services into the ongoing Indian health program with major emphasis upon the prevention of mental illness and the reduction of mental health complications that accentuate other medical conditions. Distribution of the $150,000 requested follows:

Pine Ridge, 5 positions $50,000.

In the 1966 appropriation, Congress provided $100,000 for the development of a pilot mental health study oriented to the needs of a community mental health program at the Pine Ridge Service Unit. Provision was made for five full-time staff members, four part-time consultants, and other necessary costs. Despite the fact that the program has been in operation less than 10 months, plans are well under way to obtain baseline data on the extent of the problem. Benefits are already accruing from the initial efforts to sensitize Area and field staff to recognize early manifestations of deviations from normal behavior and emotional patterns, and to involve tribal and community groups in the planning of mental health programs. Five workshops have been held for medical and related agency personnel and a planned system of supportive consultations has been set up to advise teachers, welfare workers and clergy who have daily contacts with Indians in trouble.

Activities will be accelerated toward compiling and analyzing the study data and providing the services and the training necessary for the implementation of positive mental health concepts. In Fiscal Year 1968, $50,000 and five additional staff members consisting of a clinical psychologist, a biostatistician, a psychiatric social worker and two clerks are requested for this purpose.

The project implements activities of the Economic Development Program and is expected to make a significant impact on such indices of maladjustment as incarcerations for drunkenness, alcohol-related neglect of children and repeated hospitalizations.

Albuquerque, 5 positions $100,000.

It is proposed to initiate in fiscal year 1968 a mental health program in the Albuquerque Area which serves more than a quarter of all reservation Indians in the United States. There is a critical need for such a program in this Area. On the basis of national statistics there are here 13,000 Pueblo, Navajo and Apache Indians with treatable mental and emotional disorders. Yet last year only 760, or less than 6% received treatment. Studies conducted in an Area boarding school showed that 16% of the students needed psychiatric care in 1965, yet less than 2% received psychiatric services. There are 462 mentally retarded children among the Pueblos and Apaches and at least 2,000 among the Navajos who need psychiatric and psychological evaluations. A study recently completed on one Indian reservation in this Area showed that one-third of all adult Indians have an alcohol problem which adversely affects their ability to care for their children and to keep a steady job. This group had twice as many hospital admissions as the rest of the reservation population, and 70% of their hospital episodes were alcohol-related. The Tribal judge reported that over 80% of tribal arrests and court activities were alcohol-related.

Suicide rates among Indians are 14% greater than among non-Indians, and homicides occur three times as often.

Counseling and other services which might help an Indian approach his problems with a healthy attitude are rarely available. Despite efforts of the State mental health authorities to provide psychiatric treatment to all citizens who need it, the majority of Indians are dependent for early evaluative diagnoses and outpatient psychiatric services on the general physicians and allied staff of the Division of Indian Health. It is anticipated that over 100 mental health centers will be built in the United States in the next few years, yet very few are being planned for the States with the highest concentrations of Indian population, and the few that will be developed will be inaccessible to the isolated, sparsely settled areas where reservation Indians reside.

A program is being proposed with a mental health team stationed in Albuquerque to collect data from scattered studies, to analyze the extent and prevalence of the most severe problems and to develop a course of action to suit the problems. Concurrently with the study the mental health team will travel to the small satellite hospitals to provide professional education for the young general practitioners and related staff to assist them in the early detection of mental disorders, in the evaluation of the emotional component in physical ailments, and in the handling of groups of Indians who need to learn how to manage periods of crisis in their lives with a minimum of stress to avoid mental breakdowns that require long periods of hospitalization. Consultative services, geared to Indian cultural values, will be extended to educational, welfare, police and other related agencies whose work may involve counseling of emotionally maladjusted Indian people. The mental health team will be responsible also for maintaining strong liaison with State mental health agencies to coordinate the preventive aspects of the Indian mental health program with the over-all State mental health plans.

$100,000 and 5 positions consisting of a community psychiatrist, a psychologist, a mental health social worker and two clerks are requested to initiate the program in the Albuquerque Area in 1968.

Plan of work

The request of $9,459,000 for Field Medical Services encompass ambulatory medical care and preventive health services provided at fixed facilities, outside of hospitals, and at numerous field locations as close as practicable to the widely scattered and isolated groups of Indian and Alaska Native beneficiaries.

The therapeutic services include diagnosis and treatment, referral of persons needing hospital care and follow-up of patients after hospitalization. The preventive health services include a vast range of activities such as prenatal and postnatal care, well child clinics, school health, control of communicable diseases including immunization and screening and follow-up of cases and contacts, e.g., tuberculosis, venereal diseases and trachoma, early detection of chronic diseases such as diabetes, prevention of deficiency diseases and mental health. Associated with this activity are medical social services and epidemiology training.

The prevention and early identification of diseases will be accomplished by an increase in the number of scheduled general and specialty clinics that will be held in the present clinics and new clinics to be constructed. The new clinics will be make the services more easily available to the Indians by being closer to where they live.

The percentage of children under five years old immunized against diphtheria tetanus, pertussis, polio, measles and influenza will be increased from 50 percent to 55 percent.

The number of pre-school children who have had complete physical examinations previous to entering school will be increased from 50 percent to 60 percent. Seventy percent of the children under one year of age will be brought under medical supervision. Expectant mothers will be seen in the prenatal clinics in the first trimester. Premature babies will be seen by the public health nurses within 1 month after birth. Nutrition services will be increased to reduce the number of cases of malnutrition, particularly in children, as malnutrition contributes to the high incidence of infective and respiratory diseases.

The increased services will also assist in identification and coordination of all community resources toward the prevention of accidents, and the prevention and treatment of mental disorders, crippling conditions in children, tuberculosis and venereal diseases.

The facilities in which these services are provided include 46 Health Centers (which include centers at the large BIA Boarding Schools) and about three hundred other locations which include health stations and satellite field clinics.

There follows a distribution by major fixed facilities of the outpatient visits for 1965, 1966 and 1967:

	1966 actual	1967 estimate	1968 estimate
Health centers	253, 600	275, 000	300, 000
School health centers and larger day schools and dormitories	85, 300	70, 000	80, 000
Other clinics	241, 650	285, 000	300, 000
Total	580, 550	630, 000	680, 000

Itemization of estimate—Field health services

Obligations by objects	Actual, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
11 Personnel compensation	$8, 388, 797	$10, 481, 000	$12, 669, 000	+$2, 188, 000
12 Personnel benefits	937, 103	1, 206, 000	1, 495, 000	+289, 000
21 Travel and transportation of persons	823, 615	943, 000	1, 155, 000	+212, 000
22 Transportation of things	360, 387	367, 000	486, 000	+119, 000
23 Rent, communications, and utilities	454, 632	493, 000	530, 000	+37, 000
24 Printing and reproduction	43, 767	52, 000	71, 000	+19, 000
25 Other services	813, 435	856, 000	943, 000	+87, 000
26 Supplies and materials	938, 002	1, 060, 000	1, 154, 000	+94, 000
31 Equipment	385, 355	313, 000	588, 000	+275, 000
42 Insurance, claims, and indemnities	1, 500			
Subtotal	13, 146, 593	15, 771, 000	19, 091, 000	+3, 320, 000
Deduct quarters and subsistence charges	113, 542	140, 000	140, 000	
Total obligations	13, 033, 051	[1] 15, 631, 000	[1] 18, 951, 000	+3, 320, 000

[1] Excludes reimbursements as follows: 1967, $94,000; 1968, $94,000.

4. Special assistance to the Menominee Indian people

Special assisance to the Menominee Indian people:

Amount available, 1967	$800, 000
Estimate, 1968	350, 000
Decrease	450, 000

A four year program to assist the Menominee Indian people of Menominee County, Wisconsin was authorized by Public Law 89-653 dated October 14, 1966, commencing with 1967. The assistance for 1968 covers joint school district costs of $150,000 per annum, public welfare benefits costs of $100,000 per annum (including administrative costs, public assistance, indigent medical care services, child welfare, veterans services, surplus commodities, general relief, and the services of State hospitals, mental institutions, and industrial schools), and health and sanitation services costs of $100,000 per annum (including hospitalization of the tubercular, employment of a public health nurse and a sanitary aide, immunization against communicable diseases, collection and disposal of garbage and refuse, and collecting and recording of vital statistics).

The estimate of $350,000 provides a net decrease of $450,000 resulting from the anticipated completion of the construction of sanitation facilities in Menominee County, Wisconsin, commenced by the Secretary of Health, Education, and Welfare pursuant to the authority contained in the Act of April 4, 1962 (76 Stat. 53) and authorized for completion in 1967 pursuant to Public Law 89–653.

Itemization of estimate—Special assistance to the Menominee Indian people

Obligations by objects	Actual, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
11 Personnel compensation	------------	------------	------------	------------
12 Personnel benefits	------------	------------	------------	------------
21 Travel and transportation of persons	------------	------------	------------	------------
22 Transportation of things	------------	------------	------------	------------
23 Rent, communications, and utilities	------------	------------	------------	------------
24 Printing and reproduction	------------	------------	------------	------------
25 Other services	------------	$450,000	------------	−$450,000
26 Supplies and materials	------------	------------	------------	------------
31 Equipment	------------	------------	------------	------------
41 Grants, subsidies, and contributions	------------	350,000	$350,000	------------
Subtotal	------------	800,000	350,000	−450,000
Deduct quarters and subsistence charges	------------	------------	------------	------------
Total obligations	------------	800,000	350,000	−450,000

5. *Administration*

Administration:	
Amount available, 1966	$1,880,879
Amount available, 1967	1,887,000
Estimate, 1968	2,156,000
Increase	269,000

The estimate of $2,156,000 provides an increase of $269,000 and 9 positions consisting of:

Statutory promotions	$39,000
Program increase:	
Division of Indian Health (9 positions)	107,000
Public Health Service management fund	123,000
Net Increase	269,000

Division of Indian Health, 9 positions and $107,000

Planning-Programming-Budgeting, 8 positions and $100,000.

The Division of Indian Health is committed to the administration of its programs in the most prudent and judicious manner possible. The Division's innovating program packaging concept with its techniques of performance budgeting developed and implemented in 1963 without a request for additional staff or resources is an example of the Division's exercise of administrative responsibility and control. This system is currently being integrated into the President's planning-programming-budgeting system.

However, the proper and effective implementation of the President's planning-programming-budgeting system with its workload ramifications requires a minimum of eight additional staff at the headquarters level in order to provide higher level management echelons with the information they will require under this system to fulfill their decision making responsibilities.

Eight additional positions are requested in 1968 to provide for:

1. The workload requirements of translating the costs of program plans and objectives into a sound and effective budget and appropriation request:
2. A centralized report and retrieval control responsibility;
3. The quantitative analytical evaluations and computations necessary for conducting in depth cost effectiveness and other special studies; and,
4. The application of computer oriented systems analysis which will give the Division greater precision in specifying the variables of its health problems and the further development and design of information systems to facilitate the planning-programming-budgeting system.

The positions requested are two programming budget analysts, one program reports officer, one program evaluation officer, one public health programming analyst, two systems analysts, and one secretary.

Training, 1 position and $7,000

The position of an audio-visual assistant is vitally needed to perform audiovisual services including graphic art development—production of aids and materials, maintenance of equipment, audiovisual files and training materials stocks now performed by the Assistant Branch Chief with the assistance of extensive overtime help, thus releasing him to devote needed time to the newly instituted DIH career development program. The career development program and expanding training activities including additional inhouse residencies and programs instituted by the new DIH Training Center increase the workload upon the already overburdened headquarters Training Branch staff.

Office of the Bureau Director, Public Health Service management fund, $123,000

The Office of the Bureau Director provides program direction, program services and handles business management functions for Bureau activities. It is financed by payments from the component Divisions to the Public Health Service Management Fund on a pro rata basis.

Itemiaztion of estimate—Administration

Obligations by objects	Actual, 1966	Amount available, 1967	Estimate, 1968	increase (+) or decrease (−)
11 Personnel compensation	$1,231,015	$1,197,000	$1,331,000	+$134,000
12 Personnel benefits	118,484	117,000	125,000	+8,000
21 Travel and transportation of persons	93,210	86,000	90,000	+4,000
22 Transportation of things	7,824	8,000	8,000	
23 Rent, communications, and utilities	55,011	61,000	61,000	
24 Printing and reproduction	864	1,000	1,000	
25 Other services	355,833	402,000	525,000	+123,000
26 Supplies and materials	6,705	7,000	7,000	
31 Equipment	11,933	8,000	8,000	
Subtotal	1,880,879	1,887,000	2,156,000	+269,000
Deduct quarters and subsistence charges				
Total obligations	1,880,879	1,887,000	2,156,000	+269,000

Itemization of estimate—Indian Health Activities, Public Health Service

	Actual, 1966	Amount available, 1967	Estimate, 1968	Increase (+) or decrease (−)
Program and financing:				
Obligations	[1] $67,230,376	[1] $76,324,000	[1] $82,133,000	+$5,809,000
Unobligated balance lapsing	296,624			
Total amount available	67,527,000	76,324,000	82,133,000	+5,809,000
Transferred from "Economic opportunity program," Office of Economic Opportunity (80 Stat. 1063)		−800,000		+800,000
Transferred to "Office of the Surgeon General, salaries and expenses" (42 U.S.C. 226)	11,000			
Transferred to "Operating expenses, Public Buildings Service" (79 Stat. 531) (80 Stat. 674)	10,000	12,000		−12,000
Proposed supplemental to cover Public Law 89-504 pay act increase		−1,190,000		+1,190,000
Proposed supplemental to cover Public Law 89-501 pay act increase		−177,000		+177,000
Proposed supplemental to cover wage board increases		−498,000		+498,000
Appropriation	67,548,000	73,671,000	82,133,000	+8,462,000
Obligations by objects:				
11 Personnel compensation	37,039,921	42,298,000	46,522,000	+4,224,000
12 Personnel benefits	3,377,158	3,909,000	4,393,000	+484,000
21 Travel and transportation of persons	2,239,172	2,338,000	2,657,000	+319,000
22 Transportation of things	960,773	972,000	1,147,000	+175,000
23 Rent, communications, and utilities	2,191,839	2,184,000	2,283,000	+99,000
24 Printing and reproduction	158,264	167,000	186,000	+19,000
25 Other services	14,583,442	17,452,000	17,135,000	−317,000
26 Supplies and materials	5,806,199	5,831,000	6,024,000	+193,000
31 Equipment	1,645,370	1,663,000	2,276,000	+613,000
41 Grants, subsidies, and contributions		350,000	350,000	
42 Insurance, claims, and indemnities	13,500			
Subtotal	68,015,638	77,164,000	82,973,000	+5,809,000
Deduct quarters and subsistence charges	785,262	840,000	840,000	
Total obligations	67,230,376	76,324,000	82,133,000	+5,809,000

[1] Excludes reimbursements as follows: 1966, $836,300; 1967, $501,000; 1968, $496,000.

Summary of positions and average employment

Activity	Positions			Average employment		
	1966	1967	1968	1966	1967	1968
Hospital health services	4,411	4,647	4,829	4,047	4,242	4,428
Contract medical care	20	20	20	16	20	20
Field health services:						
Sanitation services	217	233	298	194	214	279
Dental services	213	235	277	208	232	274
Public health nursing	205	229	254	185	220	245
Health education	65	70	80	58	69	79
Field medical services	560	679	810	534	686	819
Total, field health	1,260	1,446	1,719	1,179	1,421	1,696
Administration	129	119	128	117	113	122
Total	5,820	6,232	6,696	5,359	5,796	6,266

PREPARED STATEMENT

Chairman HAYDEN. Dr. Rabeau, will you please submit your written statement for printing in the record, and then highlight it for the committee.

Dr. RABEAU. Yes, sir. Thank you, Mr. Chairman.

(The statement follows:)

The U.S. Public Health Service assumed responsibility for the health care of American Indians and Alaska Natives on July 1, 1955 as a result of legislation transferring the responsibility from the Department of the Interior. The Division of Indian Health was established to administer the program.

The Indian health program is unique among Federal programs. It serves a group of American citizens whose relationship to the Federal Government differs from any other and whose situation requires the utilization of the most comprehensive planning and services posssible.

The Division of Indian Health serves nearly 400,000 beneficiaries. About 340,000 are members of some 250 Indian tribes living on Federal reservations or in communities or rancherias in 23 States, mostly west of the Mississippi. The remainder are Eskimo, Indians and Aleuts scattered throughout the State of Alaska.

No other populations occupy a similar position in the cultural, sociological and economic structure of the United States. Indians and Alaska Natives are set apart from the rest of the Nation by a combination of many factors. In the majority, they are geographically isolated in remote areas, with accessibility further complicated by poor or nonexistent roads, mountainous terrain or severe weather conditions. They have their own languages peculiar to the respective tribes and maintain their own cultures which have been preserved throughout past centuries. They do not have recourse to the organized community affiliations of other Americans to meet their physical, social and economic needs and are unfamiliar with the pattern and working of non-Indian society, either industrial or social.

Indians and Alaska Natives also live in circumstances which differ from any other population group. In general their contact with non-Indian society is extremely limited and they do not belong to any community other than their own. Family income falls far below the $3,000 floor which the Office of Economic Opportunity calls the "poverty line"—it averages less than $1,500 a year, and is under $1,000 in many instances.

The majority of the housing is worse than sub-standard, with roughly 90 percent below that which is considered acceptable. The average family of 5.5 lives in a one or two-room dwelling poorly constructed of wood, clay, or a combination of materials indigenous to the particular area. They do not have sanitation facilities and more than 40 percent obtain domestic water from potentially contaminated sources and approximately 50 percent must haul or carry their drinking water. Only about 25 percent of the houses have satisfactory waste disposal facilities.

The average education level of the adults of middle age is fifth grade and many are virtually illiterate in English. Among children who go to Reservation Indian schools, about eight out of ten enter with limited or no ability to speak English. The number who complete even elementary level education is the lowest of any ethnic group and each year only a few hundred Indian high school graduates go on to college.

The lack of education and correspondingly vocational training, inhibits economic advancement of tribal groups. They cannot favorably compete in the regular labor market and employment opportunities on reservations are extremely limited.

The low economic level coupled with the deplorable living conditions are reflected in serious health problems affecting Indians and Alaska Natives. The problems are further aggravated by malnutrition, isolation from health facilities or medical practitioners and lack of knowledge of good health principles and the need to obtain treatment for health conditions.

The health status of these populations is about that of the general population 25 years ago. Most of the illnesses and about 13 percent of the deaths among Indians and Alaska Natives are due to infectious diseases and their complications. Included are gastroenteritis, dysentery, influenza, pneumonia and other respiratory diseases, tuberculosis, measles, otitis media and trachoma, all of which can be considered preventable. These, combined with accidents account for almost 50 percent of the hospital admissions.

The Indian infant death rate is almost one and one-half times that of the general population and the average age at death is 44 in contrast to 63 in the general population.

GOAL AND OBJECTIVES OF THE INDIAN HEALTH PROGRAM

The magnitude of the health needs of these populations and their social and economic situations necessitate the provision of a totally comprehensive health program which will integrate and coordinate curative medical treatment, rehabilitative care, and most important, preventive services, including the whole gamut of environmental health activities.

The goal of the Indian health program is to raise the health status of American Indians and Alaska Natives to the highest possible level.

To achieve this goal the Public Health Service has set the following objectives:

1. Institution of self-help health programs conducted by and with the Indians and Alaska Natives. The aim of these programs would be the assumption by the beneficiaries of fuller responsibilities in meeting their health needs.
2. Management of Division resources (manpower, money, and materials) in a manner that provides a coordinated and balanced preventive, curative and rehabilitative health program through a constantly updated Area-wide operations plan, initiated at the service unit level and consolidated in a comprehensive Division plan with Indian cooperation and consultation.
3. Institution of continuing appraisal of health status to insure efficient application of effort in those areas that will have the greatest impact on achieving the Division's goal, coupled with continued development of additional tools for measurement, evaluation, and application.
4. Management of manpower resources not only to provide for the most efficient utilization of these resources, but also to provide opportunity for total growth and development of individual staff.
5. Fostering and promotion of all extra Divisional resources, public and private, with particular reference to State and local government responsibilities for their Indian citizens.

The new procedures developed by the Division in providing comprehensive health services can be utilized to great benefit in non-Indian communities in the United States and in underdeveloped nations throughout the world.

ACCOMPLISHMENTS

The Public Health Service will begin its 13th year of responsibility for the health care of American Indians and Alaska Natives on July 1, 1967. The progress of the past 12 years is measurable and significant, due mainly to the understanding of the Congress and its committees which reviewed and advised or acted upon the Indian Health program by passage of supportive legislation and appropriation of requested funds. We also gratefully acknowledge the assistance of Indian interest groups, especially, Association of American Indian Affairs, Inc., National Congress of America Indians, Indian Rights Association and American Friends Service Committee, Inc.; other organizations, the States and communities where Indians live, and most importantly, the Indians themselves. Valuable help has been received on all aspects of program improvement from the American Medical Association, the American Dental Association, the American Academy of General Practice, the American Academy of Pediatrics, the American Hospital Association, the American Public Health Association and the Association of State and Territorial Health Officers.

Combatting the high morbidity and mortality rates among Indian and Alaska Native populations has been the primary effort of the Division of Indian Health. Dramatic reductions have been made since 1955. Among Indians, infant death rates have declined 41 percent; death rates from tuberculosis are down 57 percent; and death rates from gastroenteric diseases are down 49 percent. Among Alaska Natives, infant death rates are down 31 percent and tuberculosis death rates are down 86 percent. During the same period, new case rates for tuberculosis declined 60 percent among Indians and 70 percent among Alaska Natives.

Despite such major inroads, comparisons with the general population still are highly unfavorable. Ratios of Indian rates to U.S. All Races rates are: infant deaths, 1.4 times higher; deaths from tuberculosis and gastroenteritis, 5 times higher; and incidence of tuberculosis, 7 times higher. Ratios of Alaska Native rates to U.S. All Races rates are: infant deaths, 2.2 higher; deaths from tuberculosis, 4.2 higher; and incidence of tuberculosis 21 times higher.

Encouraging Indians to utilize services available to them is an essential key to successful achievement of the Division goal. The Indian has a meager understanding of the scientific basis for good health and physical well-being. His culture relates physical well-being to harmony with both the natural and supernatural forces surrounding him; while illness is associated with a lack of attunement with these forces rather than with some condition within himself. His language contains no terms to describe the disease theory and he is still often accustomed to relying on religious rituals, rather than on modern medical practices to cure his ailments.

Staff serving these populations must be familiar with their conceptual differences and be prepared to take infinite time, frequently through interpreters, to make a person understand what is wrong with him and what procedures must be performed to make him well. Explaining preventive health measures and why they are necessary, is a particularly difficult endeavor and one in which the entire health team collaborates continuously.

A measure of the Indian's growing understanding and appreciation of the importance of health care is shown by his increased utilization of the health facilities. Admissions of Indians and Alaska Natives to hospitals now number some 92,000 a year in contrast to 50,000 in 1955. Similarly since then out-patient visits have more than doubled, from 550,000 to 1,300,000 and the number of dental services provided has almost tripled from 220,000 to 571,000 a year.

Part of the growth is attributable to the Division's capability of providing better services through additions of staff and improved facilities. Since 1955, the numbers of physicians assigned to the program has increased from 125 to 335; dentists from 40 to 105 and professional nurses from 782 to 908.

Nine hospitals, nine health centers and 34 health stations have been built either to replace antiquated facilities or to provide care where none was formerly available. Construction of two additional hospitals and two health centers is underway.

With expanded staff and better facilities, the Division has been concentrating on improving the competency of employees so that they can better perform their individual duties and also assume a more substantial role as a member of the health team. Successful functioning of a total health program depends on the ability of professional workers to plan, budget, conduct and continuously evaluate a coordinated effort of curative, preventive and rehabilitative medical services and environmental health activities to meet the Indians' needs. The most prudent use of resources must be made and a constant vigilance maintained to improve the amount and quality of services provided.

With the groundwork laid several years ago in training Division staff in management practices, including the relating of program planning to specific health objectives, it was an easy transition to enter the new Federal system of Planning-Programing-Budgeting (PPB) in order to assure that each dollar will be spent where it will show greatest gain or "profit" in terms of achieving a defined goal. In addition to improving health services, practices can be applied to other community health programs throughout the world.

Other professional staff training efforts instituted include three physician residency programs in pediatrics, general practice and preventive medicine in which 17 physicians have been enrolled, and a dental internship program with 6 dentists in training.

More than 200 professional employees of the Division have received training in epidemiology combined with program planning and managerial principles The Division training center where the course is given has recently been moved from Phoenx, Arizona, to the PHS Indian Health Center near Tucson.

Prototype studies were conducted at three locations wherein hospital administrators were utilized as hospital managers, thus relieving physicians from certain administrative duties. Results indicated the soundness of the concept and non-medical administrators are now being appointed to Indian hopsitals.

Two pilot efforts have been instigated to attack mental health problems which are increasing among Indian and Alaska Native people. One is a prototype study being conducted on the Sioux Reservation at Pine Ridge, South Dakota, where a mental health staff is measuring the magnitude of the situation and developing a program which will be applicable Division-wide; the other is a preliminary investigation and consultative project carried out by a psychiatrist and mental health team workng out of the Anchorage, Alaska, Public Health Service Hospital.

The training and employment of Indians continues to carry sustained emphasis within the Division of Indian Health. Consistently, more than 50 percent of employees are of Indian descent and more than 1,000 have been trained for health auxiliary positions in the program.

The largest single category of formal training for Indian people is practical nursing, which encompasses a year's basic training leading to licensure, plus advanced training in either clinical or public health nursing duty. Opportunities are offered to graduates who wish to continue studies to become registered nurses.

Formal training also is provided for dental assistants and sanitarian aides who perform essential services for the professional in each field. In addition to their regular assignments, these employees provide a link with their fellow Indians to encourage understanding and acceptance of the health services available.

Increasing the participation of Indians and Alaska Natives in activities directed toward bettering their health is another of the Division's major efforts. Their cooperation in the area of sanitation facilities construction exemplifies a significant trend in this direction. Under the authority of the Indian Sanitaton Facilities Act, passed in 1959, safe water and waste disposal facilities are constructed by the Division on Indian reservations and in Alaskan villages. About 37,000 families have benefited by this Act through projects authorized to date. More than one-third of the value of the projects has been contributed by Indians and Alaska Natives through donated labor, materials, and funds.

We anticipate that continued improvements in program development, staff training and facilities, governmental and private cooperation, and involvement of Indian and Alaska Native people will be reflected in health statistics that will be more compatible with those of the general population.

INDIAN HEALTH ACTIVITIES

Direct medical care is currently provided to Indian and Alaska Native people by the Public Health Service through a system of 51 hospitals (including St. George and St. Paul Islands in the Pribilofs transferred to the Public Health Service pursuant to Section 205 of Public Law 89-702), each with inpatient and outpatient services, 46 health centers, 30 in various field locations and 16 at Bureau of Indian Affairs boarding schools; and more than 300 field health stations and special school clinics. In addition, where there are no Public Health Service facilities or personnel is limited, contractual arrangements are held with 300 community hospitals, 18 State and local health departments and more than 400 private physicians, dentists and other specialists, to provide whatever health services are needed.

Hospital admissions and outpatient visits have shown steady increases, with pediatric patients comprising more than one-third of admissions to Indian hospitals and more than one-half of the workload in outpatient departments and clinics. Other significant portions or medical services are expended on various aspects of maternity care, on patients with infectious diseases and on victims of accidents.

Hospital Health Services

The 1968 request for hospital health services will provide for (1) the operation of 51 Public Health Service Indian hospitals and attached outpatient clinics with an employee/patient ratio slightly higher than 1967; (2) a nurse training program associated with Public Health Service Indian hospitals; (3) maintenance of all Public Health Service Indian Health facilities consisting of hospitals, health centers, stations, school clinics and staff quarters; (4) increased training of professional and sub-professional personnel; and (5) consultant services.

Three practical nurse training programs for young Indian women are conducted by the Public Health Service. The largest is the School of Practical Nursing in Albuquerque where some 60 girls are trained and graduated each year. After graduation, they take State board examinations and following qualifications as licensed practical nurses, are assigned to hospital or field positions within the Division of Indian Health, or to some other Public Health Service facility.

The second oldest practical nurse training program was established at Shiprock, New Mexico, to teach Indian graduates to assist public health nurses who work in Indian homes, schools and field clinics. Twelve young women receive this training each year.

New funds made available in 1964 permitted the introduction of the third type of practical nurse training which includes advanced clinical experience to enable the licensed practical nurses to assume additional nursing responsibility and to perform more complex nursing procedures. Eighty-five Indian women have now been graduated from the course.

The Division of Indian Health is also financing the enrollment of three Indian licensed practical nurses in schools of professional nursing and graduate study for two registered nurses.

Seventeen physicians are now in residency training in programs being conducted at the Phoenix Indian Medical Center, the Gallup, New Mexico, Indian Hospital and the University of Oklahoma, Oklahoma State Health Department. Each of the programs in pediatrics, general practice and preventive medicine has been approved by the American Medical Association.

Six dentists are in training in dental internship courses at the PHS Indian Hospitals at Gallup, New Mexico, Fort Defiance, Arizona, and Anchorage, Alaska.

All residencies and internships include instructions in the culture and beliefs of the Indians and in techniques for meeting their special health needs.

The $46,770,000 requested in 1968 will permit the hiring of 182 additional personnel to enable the Division to provide better quality care in hospitals and their outpatient clinics and to slightly increase the employee/patient ratio.

Contract Medical Care

It has been the practice of the Division of Indian Health that where the Public Health Service does not have facilities or sufficient personnel, medical and dental services are provided through contractual arrangements with community hospitals, clinics, laboratories, pharmacies, and private physicians and dentists. In addition, special diagnostic and therapeutic services which are used only occasionally, are purchased through contracts, avoiding the necessity for the Division to support these activities on a full-time basis.

Emergency hospitalization and medical care in locations where an Indian facility is not readily available are also provided under this program.

The request for 1968 of $13,906,000 reflects a moderate decrease expected in average daily contract patient loads and in contract physician services. This represents the anticipated effect of Titles XVIII and XIX, Public Law 89–97 on the Indian health program. Title XVII provides hospital insurance and supplementary medical benefits for people 65 years of age and over. The responsibility for administrating this program rests with the Social Security Administration. Title XIX provides federal grants to states which meet the requirements for federal participation in an expanded and improved medical care program for recipients of public assistance and for the medically needy. These programs are administered by State agencies.

Field Health Services

All programs of preventive health services and medical care provided outside hospitals are identified as field health services. The field health program is designed to bring health services to the tens of thousands of Indians and Alaska Natives who live considerable distances from Indian hospitals or community health resources. Involved are all health activities conducted in homes, communities, villages, at field health stations and at schools and health centers.

It is during the home visits and community activities that field health personnel provide therapeutic medical services and preventive health programs so necessary to reduce illness and premature death among Indians and Alaska Natives.

Services include medical and dental diagnosis and treatment; clinical and public health nursing; immunizations; referral of people needing hospitalization or specialized service; communicable disease surveillance and control. Other services include specialized clinics for screening and treatment of diabetes, tuberculosis, heart disease, cancer, ear and eye diseases; follow-up home visits; well baby care; prenatal and postnatal care; health education; medical social services; guidance in nutrition problems; accident prevention; environmental health services, and conduct of a cooperative Federal-Tribal program to construct water supply and other sanitation facilities.

The extent of services ranges from the continually operated fully staffed health center to the smaller, more remote health station which may be open one, two or more days a week. In Alaska, these stations permit service to hundreds of villages which are accessible only by bush plane and dog sled, and where Indian health physicians hold daily radio medical clinics with villages to provide advice and instructions on care of the sick or injured. Medical and nursing staff fly into the villages at least once a year to hold general medical clinics and make home visits.

The 1968 request of $18,951,000 provides for 273 new field health positions needed to accommodate an additional workload and to increase the attack on health problems through the preventive medical care program. It will also permit expansion of the preventive medicine physician residency training program; provision of long and short-term professional training and further development of community health aide training.

Community health aides, also known as village health aides have been utilized in Alaska since 1947, serving as the link between the professional medical staff at PHS Alaska Native Hospitals and the village residents needing health services. Their training was conducted on an informal basis until 1964 when four 1-2 week courses were given at Kotzebue, Bethel and Mount Edgecumbe. In 1965 and 1966 community action programs to train Indians as community health aides were initiated on several reservations under Title II of the Economic Opportunity Act. The Division of Indian Health participated in the program by developing a prototype course of instruction and providing instructors, field supervisors and facilities for field practice for the Aides. The Division plans to extend the program to as many reservations as possible.

Summary

The 1968 appropriation request for $82,133,000 for Indian health activities represents an increase of $5,809,000 and a net increase of 464 positions: 182 in Hospital Health; 273 in Field Health; and 9 in Administration. In addition to mandatory items such as statutory increases and cost increases under the Contract Medical Care program in the amount of $1,754,000, funds requested will provide for: (1) a small increase in the hospital employee/patient ratio which includes the full operation of two hospitals replacing inadequate ones, (2) direct services to beneficiaries on the Pribilof Islands, Alaska, (3) the establishment of an operations research program directed toward the design and preliminary implementation of an integrated and comprehensive management information system based on Service Unit planning and evaluation needs, (4) a decrease in the workload of the Contract Medical Care program due to the anticipated effect of Medicare legislation, (5) an increase in the preventive health activities consisting of Sanitation, Dental, Public Health Nursing, Health Education and Field Medical Services including the administration of an increased sanitation facilities construction program and the establishment of a community health aide training program, (6) special assistance to the Menominee Indian people, and (7) a slight increase to effectively implement the President's planning-programming-budgeting system.

CONSTRUCTION OF INDIAN HEALTH FACILITIES

Hospitals, Field Health Centers, and Field Health Stations

To successfully conduct the Indian Health program following modern medical practices and utilizing specialty skills to the utmost, it is essential that health facilities be fully operative and functionally arranged. Considerable progress has been made in correcting deficiencies which existed at the time of transfer of the program to the Public Health Service, through alterations, additions and new construction. But many still exist due to age, obsolescence, deferred maintenance and unsafe conditions. In addition, population shifts and changing health problems create needs for increased capacities of facilities or for construction of facilities where none exist.

During 1967 construction on new facilities was started or completed on replacement hospitals at Lawton, Oklahoma, and Belcourt, North Dakota, and clinics at Cherry Creek, South Dakota, Kaibeto, Arizona, Lower Greasewood, Arizona, and Whitehorse, South Dakota.

In addition, construction was started or completed on alteration projects at Gallup, N. Mex., Sells, Ariz., Wagner, S. Dak., Rapid City, S. Dak., and Anchorage, Alaska.

The 1968 appropriation request provides $5,478,000 for (1) construction of a 125-bed hospital to replace the present 75-bed facility at Tuba City, Ariz.; (2) completion of a 15-bed hospital in Mescalero, N. Mex.; (3) planning for the construction of a new 100-bed hospital in Chinle, Ariz.; and (4) alterations of health facilities at 13 locations.

The request also includes $2,285,000 for construction or for planning of health centers and health stations at Chilocco, Okla.; Riverside, Calif.; White Shield and New Town, N. Dak.; Tec Nos Pos, Albuquerque, Sanostee and San Felipe, N. Mex.; Beshbitoh, Many Farms, Dilkon, Nazlini, Oraibi, and Rock Point, Ariz.; Red Water, Miss.; and Stewart, Nevada.

Staff Quarters

The isolation of Indian health facilities and their remoteness from established communities where housing is available make it necessary for the Public Health Service to provide quarters for Indian health staff. Unless adequate housing is provided, it is virtually impossible to recruit and retain the professional and technical personnel needed in the program.

Since the time of the transfer of the program to the Division of Indian Health many of the gross deficiencies in staff housing have been corrected, but there still remain many units that are substandard and there is an insufficient number to accommodate personnel.

This year 207 units were authorized for construction at Kaibeto, Lower Greasewood, Shonto, Whiteriver, Parker, Sells, San Carlos, and Peach Springs, Arizona; Ft. Yates and Belcourt, North Dakota; Winnebago, Nebraska; Wanblee and Pine Ridge, South Dakota; Mescalero and Crownpoint, New Mexico; Browning, Crow, Poplar, Lame Deer and Rocky Boy, Montana; Ft. Washakie, Wyoming; and Schurz, Nevada.

The 1968 request of $3,734,000 will permit the construction of 195 units at Taholah, Washington; Warm Springs, Oregon; Fort Hall, Idaho; Beshbitoh, Teec Nos Pos, Nazlini, Dilkon, Tuba City and Many Farms, Arizona; Sanostee, New Mexico; Wagner, South Dakota; White Shield, North Dakota; and Owyhee, Nevada.

Sanitation Facilities Construction

One of the most glaring deficiencies of the Indian and Alaska Native physical environment is the lack of safe water supplies. Currently more than 40 percent obtain their domestic water from potentially contaminated sources and approximately 50 percent haul or carry all water for household use. Another is the inadequacy or complete absence of facilities for the disposal of human and other household wastes.

These conditions are responsible for much of the spread of organisms causing diarrheas and dysenteries which plague these populations, and contribute in a large extent to the spread of communicable diseases throughout Indian reservations and communities, and Alaska Native villages.

These physical inadequacies are further compounded by the lack of understanding of modern health and sanitation principles on the part of the people.

Environmental health activities of the Division include motivating and educating Indians to desire a better environment, construction of needed sanitary facilities, and training of Indians in use and maintenance of these facilities. Preparatory activities at the local reservation level prior to construction are essential to development of full Indian understanding of the relationship between environment and health. Further, these activities are prerequisites to the conversion of Indian requests into workable sanitation facility projects.

The construction of sanitation facilities is accomplished under the authority of Public Law 86–121. Appropriations authorized under Public Law 87–658, the accelerated public works programs, has augmented this construction activity. In all instances, planning and implementation of construction activities are done by the Public Health Service cooperatively with the respective Indian tribes or Alaska Native groups. The tribes themselves contributed about one-third of the value of the projects in labor, money or materials.

With the completion of all projects and assistance to housing authorized through fiscal year 1967, improved sanitation facilities will have been made available to nearly 37,000 Indian and Alaska Native families. This level of accomplishment represents 38% of the required effort to provide all families with both running water in the home and adequate waste disposal facilities.

The request of $10,464,000 for sanitation projects in 1968 will permit construction of 65 projects to correct existing sanitary deficiencies and for construction of sanitation facilities for Federal and Tribal housing programs conducted by the Housing Assistance Administration, the Bureau of Indian Affairs and other Federal Agencies, as well as Tribal groups.

In addition, continued emphasis will be placed on educating the Indians and Alaska Natives in good environmental health practices and in proper care and maintenance of facilities constructed for them.

Summary

In summary, the construction appropriation request in the amount of $22,211,000 will provide for (1) construction of a 125 bed General Medical and Surgical hospital at Tuba City, Arizona ($4,230,000), completion of a 15-bed hospital at Mescalero, New Mexico ($50,000) and planning funds for a new 100-bed hospital at Chinle, Arizona ($288,000); (2) construction of eleven and planning of two health centers or school health centers ($2,120,000); (3) construction of three health stations ($165,000); (4) funds for 195 units of personnel quarters ($3,734,000); (5) alteration projects at thirteen locations, including planning of improvements at Shiprock and Crownpoint, New Mexico ($910,000); (6) participation in a community hospital construction ($250,000); and (7) 65 sanitation projects plus provision of sanitation facilities to serve Federal and Tribal Housing programs for Indians ($10,464,000).

INDIAN DEATH RATE DECREASE

Dr. RABEAU. I would like to highlight what has occurred in the past 11 years since the Public Health Service has taken over the Indian health program. The progress has been both measurable and significant. For example, among Indians infant death rates have declined 41 percent. Deaths from tuberculosis are down 57 percent and deaths from gastroenteric diseases are down 49 percent.

USE OF HEALTH FACILITIES

The growing appreciation by the Indian of health care is shown by this continued use of the health facilities.

Our admissions now number some 92,000 a year in contrast to about 50,000 in 1955. In this same period the outpatient visits have more than doubled. The number of dental services have almost tripled. Part of the growth is due to the Division's capability of providing better services through increased staff and better facilities. This came about through the understanding and support of this committee.

PROGRAM PHYSICIAN AND NURSE INCREASES

During this period, the number of physicians assigned to the program has increased from 125 to 335; the dentists from 40 to 105; professional nurses, from 782 to 908.

CONSTRUCTION

During the same period, nine hospitals, nine health centers, and 34 health stations have been built either to replace antiquated facilities or to provide care where none was fomerly available. Construction of two additional hospitals is underway at the present time.

With this expanded staff and better facilities the Division has, in recent years, been able to undertake efforts to improve the competency of all employees so that they can better perform their individual duties and also assume a more substantial role as a member of the health team. We place a great deal of credence on functioning as a team.

PROFESSIONAL TRAINING

Professional staff training has been instituted in epidemiology and management practices. We have instituted several physician residency programs and a dental internship program. Subprofessional training activities are intensive and varied and include basic and advanced practical nurses, courses for dental assistants, health record technicians, and sanitarian aids and community health aids.

Much of the training has been devoted toward the expanded function of the health auxiliary.

WATER SUPPLY AND SANITATION

Another area of improvement is in water supplies and sanitary facilities on Indian reservations and Alaskan villages. The majority of Indians and Alaskans do not have sanitation facilities and more than 50 percent still must haul or carry their drinking water. Under the authority of the Indian Sanitation Facilities Act, safe water and waste disposal facilities have been authorized for over 37,000 families since the passage of legislation in 1959.

CONTRIBUTIONS BY INDIANS AND ALASKAN NATIVES

I think the best example of the involment of the Indian in the program is manifested by the fact that for every dollar—every Federal dollar expended on these projects, approximately 40 cents has been contributed by Indians and Alaskan natives through donated labor, materials, and funds.

NEW PROGRAMS FUNDED IN 1967

New programs that have been initiated through the 1967 appropriations are having considerable impact on specific health problems within the populations we serve.

Indian Trachoma Control Program

To prevent further spread of trachoma in the Indian population, a 5-year Division-wide control program has been initiated with major program emphasis in the Southwest—the Phoenix and Albuquerque-Window Rock areas.

Alaskan Mental Health Program

A mental health program in Alaska has been instituted. We have a mental health team that orients medical and nonmedical personnel to enable them to recognize and treat early symptoms and manage the recuperating patients when they return to the home community.

In the first 7 months of this program, over 300 patients have been treated by this method and it is estimated that 150 of these would have had to return or be committed to the psychiatric hospital if this program had not been instituted.

INDIAN HEALTH CARE, RAPID CITY, S. DAK.

Another new program is provision of health care for Indians in Rapid City, S. Dak. Since our health center there is one of the few we operate in an urban area, we have developed a unique, comprehensive, family-centered program plan which identifies the need of the people and provides special care for the high-risk families living in an urban center.

1968 PROGRAM

The provisions of our appropriation request for 1968 represent an increase of $5,809,000 or a net increase of 464 positions: 182 in hospital health, 273 in field health, and nine in administration.

In addition to mandatory items, such as statutory increases and cost increases under the contract medical care program, these funds requested will provide for a small increase to the hospital employee/patient ratio which includes full operation of two replacement hospital facilities; provide direct services to the beneficiaries on the Pribilof Islands in Alaska; allow the Division to establish an operations research program, which is directed toward the design and preliminary implementation of an integrated and comprehensive planning management information system based on our unique service unit planning and evaluation techniques; a decrease in the workload of the contract medical care program due to the anticipated effect of medicare legislation; an increase in preventive health activities consisting of sanitation, dental, public health nursing, health education, and field medical services, which includes the administration of an increased sanitation facilities construction program and the establishment of a community health aide training program.

This appropriation also provides for special assistance to the Menominee Indian people and allows for an increase to develop an improved planning-programing-budgeting system.

CONSTRUCTION

The construction appropriation request in the amount of $22,211,000 will provide for the construction of one new hospital, complete construction of a second new hospital and allow planning for a third. It will also allow construction of 11 health centers or school health centers, and the planning of two more. It will allow for the construction of three health stations, 195 units of personnel quarters, alteration projects at 13 locations, including planning for two hospitals; participation in a community hospital construction program, and last but not least, 65 sanitation facilities projects plus provision of sanitation facilities to serve Federal and tribal housing programs for the Indians.

Mr. Chairman, I would be happy to answer any questions.

Senator BARTLETT. Mr. Chairman, I wonder if I might ask Dr. Rabeau, before you start, where are those new hospitals to be located?

Dr. RABEAU. The new hospitals? Tuba City, Ariz.; and planning for one at Chinle, Ariz.

Senator BARTLETT. Thank you.

HOSPITAL ADMISSIONS

Chairman Hayden. In the highlight statement which you submitted with this estimate, you indicate that hospital admissions are continuing at a high rate through fiscal year 1966. Is the number of admissions still increasing?

Dr. Rabeau. It is starting to plateau now, Mr. Chairman. Our admission rate is starting to level off now.

Chairman Hayden. Is the increase because of additional available facilities or because of increasing difficulties?

Dr. Rabeau. The increase in hospital admissions has been, we feel, twofold. One, there are now additional and better facilities, and second—and I think this is the major point—acceptance of the program by the American Indian. The ever-increasing recognition by the Indian and Alaskan native of the importance and value of health care, particularly early health care, and preventive activities.

BUDGET REQUEST INCREASES

Chairman Hayden. Your proposed increase for Indian health activities over the amount appropriated in fiscal year 1967 is $8,462,000. How much of this results from increases resulting from Federal Pay Act legislation and from wage board increases, and how much of it is due to program increases?

Dr. Rabeau. Of the $8,462,000, $1,865,000 is due to Pay Act increases. $800,000 is a special appropriation for the Menominee Indians, and the balance are program increases.

Personnel Increase

Chairman Hayden. What is the total number of additional permanent employees which you plan to add during the coming fiscal year?

Dr. Rabeau. 464.

Hospital Health Services Increase

Chairman Hayden. For hospital health services, you are proposing a program increase of $2,157,000 to require 182 new employees. Would you please discuss this program?

Dr. Rabeau. The increase in hospital health activities will allow us to accomplish a number of things. First, funds are requested which will allow us to increase the hospital employee-patient ratio from 156 employees per hundred patients to 161 employees per hundred patients. The increase will also allow us to increase our hospital outpatient employee-patient ratio. It will increase it from 0.642 man-years per thousand outpatient visits to 0.698. There are 19 positions requested for an operations research program. Eight positions are requested for the direct operation of medical facilities on the Pribilof Islands. Public Law 89–720, which was passed by the last Congress, directed the Secretary of HEW to provide health services to the natives and other personnel of the Pribilof Islands. Heretofore, we had been providing the health service through a reimbursable agreement with the Fish and Wildlife Service.

SYSTEMS ANALYSIS MODULE

Chairman HAYDEN. Please explain the systems analysis module?

Dr. RABEAU. Operation SAM is the acronym that we use for the systems analysis module. Basically this is a program of applied research on health services. It is an area where very litttle has been done throughout the country. Most of the advances that have come about in the improvement of health of the American people have been in the nature of clinical and basic medical research. There have been very few advances in the public health field in the delivery of health services. What we propose is to do applied research on what is the proper mixture of personnel, for example, to work on a particular health problem. How much of a public health nurse's time, how much of a physician's, how much of a health educator's, should be devoted to this health problem? These facts are not known at the present time.

Traditionally, in the provision of health services, planning has been done and directed toward effort, and not toward a measurement of what the effort has produced. We hope through this research program to be able to come up with new ways that will more efficiently and effectively, and much more quickly, produce the solutions to the health problems of the American Indian.

HEALTH SERVICES FOR THE PRIBILOF ISLANDS

Chairman HAYDEN. I note that effective last November, your department became responsible for providing medical and dental care to the Pribilof Islands natives; and on a reimbursable basis to Federal employees and their dependents, and tourists and other persons in the Pribilof Islands. In order to accomplish this you are proposing an additional 8 positions and an increase of $117,000. Is this expense reimbursable from the Pribilof Islands fund?

Dr. RABEAU. No, sir. In the past it has been done on reimbursable basis. It is now necessary under Public Law 89–702 that we fund these services from our direct operations.

PEDIATRIC RESIDENCIES

Chairman HAYDEN. You ask for pediatric residency training programs in Phoenix and in Alaska. Which of these, if either, is a new program?

Dr. RABEAU. Neither of them, Mr. Chairman. For the Alaska program we received two positions in the 1967 budget. We were unable to institute this program because of delays in affiliating with a university medical school. The two positions were put in our Phoenix pediatric residency program. We anticipate that the requested increase will allow us to have two residents in our Anchorage pediatric residency program, which will be affiliated with one of the medical schools of the Pacific Northwest. Under our Phoenix pediatric residency program, we have four residents at the present time, our program is an affiliated community residency with community hospitals in Phoenix.

FOOD SERVICE TRAINING

Chairman HAYDEN. I assume that you have a supervisory food service training program in existence now. Where is it located, and how much is the total requested for this activity?

Dr. RABEAU. We do not have a formal training program at the present time for supervisory food service workers. In our hospital chain of 51 hospitals, many of them are too small to have a dietician; that is, a professional dietician to head the food service department. Nor are they of the size that would be feasible, if you could get dieticians in such isolated locations, to utilize them there; however, we do need somebody that is knowledgeable not only in the preparation of food and the various nutritional and caloric values, but is also knowledgeable about the managing of the food service department.

The great percentage of our food service staff are American Indians and Alaska natives. Many of them are excellent cooks, but they have never had any formal training. In the past, we have been able to send an occassional food service worker to a course that is offered by Michigan State University for food service supervisors. We can't enroll adequate numbers in that course at any one time because it is designed for people of Michigan and the surrounding area. Furthermore, it is not appropriate for our needs. We therefore propose to introduce our own training program.

PHARMACY RESIDENCY PROGRAM

Chairman HAYDEN. Is the Gallup pharmacy residency program a continuing one or a new one?

Dr. RABEAU. It is a new one, sir.

COMMISSIONED OFFICER EXTERN PROGRAM

Chairman HAYDEN. How many students are now enrolled in the commissioned officer student training extern program, and what is its present level of funding?

Dr. RABEAU. The commissioned officer students training extern program, or COSTEP, is a program where we recruit medical, dental, nursing students and other health professionals somewhere in their graduate training, for active duty with the Public Health Service for a period of time up to 3 months. I might add, this program serves as one of best sources of recruiting professionals into the Public Health Service. Recent figures that the Office of Personnel provided me show that about 47 percent of our COSTEPs join the Public Health Service.

At the present time, we are budgeted for 48 positions. The additions requested in 1968 will allow us a total of 75.

LOCATION OF OPERATIONS RESEARCH PROGRAM

Chairman HAYDEN. I note on page 33 of your justification statement that an operations research program to be located at Tucson, Ariz., will utilize the Papago Indian Reservation as the operational community. Would you please describe this program?

Dr. **Rabeau.** Yes, sir. The operations research program will be headquartered at the old San Xavier TB sanitarium. We are not using this facility except for a small portion as a health center at the present time. There are several reasons why we have selected this particular area for this operation research program.

One is that the Papago Reservation provides us a typical service unit insofar as we have two health centers, health stations and a hospital in this reservation. San Xavier, being 12 miles from Tucson, is in close proximity to the University of Arizona. This allows us to have frequent and intimate access to consultants.

The other major advantage of this is that the Bureau of Ethnic Research of the University of Arizona has compiled a rather unique population register, which supplies complete demographic information about all Papago Indians, on or off of the reservation. This affords us a complete universe of the Papago people.

Now, to do studies, it is necessary that when you take a sampling it be a representative sampling. By having a complete universe, and when you are dealing with small numbers of only around 10,000 people, it is imperative that your sample be statistically significant. Having an excellent known universe, as we would have on the Papago, allows us to take small samplings, stratified or otherwise, that will be accurate and statistically significant. This would permit us to perform our research with considerable ease, and yet at the same time with a great deal of accuracy.

CONTRACT MEDICAL CARE

Chairman **Hayden.** You indicate that there will be a decrease of $980,000 in your contract medical care program because of the effect of the medicare legislation. How is this program applicable to the Indian Health Service?

Dr. **Rabeau.** Titles XVIII and XIX of the medicare legislation, of course, are applicable to all Americans. We have estimated that of the beneficiary population we serve, approximately 18,000 of the Indians are 65 or over, and would be eligible for services under title XVIII. However, only about 11 percent of this population reside in areas where community facilities and private practitioners are the most available and accessible ones to them. The balance of the Indians live in areas where they would have to go by one of our own health facilities to reach a community facility, and therefore, would not utilize community facilities. Title XIX, or medicaid, as it is popularly known, takes in other categorical groups not over 65. It provides basically for the medically indigent. Now, our figure here is only an estimate. This is predicated on the basis that all States that have Indian populations will have enacted title XIX legislation by the beginning of fiscal year 1968.

At the present time, there are 10 States that need legislative authority before they can enact a title XIX program. There is an 11th State, but at the present time we are unable to predict when it will enact basic legislation. This is an estimate, and we are somewhat uncertain about it.

FIELD HEALTH PROGRAM

Chairman **Hayden.** Please comment on your proposed program increase of $3,098,000 and 273 positions for field health services.

Dr. RABEAU. Mr. Chairman, our field health services are where the primary thrust, the direction of our program, is aimed. It is basically the part of the program that reaches the Indian in his home. It is directed toward preventive health activities. If we are ever to achieve our goal of elevating the health status of this population segment to that of the general population of the United States, it will be through these preventive health activities.

Under field health services, sanitation, dental, public health nursing, and health education are significant aspects of the program. The balance, field medical services, is the portion of the field health services activity wherein field locations, field health stations and field health centers are located. It includes clinics that are held on an intermittent but regularly scheduled bases as well as clinics that are held on a daily basis that are not located within a hospital.

SANITATION FACILITIES CONSTRUCTION

Chairman HAYDEN. I note that 38 additional staff positions are requested in connection with the sanitation facilities construction program. In this connection, how many sanitation facilities projects were constructed in fiscal years 1965, 1966, and are proposed for 1967?

Dr. RABEAU. Mr. Johnson, do you have the figures on the projects for the last 3 years? We will submit it for the record, otherwise.

Mr. JOHNSON. I will submit it for the record.

Chairman HAYDEN. Place it in the record.

Dr. RABEAU. For 1968, we anticipate that the 65 projects, plus the housing projects, will reach 8,000 additional families.

(The information follows:)

Indian sanitation facilities construction authorized under Public Law 86-121, fiscal years 1965-67 and fiscal year 1968 request

Fiscal year	Type of project		
	Major construction	Assistance to Federal housing	Emergency, study, and other special projects
1965	48	28	13
1966	36	31	13
1967	39	*27	*12
1968	65	**50	------

*Through Mar. 15, 1967.
**Estimated.

SANITATION FACILITIES CONSTRUCTION PROGRAM PERSONNEL

Chairman HAYDEN. For each of these 3 fiscal years, how many staff positions were added because of the sanitation facilities construction program?

Dr. RABEAU. The staff in the construction program are mainly engineers. Prior to fiscal year 1965 we had 46, we added none in 1965. In 1966, we added 22. This year we added none, and 38 are requested in fiscal year 1968. This will give us a total of 106 personnel in the sanitation facilities construction program.

Chairman HAYDEN. As construction of these facilities is completed, do not the staff positions which were provided in connection with them become available for use with a new sanitation facilities construction program?

Dr. RABEAU. When our permanent staff on sanitation facilities construction complete a project, they move to another project. The other personnel are part-time employees, that is wage board employees. They are laid off at completed locations. New ones are hired wherever the next project is initiated.

Chairman HAYDEN. If the 38 additional staff positions are approved, what will be the total number of positions then available to you for implementation of the sanitation facilities construction program?

Dr. RABEAU. If these 38 are added, this would give us a total of 106.

STATE PUBLIC HEALTH CONTRACTS

Chairman HAYDEN. What is the total amount requested to cover contract services with the States?

Dr. RABEAU. Our contract services with States are of several types. The major contracts that we have with States are with health departments; the largest element is for public health nursing. We had $539,000 in 1966. This year we have $563,000 and in 1968 we are requesting a total of $592,000. Our contracts are with many of the States. The largest single contract is with Alaska.

FIELD MEDICAL SERVICES

Chairman HAYDEN. You are requesting an increase of $1,615,000 for "Field medical services." Indicate to the committee what program you propose in fiscal year 1968 under this subactivity.

Dr. RABEAU. There are three segments to this. The largest segment of personnel (98) under the field medical services program will be to increase field medical services; i.e., the services provided at field clinics. We are asking for an increase of 10 personnel in the field of mental health. Five of these will be to allow us to go into phase 2 of the Pine Ridge mental health prototype program that is in its second year at the present time. The other five positions in mental health are to institute a prototype mental health program in Albuquerque, N. Mex. These 98 additional positions in field medical services will allow us to provide an estimated additional 50,000 outpatient visits. The balance of the positions, 23, are for training programs, and they are several in number. We propose to institute a community health aid training program in Alaska, where we have some rather unique problems in that it is necessary to have an individual in each village in Alaska, knowledgeable about medical practices, able to communicate via radio with our medical personnel and provide a description of the symptoms, and then carry out necessary treatment as ordered over the radio by the physician.

The preventive medicine residency program, for which three additional positions are requested will allow us to reach our maximum number that was originally projected in our physician preventive medicine program, which is affiliated with the University of Oklahoma.

SOCIAL WORK ASSOCIATES TRAINING PROGRAM

Another program that we are requesting is a social work associates training program. We wish to train Indians and Alaska natives to be social work associates, to help social workers in casework. The use of indigenous people in any health program is of paramount importance. It is important because these people serve as a bridge between the professional and their own people. With the large cultural gaps that exist between our two cultures, it is necessary to have somebody that can bridge the gap. This accomplishes several things: it expedites the work of the professional, it allows the professional to act as a manager of services, rather than as a purveyor. In other words, it increases the scope of professional services that can be provided to the Indian.

LOCATION OF TRAINING CENTER

Chairman HAYDEN. You indicate that the Division of Indian Health Training Center now located at Phoenix is to be transferred to Tucson. Is there a Government-owned facility available?

Dr. RABEAU. Yes, sir, Mr. Chairman, we propose to put it in the same facility as Operation SAM which is the Old San Xavier Hospital.

Chairman HAYDEN. Is all of the Indian health training to be done at Tucson?

Dr. RABEAU. Much of our training activites will be carried on out of Tucson. Basically, we envision that at Tucson we would do several things in the way of training. One I regard as training, although it is health education. This is training of the individual beneficiary. For example, we have developed and are developing audiovisual aids that consist of a box that holds a slide projector and a tape mechanism that plays automatically. It will hold up to 80 slides. This mechanism we are placing in all the waiting rooms of our hospitals and clinics. They are automatic; when they finish one round, it will start repeating again. These programs are of about 30 minutes in duration, and one of the subjects that we have already developed, for example, is on safety in the home—an educational series of pictures and talk that tells the mother how she should protect her children from hazards in the home, how medication should be safely put away; how, for example, boiling water should be kept on the back of the stove.

TRAINING OF PERSONNEL

In training personnel, the major emphasis will be in the development of programed—instruction for personnel, that will allow them to take a training course right back in the particular service unit where they are located, at the hospital, the health center, wherever it may be.

We are developing material to cover the entire gamut of our health team. As you will recall, over 50 percent of our employees are American Indians and Alaska natives. It is necessary to continually seek educational opportunities and to continually provide inservice training for not only the Indian staff but the balance of the health team as well.

We also propose to have our epidemiology training center located at Tucson. This is the course that we have now run for several years, in which we teach a cross section of the health team, not only the health professionals and the subprofessionals, but also administrative personnel, for example, personnel officers, finance officers. They are taught the principles of epidemiology, not in the traditional sense, but rather the use of epidemiology, as a scientific method in decisionmaking and program planning. This has been a tremendously successful program. I might add this was started under Dr. Wagner's tenure as chief of the division. A new program that we anticipate will be training of our people in program planning by the use of simulation models. Our operations research group will be able to develop in concert with our training people, hypothetical communities, which will give health problems, and complete demographic characteristics of the community.

In other words, we will describe a typical Indian community with its health problems. The personnel to be trained will be brought into Tucson. They will attempt to lay out a program plan of how you would solve the health problems of a hypothetical community. They will feed their data into the computer. The computer will then give them more information if they request it, or it will tell them that this is what would have occurred if they had taken this action. This is an extremely valuable training mechanism.

Another function of this training center is that much of the material will be developed for training programs that will be conducted elsewhere.

Under our social work associates, for example, we anticipate that in the first year of the program all the training will be done at Gallup. Training will be provided particularly to Navajo aids. In a few years, we expect to extend this to Alaska, and set it up at Anchorage, where we will train Eskimo and Alaskan Indian social work associates.

Chairman HAYDEN. What will be the effects of our Tucson operation on your activities at Phoenix?

Dr. RABEAU. None whatsoever, sir. At the present time, in addition to these others, our health record technician training is conducted at Phoenix. With the construction of the new Phoenix medical center, we anticipate initiating a great number of other clinical and professional residency training programs. At the present time, our people are working with community hospitals in Phoenix on community residency programs in surgery and internal medicine. We do not have the space at Phoenix for this training center.

MENTAL HEALTH PROGRAMS FOR PINE RIDGE

Chairman HAYDEN. Last year, Congress provided funds to initiate a mental health program at Pine Ridge. I note that this year you propose to increase the scope of this program by five positions and $50,000. Would you please explain your activities under this program?

Dr. RABEAU. Mr. Chairman, last year Congress provided a hundred thousand dollars for the development of this program. It was a prototype study done at the service unit level. This particular study for the Oglala Sioux is located in the Pine Ridge service unit. What we have attempted to do is to determine what are the mental health needs, what are the mental health problems on a reservation and what is the best method of attacking these problems. We have found that it has been tremendously successful. Our mental health team is headed by a psychiatrist. They work with all personnel who work with the Indians, not just the health people, but the schoolteachers, the clergy, and other community workers. The team increases the expertise of these people, not only in recognizing abnormal reactions to stress, but also how to assist and treat abnormal mental behavior.

One of the steps that is necessary to achieve a completely well-rounded program is to perform a very intensive study to derive background data. This study is underway at the present time.

In 1968 we propose to add a psychologist, and a psychiatric social worker to our team. We also need to add a biostatistician, who will take the results of this survey and present the data in usable form for the mental health team itself. Personnel of this project have been working very closely with community action projects under OEO that are extant on the Pine Ridge Reservation.

I might add that we have community health aids on Pine Ridge. Our mental health team is extending the expertise of these aids, who are all Sioux Indians working on their home reservation.

MENTAL HEALTH PROGRAMS FOR ALBUQUERQUE

Chairman HAYDEN. You also indicate that you intend to initiate such a program at Albuquerque. What comments do you have on this?

Dr. RABEAU. Yes, sir. Mr. Chairman, we hope to institute a mental health program in the Albuquerque area. It would be somewhat similar to the one at Pine Ridge; and also the one that is in Alaska, insofar as it would encompass more than a service unit. This program will work on the predominant mental health problems that present themselves, ranging from the overt psychoses to merely stress reactions; also alcoholism, which is another very prominent manifestation of abnormal mental health.

In addition, the program at Albuquerque will become deeply involved in the mental health of the Indian boarding school student. There has been a great need over the years for more emphasis to be placed on the study and treatment of the student in the boarding school. These boys and girls leave a reservation home for a boarding school. They are met not only with the challenge of being away from their family and being in school, but also the challenge and the problems that arise in a different society. They are now living in a Caucasian society as contrasted to the Indian one. This often produces marked stresses. These stresses, in turn, produce some significant behavior problems.

The thrust of our Albuquerque program will be more on the school health program, whereas the one on Pine Ridge and the one in Alaska, are a general overview of the mental health of the specific population group.

MENTAL HEALTH PROGRAM FOR ALASKA

Chairman HAYDEN. Also last year $100,000 was made available for an areawide preventive mental health program in Alaska. What has been accomplished with this appropriation?

Dr. RABEAU. A great deal, Mr. Chairman. Our people in Alaska are working very closely with the Alaska Psychiatric Institute, where hospitalization for mental patients is provided. In the first 7 months of this program, our mental health team, by themselves, or in the teaching and training they have provided our health staffs in our various field locations, have been able to treat over 300 patients, many of these are patients who have been in the psychiatric hospital and have been discharged. They have been able to provide followup service to them.

In addition, they have prevented a great number from needing psychiatric hospitalization. There is a basic tenet in the field of mental health that the closer to home the treatment of the mentally ill patient can be accomplished, the more successful and the shorter the treatment time will be.

Our people estimate that there would have been about 150 more hospitalizations at the psychiatric institute, if it had not been for the efforts of this team.

MENOMINEE HEALTH PROGRAM

Chairman HAYDEN. Late last fall legislation was enacted to provide special assistance to the Menominee Indian people and $800,000 was subsequently appropriated for this purpose. Would you please discuss this program briefly?

Dr. RABEAU. The Menominee Indians are a group of Indians in Wisconsin that were terminated several years ago. However, they have continued to have significant problems in functioning as a county, and they became, I believe it was, the 73d county in the State of Wisconsin. Public Law 89–653, which was passed this past October, authorized a 4-year program to assist these people. In 1967 there is a $450,000 appropriation to complete the sanitation facilities construction for the Menominee Indians. This is a nonrecurring item. The balance of the $350,000 which is again asked for in 1968, is to give grants to Wisconsin, $150,000 for education, $100,000 for health, and $100,000 for welfare. This will allow this county of Menominee Indians to better meet their needs in the future.

PLANNING, PROGRAMING, AND BUDGETING

Chairman HAYDEN. How many persons do you have now for planning, programing, and budgeting? You are requesting eight additional ones in fiscal year 1968.

Dr. RABEAU. We have—I may answer this rather paradoxically. We have none, and yet we have very many. I might say that the numbers are in the thousands, because our planning and programing is done by almost the entire Division of Indian Health staff. It is done at the service unit level where the plans and programs for that individual service unit are developed. They are reviewed and collated at the area and incorporated into an area plan, and then headquarters makes a divisonwide plan based on the area plans that were originally developed at the service unit level.

The necessity for new activities in budgeting that this requires, because this does require a different system, has placed a great deal of stress and impact upon our financial management staff. They have absorbed this. I really don't know how, for it has placed a tremendous overload upon them. It is anticipated that in the future there will be more of the new type of PPB system, implemented throughout the Department of Health, Education, and Welfare. It is necessary that we have additional staff to implement this system.

ADMINISTRATION

Chairman HAYDEN. Would you please provide for the record a breakdown of the total amount assessed against each of your programs to be used for administrative purposes?

Dr. RABEAU. I would be happy to, sir.

(The information follows:)

All administration activities of the program are financed from the Administration Activity of the Indian Health Activities appropriation.

INDIAN HEALTH ACTIVITIES IN SOUTH DAKOTA

Chairman HAYDEN. Senator Mundt desires that you answer for the record his questions regarding Indian health activities in South Dakota. Would you please do that?

(The questions and answers follow:)

Question. Will the $50,000 requested on page 58 of the justification adequately fund the Pine Ridge pilot health study?

Answer. Yes, sir, for fiscal year 1968. However, as the program develops additional resources may be required.

Question. A few years ago we appropriated money for the practical nurses training course at the Sioux Sanitorium at Rapid City. Would you please give the committee a rundown on how that program has been working out? It seems to me that we may be at the point where we should expand that program a bit. Will you give us your thoughts and indicate how much the program might be expanded if the committee provided the funds?

Answer. The advanced practical nurse training program at the Sioux Sanatorium at Rapid City has been working out very well and has benefitted greatly both the Indian girls and the Division's Nursing Program. To date, 85 students have graduated from the course. Many of these have now been promoted to a higher grade because they are able to function at a somewhat higher level. In addition, we have found several who appear to have potential for going on into professional nursing.

This year in January, because of the Division's felt need for upgrading of another category of personnel, the GS-2 Nursing Assistant, we decided to use one of the Sioux San courses on an experimental basis to provide training to a group of Indian girls at that level. Although, this course will not be completed until April, we have already found it highly successful. The first surprise was the calibre of individual we found in this group. One had had one year of college and has now become interested in going into professional nursing. Several others have indicated their desire to enroll in the basic Practical Nurse Course at Albuquerque.

On the basis of our experience with this class, we would like in the future to be able to conduct the two courses simultaneously, one for practical nurses, and one for GS-2 nursing assistants, having 5 in each class. The faculty of the school feels this can be worked out very well and that there would be advantages in having the two groups simultaneously.

We do not feel that the program should be expanded at this time since a group of ten seems to be about the maximum that can be handled optimally with our present patient case load material, facilities, and student housing. However, the current program could be improved by providing a student counselor for the students when they are assigned to Pine Ridge for the portion of their clinical experience which they receive there. The lack of such a position at present seems to be th current chief difficulty of the program. An addition to the budget of $5,000 would adequately provide for this.

We also feel that an increase in the appropriation for sending Indian employees into Schools of Professional Nursing would be highly desirable.

We have at the present time three young ladies enrolled in schools of professional nursing in South Dakota under the appropriation received for this purpose. Two of them are in their Sophomore year and one in her Junior year. The average cost per year for each of these (including salary) is $6,200.

We have encountered one major difficulty in this program with our first three trainees. It was necessary for them to be enrolled for four years in a three year program, the first year being used for making up deficiencies and for special tutoring to bring them up to the level scholastically of the other beginning students. The Bureau of Indian Affairs has, however, agreed to provide assistance to us with this in the future.

For these reasons the most appropriate area for expansion of the nurse training program would be to increase the professional nurse training to a magnitude of two to three times its current level.

Construction of Indian Health Facilities

Chairman Hayden. I will place in the record the statements in justification of a budget estimate of $22,211,000 for construction of Indian health facilities. This is $7,722,000 more than was appropriated last year.

(The justification follows:)

Appropriation, 1967	$14, 489, 000
Unobligated balance from prior years	9, 212, 522
Total available for obligations	23, 701, 522
Decreases:	
Hospitals and clinics	9, 334, 377
Personnel quarters	4, 208, 666
Alterations	2, 763, 520
Construction of Indian sanitation facilities	6, 091, 859
Total	22, 398,422
Carried into 1968	1, 303, 100
Increases (1968 appropriation request):	
Hospitals and clinics	6, 853, 000
Personnel quarters	3, 734, 000
Alterations	910, 000
Community facilities (Public Law 85–151)	250, 000
Construction of Indian sanitation facilities	10, 464, 000
Total	22, 211, 000
Total available for obligations	23, 514, 100

ANALYSIS BY ACTIVITIES

Amounts available for obligation

	Amount available 1967	Fiscal year 1968			Total available 1968 compared to total available 1967
		Unobligated balance from prior years	1968 budget requests	Estimated total available	
1. Hospitals and clinics	$9,651,777	$317,400	$6,853,000	$7,170,400	−$2,481,377
2. Personnel quarters	4,361,366	152,700	3,734,000	3,886,700	−474,666
3. Alterations	3,096,520	333,000	910,000	1,243,000	−1,853,520
4. Community facilities			250,000	250,000	+250,000
5. Construction of Indian sanitation facilities	6,591,859	500,000	10,464,000	10,964,000	+4,372,141
Total	23,701,522	1,303,100	22,211,000	23,514,100	−187,422

Obligations by activity

	1966 actual	1967 estimate	1968 estimate	Increase (+) or decrease (−)
1. Hospital and clinics	$894,810	$9,334,377	$6,777,400	−$2,556,977
2. Personnel quarters	891,438	4,208,666	3,886,700	−321,966
3. Alterations	1,138,057	2,763,520	1,194,900	−1,568,620
4. Community facilities			250,000	+250,000
5. Construction of Indian sanitation facilities	5,886,458	6,091,859	10,416,000	+4,324,141
Total	8,810,763	22,398,422	22,525,000	+126,578

Itemization of estimate

	Actual, 1966	Estimate, 1967	Estimate, 1968	Increase (+) or decrease (−)
Program and financing:				
Total obligations	$8,810,763	$22,398,422	$22,525,000	+$126,578
Unobligated balance brought forward	−3,927,285	−9,212,522	−1,303,100	+7,909,422
Unobligated balance carried forward	9,212,522	1,303,100	989,100	−314,000
Appropriation	14,096,000	14,489,000	22,211,000	+7,722,000
Obligations by objects:				
11 Personnel compensation	1,458,120	2,196,000	3,116,000	+920,000
12 Personnel benefits	60,902	108,000	148,000	+40,000
21 Travel and transportation of persons	48,032	100,000	149,000	+49,000
22 Transportation of things	92,655	254,000	417,000	+163,000
23 Rent, communications, and utilities	25,245	36,000	49,000	+13,000
24 Printing and reproduction	11,681	18,000	19,000	+1,000
25 Other services	1,848,070	3,119,000	2,570,000	−549,000
26 Supplies and materials	140,174	153,000	180,000	+27,000
31 Equipment	190,205	148,000	328,000	+180,000
32 Lands and structures	4,935,679	16,266,422	15,299,000	−967,422
41 Grants, subsidies, and contributions			250,000	+250,000
Total obligations	8,810,763	22,398,422	22,525,000	+126,578

Analysis of continuing projects and 1968 request

	Planning or feasibility funds for projects approved prior to 1968		1968 request			
	Amount	Year appropriated	Funds for previously approved projects	Planning or feasibility funds for new projects	Funds for new construction projects	Total
Hospitals and clinics:						
Tuba City Hospital:						
1. Feasibility	$20,000	1964				
2. Partial planning	120,000	1965				
3. To complete planning	95,000	1967				
4. Construction funds			$4,230,000			$4,230,000
Chinle Hospital				$288,000		288,000
Mescalero Hospital:						
1. Planning	45,000	(1)				
2. Partial construction funds	627,800	1967				
3. To complete construction			50,000			50,000
Many Farms School Health Center	41,000	1967	372,000			372,000
Chilocco School Health Center	22,000	1967	270,000			270,000
Riverside School Health Center	30,000	1967	434,000			434,000
Albuquerque School Health Center				2,000		22,000
Stewart School Health Center				26,000		26,000
Construction of health centers or school health centers at White Shield, Teec Nos Pos, Beshbitoh, Dilkon, Nazlini, Sanostee, Oraibi, and San Felipe					$996,000	996,000
Construction of health stations at New Town, Red Water, and Rock Point					165,000	165,000
Total, hospitals and clinics						6,853,000
Personnel quarters:						
195 units					3,734,000	3,734,000
Alterations:						
Shiprock Hospital	42,000	1967		102,600		102,600
Crownpoint Hospital				29,000		29,000
Gallup Hospital					226,000	226,000
Keams Canyon Hospital					73,600	73,600
Cass Lake Hospital					54,500	54,500
Kotzebue Hospital					247,300	247,300
Mount Edgecumbe Hospital					80,000	80,000
Construction at Sells, Pine Ridge, Sacaton, Crow, Winterhaven and Bethel					97,000	97,000
Total alterations						910,000
Sanitation facilities					10,464,000	10,464,000
Community facilities					250,000	250,000
1968 request						22,211,000

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[1] Planning accomplished through savings.

Alphabetical index of projects

Project location	Project description	Activity	Amount
Albuquerque, N. Mex	School health center (planning)	Hospital and clinics	$22,000
Beshbitoh, Ariz	School health center	do	104,500
Do	5 units of quarters	Personnel quarters	94,000
Bethel, Alaska	Foundation study	Alterations	27,000
Cass Lake, Minn	Delivery room and dietary	do	54,500
Chilocco, Okla	School health center	Hospital and clinics	270,000
Chinle, Ariz	New 100-bed hospital (planning)	do	288,000
Community facilities	Participation in community project	Community facilities	250,000
Crow, Mont	Sewage and fire remedy	Alterations	27,000
Crownpoint, N. Mex	Modernization (feasibility study funds).	do	29,000
Dilkon, Ariz	School health center	Hospital and clinics	104,500
Do	5 units of quarters	Personnel quarters	94,000
Fort Hall, Idaho	4 units of quarters	do	80,000
Gallup, N. Mex	Remodel dental area	Alterations	226,000
Keams Canyon, Ariz	Boiler plant and fire remedy	do	73,600
Kotzebue, Alaska	Sewage plant and foundation rehabilitation.	do	247,300
Many Farms, Ariz	School health center	Hospital and clinics	372,000
Do	13 units of quarters	Personnel quarters	244,000
Mescalero, N. Mex	Funds to complete construction	Hospital and clinics	50,000
Mount Edgecumbe, Alaska	Incinerator	Alterations	80,000
Nazlini, Ariz	School health center	Hospital and clinics	104,500
Do	5 units of quarters	Personnel quarters	94,000
New Town, N. Dak	Health station	Hospital and clinics	53,000
Oraibi, Ariz	School health center	do	105,000
Owyhee, Nev	6 units of quarters	Personnel quarters	120,000
Pine Ridge, S. Dak	Water mains	Alterations	10,000
Red Water, Miss	Health station	Hospital and clinics	56,000
Riverside, Calif	School health center	do	434,000
Rock Point, Ariz	Health station	do	56,000
Sacaton, Ariz	Fire remedy	Alterations	7,000
San Felipe, N. Mex	School health center	Hospital and clinics	104,500
Sanitation facilities	Water and waste disposal projects	Sanitation facilities	10,464,000
Sanostee, N. Mex	School health center	Hospital and clinics	105,000
Do	5 units of quarters	Personnel quarters	94,000
Sells, Ariz	Fire remedy	Alterations	8,000
Shiprock, N. Mex	Add 25 beds, expand outpatient department (planning).	do	102,600
Stewart, Nev	School health center (planning)	Hospitals and clinics	26,000
Taholah, Wash	3 units of quarters	Personnel quarters	60,000
Teec Nos Pos, Ariz	School health center	Hospitals and clinics	105,000
Do	5 units of quarters	Personnel quarters	94,000
Tuba City, Ariz	Replace 125-bed hospital	Hospitals and clinics	4,230,000
Do	121 units of quarters	Personnel quarters	2,312,000
Wagner, S. Dak	3 units of quarters	do	60,000
Warm Springs, Oreg	5 units of quarters	do	100,000
White Shield, N. Dak	Health center	Hospital and clinics	263,000
Do	15 units of quarters	Personnel quarters	288,000
Winterhaven (Yuma), Calif	Fire remedy	Alterations	18,000

HIGHLIGHT STATEMENT

Adequate, up-to-date health facilities of all types are prerequisite to providing proper medical care and public health services. Despite continuous improvement in this direction, many of the present Public Health Service Indian Health facilities—hospitals, health centers and stations are inadequate, are not functionally arranged and properly equipped, involve hazardous conditions, require major repair and thereby represent a major deterrent to efficient use of personnel and the practice of modern medicine. This inadequacy of physical plant results from several factors: (1) age; (2) obsolescence resulting from major changes in hospital practice; (3) lack of facilities, and (4) deferred maintenance. The projects requested herein involving major modification, changes in bed capacity, new hospitals and those providing additional bedspace have been evaluated using the PHS-BIA construction criteria (Nash-Wagner) and have been found to meet the required criteria set forth in this document.

The need for additional staff housing is critical. The Indian tribes who are the beneficiaries of Federal health services are generally located in isolated and sparsely populated areas where trained personnel needed to carry on a health program can not be locally recruited and where the local economy and practices are such that essential personnel recruited elsewhere find that surplus housing for rental simply is not available. At the time when Public Health Service assumed responsibility for the Indian health program, government owned housing at these locations was inadequate in numbers to permit full staffing needed for required health services and to a major degree grossly below normal standards of acceptability. Completed construction since that time has somewhat mitigated the situation but has by no means fully alleviated it. Rental quarters are not available. Recruitment and retention of professionally and technically trained personnel at the isolation and hardship posts to which the majority of Indian health employees are assigned depends on the availability of acceptable governmental quarters.

Public Law 86–121 authorizes the Public Health Service, in cooperation with the Indians, to construct, improve, extend or otherwise provide water supply facilities, drainage facilities, sewage-and-waste-disposal facilities, and other essential sanitation facilities for Indian homes, communities and lands. Public Law 85–151 authorizes the Public Health Service to participate in the construction of hospital facilities in a community hospital for joint use by Indians and non-Indians.

In 1967, with the concurrence of the Appropriations Committees, funds appropriated for projects at Chinle, Arizona (planning a new hospital), White Shield, North Dakota (construct a new health center), and Rock Point, Arizona (construct a new health station), together with $167,000 of funds appropriated for a sewage treatment plant at Kotzebue, Alaska, were reprogrammed and the projects deferred in order to construct projects of a more urgent nature at Belcourt, North Dakota, Kaibeto and Lower Greasewood, Arizona (bids on construction contracts exceeded available funds); Keams Canyon, Arizona (trailers to implement Trachoma Program); Winnebago, Nebraska (obstetrics and nursing areas); and Anchorage, Alaska (expansion of laboratory).

The 1968 estimate contains a request for restoration of these funds so that the deferred projects may be accomplished and needed services provided.

The rebudgeted projects are included at a slightly higher cost, essentially as a result of recent increases in the construction cost index.

To assist in conquering the controllable health conditions afflicting the Public Health Service Indian beneficiaries and to achieve and maintain an improved health status as described under the Indian Health Activities Budget estimate for 1968, it is requested that the projects and programs contained in this estimate be approved.

Funds requested in 1968

	To complete 1967 program	1968 new program	Total 1968 request
Hospitals and clinics:			
Hospitals	$50,000	$4,518,000	$4,568,000
Health centers and stations	53,000	2,232,000	2,285,000
Total hospitals and clinics	103,000	6,750,000	6,853,000
Personnel quarters	0	3,734,000	3,734,000
Alterations	80,000	830,000	910,000
Community facilities serving Indians and non-Indians (Public Law 85-151)	0	250,000	250,000
Sanitation facilities (Public Law 86-121)	464,000	10,000,000	10,464,000
Total 1968 request	647,000	21,564,000	22,211,000

HOSPITALS AND CLINICS

Tuba City Hospital, Tuba City, Arizona	$4,230,000

Project cost estimate

Feasibility funds appropriated 1964	$20,000
Planning funds appropriated 1965 and 1967	215,000
Construction funds requested 1968	4,230,000
Subtotal	4,465,000
Equipment funds to be requested under Indian health activities, fiscal year 1969	225,000
Total estimated project cost	4,690,000

PROPOSED PROJECT

The proposed project involves replacement of the existing 75-bed GM&S hospital with a 125-bed GM&S hospital, its outpatient clinics, adjunct services and supportive elements in order to provide a comprehensive coordinated health program for about 17,500 Navajo Indian beneficiaries in the Tuba City, Arizona Service Unit.

EXISTING FACILITY

The existing hospital was opened in 1954 as a 75-bed general medical and surgical facility. This facility was not designed to meet the tremendous growth in population which has occurred in the last ten years, or the expanded need for and demands an outpatient medical, dental and related preventive health services. It was originally designed to serve an estimated 11,000 Navajo Indians, including the Kayenta sub-agency. The services and activities have increased two-fold in the last ten years causing an extreme shortage of space and crowding in practically all functional areas—outpatient clinics, field health staff offices and adjunct space, administrative and professional offices, pharmacy, laboratory, X-ray, dining room, storage and supply areas.

For the past five years the hospital has been operating at 88 to 96 percent capacity. There is no flexibility in bed space arrangement to assure safe and adequate organization of the medical, surgical and obstetrical services to meet the diversified character of the inpatient load (infants, young children and male and female adults). With the limited space, it has not been possible to meet the steadily increasing need for specialty services, nor the overwhelming need for more preventive health services. Lack of space and poor functional arrangement have prevented a coordinated health program which would integrate the hospital services with the multiplicity of public health activities and services provided in the hospital and the field, at numerous schools and satellite locations.

POPULATION SERVED

The 1960 census enumerated approximately 11,700 Navajos residing in the Tuba City land management (BIA) districts; but also within the hospital service area are the Navajos around Kayenta and adjacent areas to the north and east. About 5,500 in these areas would bring the total of beneficiaries served to over 17,000. It is anticipated that the hospital service population will exceed 18,000 within a few years. This projection is based upon the accelerated school construction program and expanded BIA school enrollment, as well as on the continuing high birth rate. The Navajo population is estimated to be increasing at an average rate of 2.5% a year.

GEOGRAPHIC BACKGROUND

The Tuba City Service Unit covers about 4,400 square miles of the west central segment of the Navajo Reservation in Arizona, almost entirely in Coconino County, and also has for its hospital drawing area the Navajos who live in the Kayenta segment, (an area of 4,015 square miles) to the north and east in portions of Apache and Navajo counties, and in San Juan County, Utah. Kayenta is administratively part of the BIA Tuba City sub-agency.

The region is arid, eroded and vast areas are inaccessible to modern transportation. Tuba City is the principal trading, governmental, health, and tribal center of the service unit. Page, Williams, and Flagstaff are the principal border settlements within three hours travel time of Tuba City by car over paved road. The nearest rail center in Flagstaff, 75 miles south of Tuba City, and 152 miles from Kayenta.

The western Navajo is almost completely isolated from commercial transportation. There is no rail transportation within the area. The isolation of the population presents problems of communication. Many of the people do not speak or read English.

Economically, a majority of the population live a marginal existence. A sampling of 1960 census data indicated a median family income of $1,400 (for the Navajo).

BIRTHS AND INFANT DEATHS

The Navajo birth rate based on registered births has increased steadily in the last decade. Registered births in 1964 indicate a rate of nearly 50 per 1,000 population (twice that in the general population).

Infant deaths although reduced in the past five years, are still high. The average rate for the Navajo (1962–1964) in Arizona was about 48 infant deaths per 1,000 live births, a rate nearly twice that for all races, in 1963. Leading causes of infant deaths are influenza, gastroenteric diseases, prematurity, congentital malformations, and other diseases of early infancy (malnutrition among them). The Tuba City infant death rate of 53 is even higher than the rate for all of the Navajo.

MORTALITY—ALL CAUSES

In 1964 accidents were the leading cause of death among the Navajo; influenza and pneumonia ranked second, diseases of early infancy third and congenital malformations fourth. Deaths from tuberculosis have declined markedly among the Navajo, and ranked seventh as a cause of death.

For the Tuba City Service Unit during the period 1962–64 influenza and pneumonia were reported as the leading cause of death; deaths from accidents were second, and diseases of early infancy third. Deaths from malignant neoplasms, gastroenteritis, diseases of heart and tuberculosis follow among the ten leading causes.

MORBIDITY

Infectious diseases are reported in large numbers. Leading are gastroenteritis, pneumonia and other respiratory infections, otitis media, trachoma, and strep sore throat. Measles has been high in incidence but it appears to have fallen as a result of the immunization program. The Navajo tuberculosis incidence rate of over 200 per 100,000 population in 1965 has dropped by 60 percent compared with ten years ago, but is still almost nine times the incidence rate for all races in the United States. The Tuba City service unit reported an average of nearly 40 newly discovered cases annually over the past three years.

HOSPITALIZED PATIENTS

An unusually high percentage of patients hospitalized in the Tuba City hospital are in the younger age groups. In 1966, 45 percent of the discharges were in the pediatric age group including infants who accounted for 17 percent of all the hospital discharges. In 1966, hospital days for the pediatric age group accounted for 56 percent of the total. Infants and pre-school children suffer from the infective diseases of childhood, influenza and pneumonia and other respiratory conditions, otitis media, gastroenteric illnesses and accidental injuries and the complicating residuals of these conditions.

Influenza, pneumonia, and other respiratory infections accounted for 22 percent of the discharges in 1966. Next leading were deliveries and complications of pregnancy, gastroenteric and other digestive system illnesses, accidental injuries; genito-urinary system diseases.

Discharges, fiscal year 1966, by age group

	Discharges	Percent of total	Hospital days	Percent of total
Total	2,784	100.0	23,248	100.0
Total, pediatric	1,255	(45.1)	13,071	(56.2)
Under 1 year	472	17.0	6,863	29.5
1 to 4 years	464	16.7	4,105	17.7
5 to 14 years	319	11.4	2,103	9.0
Total, 15 years and over	1,529	(54.9)	10,177	(43.8)
15 to 44 years	1,116	40.0	5,920	25.5
45 to 64 years	252	9.1	2,059	8.9
65 and over	161	5.8	2,198	9.4

The average length of stay for these hospitalized patients ranged from a low of 3.9 days on the average for obstetrical patients, to a high of 22 days for patients with vascular lesions affecting the central nervous system and patients requiring longer hospitalization (cancer, diabetes, heart).

Fiscal year 1966—Discharges

Leading diagnostic categories	Discharges	Percent
Total excluding newborn	2,784	100.0
Respiratory system	611	21.9
Deliveries and complications of pregnancy	524	18.8
Digestive system including gastroenteritis, colitis, dysentery	332	11.9
Accidents, etc.	331	11.9
Genitourinary disease	150	5.4
Other diagnoses	836	30.1

Tuba City has an active surgical service, both in and outpatient, but there is a large backlog of elective surgery not provided due to the shortage of beds.

MAJOR WORKLOAD STATISTICS

FISCAL YEARS 1964–1966 AND PROJECTED

The following table includes basic information on the utilization of the hospital during the period indicated:

	1964	1965	1966	Projected after construction completed
Admissions	2,580	2,971	2,928	3,825
ADPL	66	68	70	105
Births	563	550	451	680
Average length of stay ... days	9.1	8.3	8.4	10.0
Outpatient medical visits to facility	41,186	38,172	37,168	42,000
Dental:				
Patients examined	3,833	3,357	3,373	4,000
Services provided	13,594	12,282	14,956	16,000

Satellite field clinic locations are Howell Mesa, Kaibeto, Dennebito Dam, Red Lake and Gray Mountain. Field clinic visits to physicians totalled more than 4,000 in 1966 (reflecting extension of clinic services to the schools and especially immunization activity).

PROPOSED PLAN

Under the proposed plan, primary emphasis will be given to the facilities and staff required for the necessary extension of health protection services, outside of the hospital facility to the Navajo of this area. The services in the outlying locations will be integrated with the hospital inpatient and outpatient program and particular emphasis will be given to maternal and child health clinics and school health.

The plan involves a replacement of the existing facility and increasing the beds to a total of 125 with provision of sufficient isolation beds for care of infectious cases (tuberculosis and other conditions requiring isolation) and beds for patients with handicapping and crippling conditions. BIA has expresed interest in the old Hospital building for use as a sub-agency administration facility upon construction of the new hospital.

ANTICIPATED BED DISTRIBUTION

The following shows the bed distribution and estimated average daily census, by major clinical service, after construction:

	Beds	ADPL
Total, excluding newborn bassinets	125	105
Medical	27	22
Surgical	20	17
Pediatric	60	51
Obstetrics	18	15
Bassinets	24	

The unusual peak loads during epidemic periods have often resulted in over 100 percent occupancy of pediatric and medical beds The projected number of admissions and the ADPL reflect an expected hospital admission rate of 225 per 1,000 population, with an average stay of ten days. The proportion of pediatric patients represents about half of the total load. Surgical services will increase as will the average length of stay for complicated cases. An increased field health program (case finding, home visiting, expansion of school clinics with increased school enrollment), will result in an increase in outpatient visits and also more referrals for hospitalization.

COMMUNITY FACILITIES AND REFERRAL FACILITIES

The Arizona State Hospital Plan, 1963 lists only two non-PHS Indian hospitals in the area. These are at Page, Arizona (25 acceptable beds), 79 miles north of Tuba City on the Utah border and Sage Memorial Hospital, Ganado Mission (47 acceptable beds recently constructed), 110 miles east of Tuba City and outside of the drawing area of the Tuba City Service Unit (serves the Chinle population).

Referral of cases requiring specialized care are to the Indian hospital in Gallup, New Mexico about two hundred miles away. Specialized laboratory services and consultant services are limited and must be obtained under contract from points over two hundred miles away.

The distinct health needs of the Navajo, the isolation of the Tuba City Service Unit, the level of acculturation, cultural pattern and degree of understanding of modern medicine require the operation of direct Federal services through a coordinated comprehensive preventive, curative and restorative health program.

Communication through interpreters is necessary, since 40% do not read or speak English. The emphasis for each of the health program activities is continuing assistance to the Navajo in order to increase their understanding of both health problems and the means made available to them of protecting themselves and their communities against controllable diseases.

The unique health needs of these people are best met by the PHS Indian Hospital and satellite field programs, with active Tribal participation.

1968 REQUEST

Although original plans were to modernize and expand the present facility, the feasibility study indicated that a completely new facility could be provided for little more than the cost of the intended alteration project. The funds requested herein are to construct a new (replacement) facility.

Additional staff is required to execute an expanded comprehensive program. Under the Personnel Quarters Activity of this estimate, there is a request for 121 units of housing to permit successful recruitment of personnel required to operate the hospital.

Chinle Hospital, Chinle Ariz	$288,000

In 1967, Congress appropriated funds to initiate planning for the construction of this facility. In order to satisfy requirements of a more urgent nature, the funds were reprogrammed with the approval of the Congressional Committee and the project deferred. It is requested that the funds be restored so that the Public Health Service may provide health services to this group of beneficiaries.

Project cost estimate

Planning funds requested in 1968	$288,000
Construction funds to be requested in 1969	3,484,000
Subtotal	3,772,000
Equipment funds to be requested under Indian health activities in fiscal year 1969	300,000
Total estimated project cost	4,072,000

PROPOSED PROJECT

The proposed project involves the construction of a new 100-bed general medical and surgical hospital and its associated clinics and ancillary services to provide major diagnostic and treatment services for the rapidly growing Navajo beneficiary population in the Chinle (Arizona) Service Unit. The 16,000 Navajos estimated to be residing in and around Chinle within the next few years would be provided with comprehensive inpatient and outpatient services through this new facility and its field health program. A comprehensive preventive health program will be extended from the hospital to the surrounding areas, through an active outpatient department and through a number of field health stations and school health units.

PRESENT SERVICES

There is no hospital in the Chinle Service Unit at the present time. Health services are provided primarily by the Chinle Health Center and field health stations which are satellites of the health center. Hospital care is provided by three different hospitals: Keams Canyon, a PHS facility about 85 miles to the west; Sage Memorial Hospital, a mission hospital at Ganado about 33 miles to the south; and the Ft. Defiance PHS Hospital 65 miles to the southeast. Many babies are born in hogans and illnesses go untreated because of the distances to available hospital facilities.

As a result of rapid population growth in these communities in recent years, few general hospital beds are available to meet the needs of Chinle beneficiaries.

POPULATION SERVED

About 12,000 people are recorded as living in the service unit by the 1960 census. The population is growing rapidly and is expected to reach approximately 16,000 within the next five years. It is a young population, with a median age of 15 years. About 20% of the population is under five years of age. The population is relatively more diverse than that of the Tuba City service unit (Western Navajo). This results in a variety of demands made upon the health services. Traditional healing practices are still adhered to.

It is estimated that not more than one-third of the Navajos seen in the Chinle clinics are able to give medical history information in English. Families are large compared to non-Indian population groups, with an average number of more than six persons per family. For the vast majority, housing is the traditional log and mud hogan, a single room, with a dirt floor. Income is derived chiefly from raising sheep, or seasonal agricultural work during the spring and summer months. Full-time wage earners are few. The average family income is about $1,700 per annum (1960 census data.)

GEOGRAPHIC BACKGROUND

The Chinle Service Unit is located in the center of the Navajo Reservation in northeastern Arizona, a roughly triangular area stretching about 100 miles east-west from the New Mexico border, and about 70 miles north-south with the northern most point about 15 miles from the Utah border. It covers an area of 3,400 square miles. The land is generally semi-arid and capable only of supporting small herds of sheep.

The Chinle community is the trading center of the central part of the reservation. Roads radiate out from it to various other reservation communities. The paved major highway in the area runs north and south through Chinle to the Utah border. Most of the roads in the service unit are gravel, dirt or primitive trails which are virtually impassable to motor vehicles during the winter and spring months.

TRIBAL AND BIA ECONOMIC DEVELOPMENT PLANS

The major community change in this Service Unit visualized at this time is limited to Chinle and Many Farms. A 400 pupil day school, and a 1,000 pupil elementary boarding school are already established and the BIA long-range plans will include a boarding high school in this area, (1,000 pupils) to be located at Many Farms. A community plan has been drawn for Chinle, designating shopping, recreational and residential areas. The residential area will be zoned for three classes of homes: (1) FHA type or quality; (2) low cost public housing; (3) "do-it-yourself" small houses. Supporting water and sewer systems will be completed prior to the start of the proposed hospital.

Several business proposals for a shopping complex and/or tourist facilities are being considered for Chinle. The Navajo Tribe visualizes Chinle becoming the first independent town on the Reservation. Recently several Navajo-owned and operated filling stations, stores and one cafe have opened in Chinle. A new jail and court house (with a few modern quarters) and a Chapter House have been built. Each year there is an increasing number of tourists visiting Canyon de Chelly National Monument. Chinle is the entrance to the Canyon. The overall Economic Development Program Planning subcommittee is working with regional Park Service personnel to fully inform Park Rangers in all nearby National Parks and Monuments about roads, etc., in order that accurate information may be provided tourists interested in visiting the Reservation. The Navajo Park Commission has built several nice picnic sites in and around Canyon de Chelly.

The tribe has indicated an interest in investing in a private proposal for a large slaughter and packing house, USDA approved and inspected, at Many Farms. BIA and Tribal irrigation programs have activated irrigation projects in Many Farms, providing a source of income for many families. There is a sizeable increase in home building in the Chinle Valley from Chinle to several miles north of Many Farms.

There is a noticeable trend among the Navajos to begin moving into communities where there is: (1) a large school; (2) a paved road, and (3) a modern water system.

BIRTHS AND DEATHS

The birth rate in the Chinle Service Unit is about 45 per 1,000 population, twice that of the U.S. population as a whole. According to available information (1962) 18% of the births for the service unit as a whole occurred of the hospital, with this proportion running much higher in some of the more isolated communities. Infant mortality is high, about 45 infant deaths per 1,000 registered live births. For those births which are not registered, it is observed that infant deaths are even higher.

The leading causes of death in this service unit in 1964 were accidents, gastroenteritis, influenza and pneumonia, diseases of early infancy, diseases of the heart and tuberculosis.

MORBIDITY

Infectious diseases are reported in large numbers. In 1965 the leading diseases were otitis media (1,598 reported cases) and gastroenteritis (1,408 cases), followed by pneumonia and streptococcal sore throat. Tuberculosis is still a serious problem, although the rate has declined in recent years. In 1965 the Navajo rate for new active cases was 217 per 100,000 population, about eight times the rate for the general population of the United States.

Overall disease patterns in the Chinle Service Unit are those relating to the youthfulness of the population, its low economic status and unfavorable environmental conditions. The most frequent causes of illness are the acute respiratory infections, the diarrheal diseases, and the common communicable diseases of childhood. In the four years (1962–1965) the most frequently reported notifiable diseases were as follows:

	1962	1963	1964	1965
Otitis media	672	1,105	1,475	1,598
Diarrheal diseases	1,091	2,503	1,771	1,409
Influenza and pneumonia	1,238	1,236	486	736
Streptococcic sore throat and scarlet fever	616	1,428	578	343
Trachoma	241	231	408	322
Measles	171	497	3	290

Because of the insanitary conditions of the home environment in which most of the beneficiaries live, the gastroenteric conditions are a year-round problem. The complications of gastroenteritis such as dehydration, acidosis, weight loss (especially in infants) are the cause of many referrals to the hospitals.

Otitis meda, a leading reportable disease, is a serious problem, particularly among the young children. In spite of continuing follow-up examinations and treatment, many children have persistent drainage from the ears. Varying degrees of permanent hearing loss are a resultant complication of these ear infections.

Other disease problems are impetigo, particulary in young children. Important factors relating to the solution of the problem includes health education regarding personal hygiene and adequate water supplies in the home. Trachoma and conjunctivitis are serious eye infections that continue as problems.

A characteristic of the disease patterns in this service unit is the explosive epidemic, a constant threat which must be guarded against continually. An example of this is the hepatitis outbreak of 1957–1958. In one month, December 1957, the Chinle Health Center reported 153 cases. Although the epidemic subsided in the Chinle area the following month, there was a marked increase in reported cases of hepatitis from adjacent service units throughout the rest of the year. No large-scale outbreaks have occurred since that time, but sporadic cases occur (28 in 1963, 19 in 1964 and 43 in 1965) and the threat of an outbreak remains.

HOSPITALIZED ILLNESSES

Since there is no hospital in the Chinle Service Unit at present, data specifically for this population group cannot be given. The experience for the smaller Navajo hospitals (excluding Gallup) are assumed to be representative of the Chinle Service Unit.

Pediatric patients (under 15 years of age) constituted 38 percent of the patients discharged in 1965. About 70% of these were hospital episodes among children under five years of age.

Leading causes of hospitalization for the peripheral hospitals on the Navajo Reservation (excluding Gallup) in 1965 were deliveries and complications of pregnancy, diseases of the respiratory system, gastroenteric conditions (including gastroenteritis and dysentery), accidents, eye and ear diseases (especially trachoma and otitis media) and skin diseases.

Of the 11,362 discharges from the five general hospitals (excluding Gallup) the distribution of discharges in 1965 by leading diagnostic group was as follows:

Diagnostic category	*Percent*
Deliveries and complication of pregnancy	24
Respiratory (including influenza and pneumonia)	15
Accidents	12
Digestive system diseases (including dysentery)	10
Diseases of eye and ear	4
Skin	3
All Other	32
Total	100

Similar to the experience for other Navajo hospitals, pediatric patients also experience the highest average length of stay. This is a reflection of various factors including poor general health level and nutritional deficiency on admission, and the crowded, poor home conditions where these young children are exposed to reinfection and where only limited means are available for adequate health measures to protect them from disease and illness. Longer hospitalization is necessary to establish an adequate health level, since home care for a convalescent is almost totally lacking. As the complications of pregnancy and immaturity among newborn lessens, the average stay of obstetrical cases will lessen, but this is not expected until prenatal care is extended and better understood.

Complicated medical, surgical and obstetrical problems will be referred to the DIH hospital at Gallup or contract facilities in Albuquerque for care. State and other resources will be utilized for mental patients. DIH hospitals and contract facilities will be utilized for tuberculosis patients.

There is only one non-Federal hospital in the area, the 47-bed Sage Memorial Mission Hospital at Ganado. This facility, already fully utilized by those living close by, is expected to be used less and less by the Chinle population. As the only facility available to non-Indians in the area, this hospital must be expected to serve the increasing non-beneficiary population.

In addition to the need for general hospital beds in this culturally isolated and rapidly growing area where the population is exploding, an expansion of outpatient services (preventive and curative) is anticipated.

The Chinle health center was designed to handle a population of about 4,000. Besides the overall increase in population, the BIA school construction program has caused a rapid expansion in school enrollees, for whom health facilities must be provided.

The outpatient services at the health center and its satellite clinic have increased as follows in the last six years:

Fiscal year	Outpatient visits (medical)		
	Total	Facility	Field or home
1961	25,334	20,049	5,285
1962	28,564	23,777	4,787
1963	38,867	24,783	14,084
1964	41,345	26,301	15,044
1965	44,800	29,035	15,765
1966	45,848	30,684	15,164

A large proportion of the health center services are provided to the school age population.

A 1,000 Student BIA Boarding School is close by the health center and a 1,000 pupil public school is located there. Another 300 pupil public school was also reported to have been planned. This school expansion explains in part the very heavy demands placed on the health center which is even now too small to meet the local needs of the Chinle community.

Over the past few years field health services have been extended at satellite field clinic locations. The larger health stations and clinic locations are at Lukachukai, Pinon, Rock Point and Round Rock. Services are also provided on an itinerant basis by the Chinle Health Center staff at the following places where there are schools and family groups: Cottonwood, Low Mt., Nazlini and Rough Rock, as well as at other isolated locations.

PROPOSED PLAN

The proposed plan is to develop a comprehensive health program providing for all aspects of community health services. Preventive services with emphasis on immunizations, case-finding and screening programs will encompass a comprehensive program of child care, prenatal and postnatal care, school health, adult outpatient and diagnostic services, tuberculosis clinics, EENT clinics and dental care; also nutrition consultation and environmental health services. With increased emphasis on health education, a significant, progressive increase in the use of outpatient services is expected. A system of referral for hospital and post-hospital follow-up, specialty care and rehabilitation services is planned.

Such a program is influenced in large measure by the vastness of the geographic area involved, the isolation of the centers of population, the lack of community resources, and difficulties of communication. In this setting, programming includes providing for a network of clinics through which services, both therapeutic and preventive, are provided close to population settlements and schools.

In addition to providing clinical services on an inpatient and outpatient basis, the hospital will serve as a base for a complete and comprehensive field health and preventive program. The five-year Many Farms Field Health Project (1957–1962) encompassing a portion of the Chinle Service Unit revealed a backlog of illness and high proportion of preventable disease. It was one of the conclusions of this study that an adequate and integrated field health and hospital program with accessible facilities was essential if inroads were to be made on the backlog of illnes found.

The proposed 100-bed hospital is to provide general medical, surgical, obstetrical and pediatric care for inpatients, and comprehensive outpatient medical, preventive health and dental services. Radiological and pathological services will be available on a full-time basis as well as complete supportive services.

The hospital will serve as the focal point for a complete and comprehensive field health and preventive health program for a service population of about 16,000.

For hospitalization the admission rates and patterns follow closely those of the Navajo at other hospitals on the reservation. Admissions usually approximate 200 per 1,000 population. Patient stay averages nine days with pediatric cases requiring an average stay up to 15 days. This is a reflection of various factors including the poor general conditions of cases on admission which necessitates longer hospitalization to establish an adequate health level.

Thirty-eight percent of admissions are pediatric cases (which account for 47 percent of the hosiptal days). Of the adult cases surgical conditions account for 26 percent of admissions, medical conditions 20 percent and obstetrics 16 percent.

Based upon the resident population of 16,000 in the Chinle Service Unit, the admission rate of the Navajo population and experiences at the Chinle Health Center in treating medical and dental conditions on an outpatient basis, the expected inpatient and outpatient workloads are indicated as follows:

Admissions	3,200
Births	700
Average length of stay	9
ADPL	80
Outpatient medical visits	40,000
Dental patients examined	2,500
Dental services provided	10,000

By projecting an average of 80 percent occupancy of available beds the ADPL will require a minimum of 100 beds. The projected bed distribution and utilization is as follows:

	Beds	ADPL
Total (excluding newborn)	100	80
Medical	25	18
Surgical	15	12
Pediatrics	45	38
Obstetrics	15	12
Newborn bassinets	(20)	----------

The distinct health needs of these beneficiaries, their level of acculturation, the geographic isolation of their communities and the present lack of available hospital beds require the operation of direct Federal services, through a coordinated comprehensive preventive, curative, and restorative health program.

REFERRAL FACILITIES

Extremely complicated medical or surgical problems will be referred to the Public Health Service hospital at Gallup or contract facilities in Albuquerque for care. State and other resources will be utilized to care for mental patients. Other Public Health Service facilities or contract hospitals will be utilized for tuberculosis.

Mescalero Hospital, Mescalero, New Mexico $50,000

Project cost estimate

Planning (savings from other projects)	$45,000
Construction funds appropriated in 1967	627,800
Balance of construction funds requested in 1968	50,000
Subtotal	722,800
Equipment funds to be requested under Indian health activities in fiscal year 1968	45,000
Total estimated project cost	767,800

In 1967 Congress appropriated funds to proceed with all budgeted projects. The amount requested here for the Mescalero Hospital project is that portion required to complete the project in 1968.

Clinics (Health centers, school health centers and stations) $4,568,000

A comprehensive preventive health program offers the most promising opportunity for eventually reducing the more costly medical and hospital services. Failure to continue to expand Field Health activities would unnecessarily delay the achievement of a level of health for Indian beneficiaries comparable to that of the general population.

The definition of Health Centers and Health Stations for which funds are requested follows:

(1) Health Center: A facility where health services are available at least 40 hours a week and where physicians' services are available either full time or on a regularly scheduled basis (at least weekly) and where other health staff is stationed such as dental, clinical and/or public health nursing, sanitation, health education and medical social services.

(2) Health Station: A facility where, although physicians' services may be regularly scheduled, physicians are not available full time, but one or more other health services are available full time or on a regularly scheduled basis, such as dental, public health nursing, sanitation, health education and medical social services. Such services are available from itinerant personnel headquartered in Public Health Service Indian Hospitals and Health Centers or on a contractual basis.

The location, need and estimated cost for each of the proposed facilities follows:

Health Centers and School Health Centers	$2,120,000
White Shield, North Dakota	263,000

In 1967, Congress appropriated funds for the construction of this facility. In order to satisfy requirements of a more urgent nature, the funds were reprogrammed with the approval of the Congressional Committees and the project deferred. It is requested that the funds be restored so that the Public Health Service may provide health services to this group of beneficiaries.

Project cost estimate

Construction funds requested in 1968	$263,000
Equipment funds to be requested under Indian health activities in fiscal year 1969	40,000
Total estimated project cost	303,000

It is proposed to construct a health center complex at White Shield, North Dakota, on tribal land to serve as the center of operation for the health program for the estimated 2,500 beneficiaries of the Fort Berthold Reservation. This reservation of 430,000 acres is in the northwest portion of North Dakota above Garrison Dam on the Missouri River. The Garrison Reservoir divides it into five segments. All Fort Berthold health operations will be directed from this location including activities in proposed health stations at Mandaree (94 miles), Twin Buttes (127 miles), and New Town (54 miles).

CURRENT PROGRAM AND EXISTING FACILITY

Space is currently rented at New Town for the administrative direction of what is basically a program of contract health services. Field clinics are held twice monthly at White Shield, Mandaree, and Twin Buttes. Outpatient care on other than clinic days is provided beneficiaries in private physician's offices in New Town, Garrison, Parshall, Hazen, Beaulah, Stanley, and Watford City. Hospitalization and inpatient care services are provided in Garrison, Hazen, Stanley and Watford City. Contract dental services are provided in Hazen, Stanley, Garrison, Dickinson, Watford City, Beaulah, and Parshall.

There is currently one Social Worker and one clerk handling matters involving eligibility and administrative duties of the service unit. The public health nursing service is under contract with the North Dakota State Health Department with three nurses giving part-time service to this reservation. One reservation sanitarian is currently on the staff and is responsible for checking wells and implementing P.L. 86–121 sanitation construction projects.

TYPE AND EXTENT OF CARE NEEDED

Health conditions on the reservation indicate a need for a comprehensive health program (with special emphasis on preventive services and rehabilitation) to adequately meet the health needs of this population group. Examples of health problems which exist are illustrated by the following indices:

1. *Respiratory diseases*—accounts for 30% of total hospital admissions—56% of these cases being in the 0–4 age group.
2. *Digestive tract disease*—second highest cause of hospitalization.
3. *Otitis media*—220 cases reported in 1965.
4. *Infant death rate* (1962–1964)—39.2 per 1,000 live births.

Infant mortality rates in this service unit are high. The average 1962–1964 rate of 39.2 is 60% higher than the infant mortality rate for all races. In 1964 the all races rate was 24.8; the rate for all Indians (excluding Alaska Natives) was 35.9 in that year.

The leading notifiable diseases in 1965 were gastroenteritis, otitis media, pneumonia, streptococcal sore throat. The following table compares reported cases of these and other leading diseases for the years 1963–1965.

Reported cases, leading notifiable diseases

	Fiscal year 1963	Fiscal year 1964	Fiscal year 1965
Gastroenteritis	238	138	309
Otitis media	(1)	245	220
Pneumonia	239	168	157
Streptococcal sore throat	131	114	136
Chickenpox	40	62	33
Measles	72	33	18
Mumps	9	20	18
Hepatitis	41	25	2

[1] Not available.

Reservation workloads	Fiscal year 1964	Fiscal year 1965	Estimated,[1] fiscal year 1966	Projected
Total outpatient visits	12,738	12,476	12,900	13,000
Total dental services provided	2,205	2,673	2,880	4,000
Total cases hospitalized	1,162	1,141	1,250	1,300
Total hospital-days	8,788	9,944	10,000	10,000

[1] Fiscal year 1966 data pending compilation of tab runs.

Inpatient care by diagnostic category, 1965 contract hospital discharges

Leading causes	Discharges		Hospital-days	
	Number	Percent	Number	Percent
Total discharges, excluding newborn	1,141	100.0	9,944	100.0
Respiratory system diseases	342	30.0	2,948	29.6
Digestive system diseases	162	14.2	1,342	13.5
Accidents	127	11.1	1,062	10.7
Deliveries and complications of pregnancy	90	7.9	460	4.6
Genitourinary system diseases	74	6.5	775	7.8
Nervous system and sense organ diseases	54	4.7	402	4.0
Infective and parasitic diseases	48	4.2	257	2.6
Skin and cellular tissue diseases	47	4.1	450	4.5
Allergic, endocrine, metabolic, and nutrition diseases	45	3.9	387	3.9
Circulatory system diseases	42	3.7	424	4.3
All other conditions	110	9.7	1,437	14.5

Continued hospital care and treatment of diseases can be adequately handled by utilization of community medical and hospital resources. The problem, however, is compounded by several factors unique to an economically deprived group who are not acculturated and who have special needs. Efforts to reduce the excessive disease and mortality require concentration in areas of public health service and practice. A full range of preventive health activities which concentrates on patient education in matters related to health and health practices is necessary in order to insure the acceptance of and utilization of techniques and practices which can and will prevent diseases which are now common and uncontrolled.

DEFICIENCIES OF CURRENT FACILITIES

The current facilities consisting of rented space in New Town, a room in the BIA school at White Shield, a small space in the tribal building at Twin Buttes, and space in the BIA building at Mandaree are completely inadequate for carrying on the current local ongoing programs and would be far less effective in meeting the more comprehensive program required to satisfy the health needs of this reservation.

PROPOSED FACILITIES

It is proposed that a health center be constructed and staffed at White Shield. This location which is on the eastern segment of the reservation, is a population center for approximately 400 beneficiaries and accessible to another 340. It would be the focal point for all of the Ft. Berthold comprehensive health services. White Shield is closer to Minot and Bismarck, both of which have a population of over 30,000 making them more attractive, medically speaking, because of the specialty services available to the beneficiary. These relationships are extremely important to the conduct of a comprehensive health program.

A health center with space to provide headquarters and services for a comprehensive medical care and health program to the Fort Berthold population will be complemented by satellite health stations at Mandaree, New Town and Twin Buttes. To conduct this program the following staff will be required: 1 health educator, 2 medical officers, 1 dental officer, 1 dental assistant, 1 pharmacist-administrative officer, 2 public health nurses, 1 clinic nurse, 2 practical nurses, 1 medical social worker, 1 technician, 2 clerks, 1 maintenance worker, 1 janitor chauffeur and 2 sanitarian aides. Three of these positions are currently on duty at New Town. Fourteen new positions will be requested in 1968 and one in 1969 making a total of 17 and 18 positions respectively.

Workload for the reservation upon completion of this health center and the satellite health stations will approximate annually:

Outpatient visits	13,400
Dental services provided	4,000
Hospital admissions	1,400
Hospital days	11,000

Fifteen units of housing will be required at this location for personnel and are included under the Personnel Quarters Activity.

Many Farms, Arizona	$372,000

Project cost estimate

Planning funds in 1967	$41,000
Construction funds requested in 1968	372,000
Subtotal	413,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	41,000
Total estimated project cost	454,000

It is proposed to construct a new school health and community health center at Many Farms, Arizona, which is an Indian Trading Center on the Navajo Reservation, 15 miles from Chinle. It will serve a rural population of approximately 2,500 and a large school population. A 400 pupil public school is now in operation, a 1,000 pupil BIA elementary school is now nearing completion. In addition a 1,000 pupil BIA boarding high school is to be constructed and ready for occupancy by September 1968. Since no other health facilities are available at the location, construction of a new facility is necessary to serve the 2,500 resident population and 2,400 school children. The only health service presently available consists of screening by an itinerant school health nurse who commutes from Chinle, and refers students requiring physicians' services to the Chinle Health Center. The local population must travel 14 miles to Chinle for health services.

PROPOSED FACILITY

It is proposed to build a facility to serve as a school health, and community health center that will adequately meet the needs of the program. The facility will include space for administration; for medical, public health activities and dental clinics. It will also include space for examining and treatment rooms to properly examine, diagnose and treat minor illnesses and injuries. The proposed facility will also provide space for routine dental care and complete physical examinations and for screening patients for more serious conditions who would be referred to DIH hospitals. The new facility will also contain ancillary space to provide routine laboratory services, health counseling to all students and in-service training to school and dormitory personnel. Emergency day bed care for students requiring observation to determine if hospitalization is necessary will also be provided.

PROPOSED PROGRAM

A comprehensive school health program of curative and preventive activities will include outpatient medical, public health nursing, and dental services and screening for referral of patients requiring hospitalization in PHS facilities at Ft. Defiance and Gallup. Eventually, after the new 100-bed hospital planned at Chinle is completed, patients from Many Farms will be referred to the Chinle Hospital for hospitalization. The beneficiary population residing in this area will be provided comprehensive services through this center and a proposed satellite health station at Rough Rock, 22 miles west. Maternal and child health services will be emphasized.

Upon completion of this facility anticipated workloads will be as follows:

Medical outpatient visits	9,000
Immunizations	5,000
Nurse visits	25,000
Dental services:	
Individuals examined	2,200
Services provided	9,000

Staffing will consist of: 1 medical officer; 2 dental officers; 4 dental assistants; 1 public health nurse; 2 clinic nurses; 2 practical nurses; 1 pharmacist; 1 medical record clerk; 1 laboratory technician; 1 community worker; 1 administration clerk; 1 maintenanceman; and 1 chauffeur-interpreter. It is anticipated this staff will be required in F.Y. 1969.

Chilocco, Okla ---------- $270,000

Project cost estimate

Planning funds appropriated in 1967	$22,000
Construction funds requested in 1968	270,000
Subtotal	292,000
Equipment funds to be requested under Indian health activities in fiscal year 1969	23,000
Total estimated project cost	315,000

It is proposed to replace the existing unsafe and functionally inadequate school health center facility located on the campus of the BIA Indian School at Chilocco, Oklahoma. Student enrollment, which reached nearly 1,000 in 1966, is projected at about the same level. The school community is an entity with no near neighbors, seven miles from Arkansas City, Kansas and 60 miles from the nearest PHS Indian Hospital at Pawnee, Oklahoma.

EXISTING FACILITY

The existing facility is a frame, stucco structure, constructed with student labor in 1926. Each part of the structure was hand crafted with little regard to dimensions or standard construction practices and even simple repairs are difficult and expensive to accomplish. There is a two story center section providing office space. Medical and dental clinics and kitchen space are provided for on the first floor (second floor not used) and there are single floor wings on either side of the structure which have open wards and bath rooms. The building continues to settle and cracks in plaster recur. Overnight care of patients has been discontinued and only day bed care is provided. Cases needing 24 hour care are referred out to local hospitals in Arkansas City, or PHS Indian Hospitals at Claremore, Pawnee or Talihina, Oklahoma. Physical arrangement of this building is very poor and does not adapt to efficient arrangement of equipment and prohibits the performing of necessary service functions. The Bureau of Indian Affairs is proceeding with long range plans for remodeling or replacing obsolete buildings on this campus.

Current workload and projections

	1963	1964	1965	1966	Workload projections
School enrollment	1,069	1,172	1,082	996	1,000
Outpatient visits:					
Physicians	1,942	692	852	755	1,000
Nurse	11,160	5,582	8,032	[1] 4,228	5,000
Dentist	1,866	1,887	1,025	932	1,200
Immunizations (completed and boosters)	2,869	4,498	3,707	NA	4,000

[1] Number of visits indicated in fiscal year 1966 reflect revised system of reporting in that multiple daily visits by an individual are tabulated as single visits.

PROPOSED FACILITY

It is planned to construct a new school health center facility at this location that will provide the environment for conducting an adequate school health program. The new facility will include space for: administration, medical, public health activities and dental clinics. It will also include space for examining and treatment rooms to properly examine, diagnose and treat minor illnesses and injuries. The proposed facility will provide space for dental care. It will enable screening patients for more serious conditions for referral to hospitals or specialized clinics. It will contain ancillary space to provide routine laboratory services, health counseling to students and in-service training to school and dormitory personnel. Also to be provided is emergency day bed care to students requiring observation to determine if hospitalization is necessary. All illnesses requiring overnight hospital care will be referred to PHS Indian or contract hospitals.

The proposed staff of the Chilocco, Oklahoma School Health Center is as follows: 1 medical officer; 1 dental officer; 1 dental assistant; 1 public health nurse; 2 nursing assistants; 2 clinic nurses; 1 medical record clerk; 1 clerk administration and 1 maintenanceman (handy man). It is anticipated that this staff will be required in F.Y. 1969.

Riverside, Calif. $434,000

Project cost estimate

Planning funds appropriated in 1967	$30,000
Construction funds requested in 1968	434,000
Subtotal	464,000
Equipment funds to be requested under Indian health activities in Fiscal Year 1969	41,000
Total estimated project cost	505,000

Plans are to replace the existing unsafe and functionally inadequate School Health Center located on the Campus of the Indian School on the outskirts of Riverside, California with a new 16 bed infirmary type School Health Facility. This facility will provide for the operation of a coordinated comprehensive health program for over 1,000 boarding students enrolled in the Bureau of Indian Affairs Boarding School at this location.

EXISTING FACILITY

The existing building constructed in 1904, is a two story wood-frame structure of approximately 11,760 square feet providing 35 infirmary beds for minor illness care. The structure does not lend itself to modernization, is obsolete, unsafe and in a deteriorated condition. The Bureau of Indian Affairs, proceeding with long range plans for remodeling the school campus is completing a dormitory which is within three feet of the present infirmary structure. This structure will be razed sometime in 1969.

The proposed replacement structure for this Health Center is a modern infirmary building with capacity to meet the basic health needs of some 1,000 students residing on this campus.

Current and projected workloads

	1963	1964	1965	1966	Workload projection upon completion
School enrollment (peak)	989	1,061	1,081	985	1,000
Outpatient visits:					
Physician	7,049	8,060	6,247	3,000	7,000
Nurse	20,465	23,499	39,395	37,894	*20,000
Dental:					
Patients examined	1,024	1,097	1,024	658	900
Treatments provided	4,224	3,088	4,234	4,146	5,300
Inpatient:					
Admissions	502	470	473	494	500
Peak census	26	15	19	31	16
Average daily infirmary inpatient	9.3	5.0	6.0	7.0	9

*Nurse visits will decline through availability of full-time physician services.

PROPOSED FACILITY

The new school health center and infirmary will provide space to meet the basic requirements for providing the services indicated in the above projected workload estimate. This will include space for administration; medical, public health and dental clinics with offices; examining and treatment rooms sufficient to properly examine, diagnose and treat minor illnesses and injuries, and give routine and specialized dental care. It will enable screening for referral of serious conditions or specialized clinics; providing immunizations, physical examinations, health counseling and tests on all students; and giving in-service training to school and dormitory personnel. Space for a minimum of 16 beds will provide for the peak load of minor illnesses (including communicable diseases not usually accepted in community hospitals). Serious illnesses and complicated cases will be hospitalized in community hospitals in Riverside.

The proposed staff for the Riverside School Health Center is as follows: 1 medical officer; 2 dental officers; 4 dental assistants; 1 public health nurse; 6 clinical nurses; 5 nursing assistants; 1 pharmacist; 1 lab technician; 2 medical records personnel; 1 administrative clerk; 2 food service workers; and 1 maintenance man. It is anticipated this staff will be required in F.Y. 1969.

Teec Nos Pos, Arizona	$105,000

Project cost estimate

Construction funds requested in 1968	$105,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	113,000

Teec Nos Pos is located 28 miles west of Shiprock on Arizona State Highway 64 and the Junction of Four Corners Highway, Arizona Route 364. A gravel road runs south off of Arizona Route 64 to Sweetwater and Immanuel Mission. No health facilities exist at present in this community.

It is proposed to provide a new school health center facility at this location that will be adequate for conducting a school health program. The new facility will include space for: administration, medical public health activities, and dental clinics. It will also include space for examining and treatment rooms to properly examine, diagnose and treat minor illnesses and injuries. The proposed facility will provide space for dental care. Patients will be screened for more serious conditions for referral to hospitals or specialized clinics. Emergency day bed care will be provided for students requiring observation to determine if hospitalization is necessary. All illnesses requiring overnight hospital care will be referred to the PHS Indian Hospital at Shiprock or contract hospitals. It will contain ancillary space to provide routine laboratory services, health counseling to students and in-service training to school and dormitory personnel.

Upon completion, this facility will serve pupils attending the following BIA schools:

	Pupils
Teec Nos Pos Boarding School	840
Aneth Boarding School	420
Baclabita Day School	60
Mission Indian School	35

This health center will serve an additional 1,400 beneficiaries residing in and around the community.

Major workload (projected)

Outpatient visits:	*Annual*
Medical	900
Nursing	2,600
Clinic (General)	3,100
Dental	3,800

Proposed staff for the Teec Nos Pos School Health Center is as follows: one school nurse; one licensed practical nurse; one janitor-driver; one clerk; one dental officer; two dental assistants. It is anticipated this staff will be required in F.Y. 1969.

Five units of housing will be required at this location for personnel and are included under the Personnel Quarters Activity.

Beshbitoh, Ariz.	$104,500

Project cost estimate

Construction funds requested in 1968	$104,500
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	112,500

Beshbitoh, Arizona, on the Navajo Reservation, is the site of a new 1,000 pupil boarding school in the Steamboat Chapter where no health facilities exist at present. The school, in an area remote from any existing facilities, is located approximately 9 miles southwest of Steamboat, 12 miles east of Jeddito, and 21 miles west of Ganado. The new school health center facility will provide space for administration, medical, public health activities and dental care and necessary offices; sufficient examining and treatment rooms to properly examine, diagnose and treat minor illnesses and injuries and give routine and specialized dental care. It would provide adequate space for the screening of serious conditions or those needing hospital care, immunization programs, physical examinations, and health counseling. Those students requiring hospitalization will be referred to the hospital at Fort Defiance.

The new facility will serve the Steamboat Chapter, a small eastern portion of the Jeddito and White Cone Chapters, and the local population. The primary population to be served by this facility consists of 1,128 pupils to be enrolled in the Bureau of Indian Affairs school and the approximately 1,490 adult and pre-schoolers living in Beshbitoh. The secondary service population would be those students enrolled at the Bureau of Indian Affairs schools at Steamboat and White Cone.

Major workload (projected)

Outpatient:	
Medical	1,200
Nursing	3,300
Clinic, general	3,600
Dental	3,300

The staff will consist of: 1 school nurse, 1 licensed practical nurse, 1 clerk, 1 maintenance man, 1 janitor-driver, 1 dental officer and 2 dental assistants. It is anticipated this staff will be required in F.Y. 1969.

Five units of housing will be required at this location for personnel and are included under the Personnel Quarters Activity.

Dilkon, Ariz	$104,500

Project cost estimate

Construction funds requested in 1968	$104,500
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	112,500

It is proposed to construct a school health center at Dilkon, Arizona. Dilkon is located approximately 39 miles north of Winslow, 26 miles of this distance being unimproved roads. It is in the south central portion of the Reservation and remote from any population center. It is about 13 miles west of Arizona Route 77 over marginal roads.

This facility will provide for the operation of a comprehensive health program for the Boarding School pupils and the local beneficiary population in Dilkon. The enrollment of the school is anticipated to be about 800. At present there are three trailer schools which will be replaced by a new facility. There have been no adequate health services for this group in the past. The facility should be adequate for provision of medical, public health and dental activities. It will also provide space for examining and treatment rooms to properly examine and treat minor illnesses and injuries. The proposed facility will provide space for dental care and for routine laboratory services, health counselling and in-service training to school and dormitory personnel. It will also provide for screening patients for more serious illnesses. Patients requiring more specialized care and inpatient services will be referred to Winslow.

The population served will include 800 students at the BIA school, plus some 200 preschoolers and other beneficiaries residing in Dilkon. The projected workload is:

Nurse visits	3, 200
Dental visits	4, 000

The anticipated staffing will be one dental officer, two dental assistants, one school nurse and one practical nurse. It is anticipated this staff will be required in F.Y. 1969.

To provide housing for personnel, 5 units of quarters are requested under the Personnel Quarters Activity.

Nazlini, Ariz	$104, 500

Project cost estimate

Construction funds requested in 1968	$104, 500
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8, 000
Total estimated project cost	112, 500

It is proposed to construct a new school health center at Nazlini to serve the new BIA Boarding School to be constructed at this location in 1968. Nazlini is located approximately 13 miles north of Ganado and 28 miles from Ft. Defiance. The roads in and around Nazlini are unpaved, but some are graded and gravelled.

This facility will provide for the operation of a comprehensive health program for the 1,000 pupils to be enrolled in the BIA Boarding School. The facility will provide space to meet the basic requirements for providing medical, public health and dental clinics with offices, examining and treatment rooms sufficient to properly examine, diagnose and treat minor illnesses and injuries and give routine and specialized dental care. It will enable screening for referral to the proposed hospital at Chinle or Sage Memorial Hospital in Ganado for serious conditions or specialized need. The school health center will provide immunization, physical examinations, health counselling and tests for all students. There are no overnight beds planned. The proposed health center would also provide services to the local Indian beneficiary population numbering about 600.

The projected workload is:

Nurse visits	3, 300
Dental visits	4, 000

Proposed staffing would include one dental officer, 2 dental assistants, 1 school nurse and 1 licensed practical nurse. It is anticipated this staff will be required in F.Y. 1969.

To provide housing for personnel, 5 units of quarters are requested under the Personnel Quarters Activity.

Sanostee, N. Mex	$105, 000

Project cost estimate

Construction funds requested in 1968	$105,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	113,000

Sanostee is located 10 miles west of U. S. 666 and 40 miles south and west of Shiprock in the Shiprock Service Unit. It is proposed to build a school health center to serve the BIA school having a population of 700 elementary students with the possibility of expansion to 1,008. The secondary population to be served would be 800 adults and pre-school children. No health facilities exist at present in this community.

Major workloads (projected)

Outpatient:	
Medical visits	700
Nurse visits	2,100
Clinic, general	1,080

It is anticipated that the general medical and preventive clinic will be operated at least twice each week. There are no overnight beds proposed for this facility.

The Dental staff will provide routine dental care to the students at Sanostee and also to the Toadlena dental facility (800 students) twice per week. Emergency dental service will be provided to the total adult population plus routine dental care to the younger age groups, relocatees and medico-dental patients:

Dental services workload (projected)

Dental visits—Sanostee and Toadlena	3,400

The proposed staffing would be: one school nurse, one licensed practical nurse, one dental officer and two dental assistants. It is anticipated this staff will be required in F.Y. 1969.

Provision for 5 units of quarters to house the staff are requested under the Personnel Quarters Activity.

Oraibi, Ariz	$105,000

Project cost estimate

Construction funds requested in 1968	$105,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	113,000

It is planned to build a new school health center at Oraibi Village on the Hopi Indian Reservation which is 35 miles due west of Keams Canyon. The present clinic used at Oraibi is located in one small room of the BIA school building which is completely inadequate. There is no space for examination, treatment, waiting room or storage of drugs and equipment. The room has only approximately 220 square feet total space.

The new school health center to be constructed would contain space for a physicians office, examination room or rooms, dental suite, x-ray-PHN office, sanitarians office, community health worker's office, waiting room, general storage and adequate toilet facilities.

The BIA school has an enrollment of 246 children and the village has a population of 400. Presently the clinic is held one day a week with as many as 90 attending and averaging about 40. The most common diseases treated are acute infections and communicable diseases. Prenatal obstetrical services are provided. Immunization is given to all babies and school children and all adults who attend the clinic. It is anticipated that the work load would increase to 4,333 visits annually averaging 1½ clinics per week if an adequate facility were made available.

Staff will be supplied by the Service Unit hospital at Keams Canyon.

San Felipe, N. Mex $104,500

Project cost estimate

Construction funds requested in 1968	$104,500
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	8,000
Total estimated project cost	112,500

It is proposed to construct a new health facility in the San Felipe Pueblo on the San Felipe Indian Reservation. This reservation comprises 49,000 acres located in Sandoval County, New Mexico. The Pueblo is mid-way between Albuquerque and Santa Fe (35 miles from each). Both Albuquerque and Santa Fe have community hospitals and DIH hospital facilities.

The total estimated on-reservation population of the San Felipe Reservation is 1,350 and increasing at the rate of about 1.7 annually. Of this number, the total of pre-school and school age children is estimated to be 550.

The present clinic facility is located in one room of a BIA building. There is no space to conduct examinations or treatment and there is a complete lack of waiting space.

A therapeutic and prevention clinic is held one day a week with an average attendance of 30. In F.Y. 1965, 46 pre-school exams were provided in special clinics. Special clinics were also held for immunizations and firefighters' physical examinations. Complete medical care and physical examinations were given to pre- and post-natals. The estimated number of visits projected after completion of the new facility is 1,600. Personnel from the Santa Fe Hospital will provide the health services.

The projected number of student beneficiaries to be seen annually in the new facility is 450. Emergency dental services will be rendered to the adult population. Selected age groups of the younger adult population plus medical-dental patients will receive routine dental services on a time-available and appointment basis. The dental clinic will be operated twice a week.

Albuquerque, N. Mex $22,000

Project cost estimate

Planning funds requested in 1968	$22,000
Construction funds to be requested in 1969	239,000
Subtotal	261,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	40,000
Total estimated project cost	301,000

It is proposed to construct a new school health center in Albuquerque, New Mexico, to complement a BIA boarding school proposed for construction in 1968.

The new boarding school will serve 2,000 new students plus the 350 students who reside in the present school. This school is to be built on the west side of the Rio Grande River, approximately 10 miles from any Public Health Service facility.

The existing health center is located in a converted residence at the old Albuquerque Indian School. This is totally unsatisfactory because of the functional inadequacies inherent in the building, which cannot be eliminated by remodeling. The new facility would be located at the new school site.

The function of the new facility will provide space to meet the requirements of providing for administration; medical, public health and dental clinics with offices; examining and treatment rooms sufficient to properly examine, diagnose and treat minor illnesses and injuries and give routine and specialized dental care. It will enable screening for referral of serious conditions or specialized need; provide space for immunization programs; physical examinations, health counseling and tests for all students; and give in-service training to school and dormitory personnel. All students requiring hospitalization will be referred to the Bernalillo County Hospital in Albuquerque. No overnight beds will be provided at the health center.

It is anticipated that upon completion of all construction there will be 8,000 medical visits a year. A comprehensive dental program will examine 2,400 patients and provide 10,000 services.

Full time staff at the facility will consist of 2 medical officers, 3 nurses, 2 dental officers, 4 dental assistants, 1 sanitarian, 2 health educators and 8 supporting personnel (clerks, maintenance, etc.). These employees will also provide health services and conduct clinics away from the center. It is anticipated this staff will be required in F.Y. 1969.

Stewart, Nev	$26,000

Project cost estimate

Planning funds requested in 1968	$26,000
Construction funds to be requested in 1969	364,000
Subtotal	390,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	22,000
Total estimated project cost	412,000

This BIA off-reservation boarding school is located at Stewart, Nevada, three miles south of Carson City in Ormsley County near the California State line. It has an enrollment of about 600 students from various reservations in the Southwest.

It is proposed to replace the present obsolete and unsafe health center with a modern, efficient and fire-resistant facility. The BIA presently is in the process of rebuilding the school campus and it would be more expedient and economical if replacement of the facility could be coordinated with their project.

The present structure, completed in 1904, is a one-story frame building with an exterior of stone veneer and drop siding. The building is not suitable for renovation because of basic functional inadequacies such as a 30-inch wide hallway which is too narrow for beds to pass through. The wooden framework prohibits achieving a fire-safe facility. Aging utilities are a constant and expensive maintenance problem.

The new health center would be an infirmary with a capacity to meet the basic health needs of 700 students with adequate space for a complete outpatient clinic and 16 infirmary beds. Space would be provided for a doctor's office, two examining rooms, nursing office, dental suite, and ancillary services. Patients requiring hospitalization will be cared for under contract services or at the PHS hospital at Schurz, Nevada.

School year 1966 workload data

	1964	1965	1966	Projected
Pupil enrollment	635	637	577	700
Visits to physician	2,053	2,251	3,148	3,200
Visits to nurse	21,815	38,030	34,731	35,000
Dental:				
Patients examined	1,013	1,121	1,100	1,200
Services provided	6,597	5,187	6,304	6,600
	Infirmary (school year 1966)			
Inpatients:				
Admissions	469	395	451	500
ADPL	7.3	7.4	6.7	7.5
Peak census	17	16	28	28

NOTE.—Staff currently (fiscal year 1967) on duty consists of 1 dental officer, 1 dental assistant, 4 nurses, 2 nurse assistants, and 1 clerk-steno. It is anticipated that an additional nurse assistant will be required in fiscal year 1969.

Health stations	$165,000
New Town, N. Dak	53,000

Project cost estimate

Amount appropriated in 1967	$3,000
Construction funds requested in 1968	53,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	3,000
Total estimated project cost	59,000

New Town, North Dakota, which is the BIA Agency headquarters is located in the northern fringe of the Fort Berthold Indian Reservation and has a population of about 2,500.

Administrative headquarters for the reservation health program are maintained at this location in rented space. Medical outpatient services have been provided by contract in private physician's offices.

With the construction and staffing of a health center at White Shield, the administrative offices in New Town will no longer be necessary. However, it is planned to provide more comprehensive services at New Town with staff from the White Shield health center.

It is proposed to situate a health station in New Town to serve those Indian residents of the Northern segment of the reservation and those beneficiaries coming into the BIA headquarters from other portions of the reservation. New Town is about 54 miles from White Shield. In 1965 approximately 11,000 visits were referred to private physicians located in New Town, Watford City, Parshall, and Stanley. Many of these referrals come from other segments of the reservation. With the establishment of the health center at White Shield and health station at Mandaree, Twin Buttes, and New Town, this load will be absorbed by these various locations and will minimize distances beneficiaries must travel.

It is proposed to hold clinics at this location two or three times per week. Both therapeutic and preventive medical and dental services will be given. In addition, well baby, prenatal, pre-school, and postpartum conferences will be conducted by a Public Health physician and/or Public Health Nurse.

Demonstrations and group instructions will also be scheduled and conducted. Staff from the proposed White Shield health center will serve this station.

A health station building providing waiting, examining, treatment, demonstration, conference and storage rooms for the various activities will be required. Space for the parking of a dental mobile unit and connections for same would be provided.

Rock Point, Ariz	$56,000

In 1967, Congress appropriated funds for the construction of this facility. In order to satisfy requirements of a more urgent nature, the funds were reprogrammed with the approval of the Congressional Committees and the project deferred. It is requested that the funds be restored so that the Public Health Service may provide health services to this group of beneficiaries.

Project cost estimate

Construction funds requested in 1968	$56,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	3,000
Total estimated project cost	59,000

Rock Point is a community on the Navajo Reservation in Arizona, located about 50 miles north of Chinle. A paved road connects Rock Point and Chinle. It is the site of a Bureau of Indian Affairs boarding school and trading post. There is an estimated population of 1,200 Navajos in the area.

At present, clinics are held on a weekly basis in an old frame building that was once a mission clinic but is totally inadequate. Services are provided by staff from the Chinle Health Center. A total of about 4,000 visits were reported in F. Y. 1966.

A permanent standard-design health station is proposed to serve the 1,200 resident population and a proposed new 400-pupil boarding school. Twice weekly general clinics and preventive health clinics, public health nursing conferences and immunization clinics will be held. An average attendance of 50–60 persons is expected.

Red Water, Miss	$56,000

Project cost estimate

Construction funds requested in 1968	$56,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	3,000
Total estimated project cost	59,000

It is proposed to construct a new health station at Red Water Community, the site of a BIA Day School. The area to be served is in Leake County, Mississippi which has a 50 bed community hospital. The PHS Indian Hospital is in Philadelphia, Mississippi, about 30 miles south and will supply the staff for the station. State highway 35 to the hospital is paved; however, most beneficiaries live on unimproved roads with only approximately one-third having their own transportation.

The 1960 census enumerated approximately 3,200 Indians in the entire state of Mississippi. Of these, 2,750 were residing in the 10 counties comprising the Philadelphia Service Unit boundaries and are considered eligible as beneficiaries of the Publc Health Service. The Red Water population estimate in F.Y. 1965 was 385. The present enrollment of the BIA Day School is between 80–85 students in grades 1–7. Most of the children who attend high school enroll in Oklahoma BIA schools.

The present clinic is being conducted in an old unused woodframe classroom which belongs to the BIA school. There is no running water or toilet facilities in the clinic, and the examining and waiting room are in the same room. When a patient is examined, a screen is used, which does not provide adequate privacy. There are no offices for ancillary health personnel.

General medical and surgical clinics are held the first and third Monday of each month. Pediatrics, prenatals and adult patients are seen at these clinics as well as school children who require medical services. Twenty-four clinics are held each year, with an annual number of visits of between 600–630. Average attendance at each clinic has approximated 24. The total number of dental patients seen annually at Red Water is approximately 78.

Space for the PHN, clinic nurse and field medical officer would be included in the new building.

PERSONNEL QUARTERS

1968 request $3,734,000

The unique characteristics of the Indian Health program and the geographical location of the beneficiary population requires location of Indian Health facilities for the most part in isolated, desolate sparsely populated areas. In most of these areas housing for sale or rental is non-existent. Unfortunately, availability of housing constitutes a major factor in the ability to recruit or retain professional employees essential to the conduct of the program and the provision of basic health services.

It is quite evident that to provide the quality and quantity of health services required to elevate the health status of the Indian, Government housing must be made available. The Surgeon General's Advisory Committee on Indian Health, the American Hospital Association, the Association of State and Territorial Health Officers and the American Academy of General Practice have noted the deficiency and have strongly recommended the provision of an adequate number of suitable staff quarters.

To implement an accelerated hospital and field health program in 1956, 326 surplus prefabricated housing units and trailers were acquired. These units provided a partial solution to emergency housing problems and helped sustain the crash health program. However, they were never intended, nor are they adequate, for long-term use. Many of these and other substandard units are still in use, but not by choice. The urgency for providing for current deficiencies, or for new and expanded programs and facilities by necessity takes precedence over the desire to replace all of the substandard units.

In 1968 the request for 195 units will permit the satisfying of both replacement and additional needs at thirteen locations. Included in the request are 174 units in association with various construction projects contained in other activities in this request: a new (replacement) hospital at Tuba City, Arizona (121 units), and clinics at White Shield, North Dakota (15 units), Many Farms, New Mexico (13 units), Beshbitoh, Arizona (5 units), Sanostee, New Mexico (5 units), Teec Nos Pos (5 units), Nazlini, Arizona (5 units), and Dilkon, Arizona (5 units). The remaining 21 units are desperately required to overcome existing deficiencies through provision of additional units or replacement of substandard units at 5 other locations.

A distribution, by location, of the 195 units of quarters for which $3,734,000 is requested in 1968 follows:

Distribution of quarters by location, fiscal year 1968

Facility	Location	Number of 1-BR units	Number of 3-BR units	Total number of units	Estimated cost[1]
School health center	Beshbitoh, Ariz	2	3	5	$94,000
School health center	Dilkon, Ariz	2	3	5	94,000
Center	Fort Hall, Idaho		4	4	80,000
Do	Many Farms, Ariz	6	7	13	244,000
School health center	Nazlini, Ariz	2	3	5	94,000
Hospital	Owyhee, Nev		6	6	120,000
School health center	Sanostee, N. Mex	2	3	5	94,000
Station	Taholah, Wash		3	3	60,000
School health center	Teec Nos Pos, Ariz	2	3	5	94,000
Hospital	Tuba City, Ariz	36	85	121	2,312,000
Do	Wagner, S. Dak		3	3	60,000
Center	Warm Springs, Oreg		5	5	100,000
Do	White Shield, N. Dak	4	11	15	288,000
Total 1968 program		56	139	195	3,734,000

[1] Costs indicated reflect prefabricated type units.

Equipment requirements for ranges, refrigerators, washer-dryers in the amount of $130,700 will be requested under Indian Health Activities estimate in 1969.

ALTERATIONS

1968	$910, 000

The following projects represent needed alterations to existing Indian Health facilities to meet current program needs and/or provide for safe patient care.

Aberdeen area

Pine Ridge Hospital, Pine Ridge, S. Dak	$10, 000

It is proposed to extend water mains for a fire hydrant line loop as recommended by the National Fire Protection Association.

The project will eliminate dead-ends of fire lines which extend into areas of newly constructed personnel quarters.

The present domestic water supply system provides fire protection to the hospital and personnel quarters through a 6-inch main. There exists a 1,400 foot-long dead-end run of 4-inch main that serves a part of the quarters areas. New quarters authorized in 1967 make is essential to provide a 6-inch main which will complete a loop in compliance with fire code requirements. To complete the project will require the relocation of 500 feet of sewer line and construction of a new manhole.

Cass Lake Hospital: Cass Lake, Minn	$54, 500

Cass Lake Hospital is located in the northwestern part of Minnesota near the North Dakota State line, where U.S. Highways 2 and 371 intersect. There is excellent public transportation to the hospital. Three busses arrive daily and are accessible to the Indians living in the surrounding communities. About 50% of these Indians own automobiles.

This 22 bed facility serves a beneficiary population of over 2,500 of which approximately 1,400 are 18 years or younger.

Major workloads for the past three years follow:

	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966
Inpatient admissions	705	691	629
Inpatient hospital days	3, 987	3, 775	3, 588
Average daily census	10. 9	10. 3	9. 8
Average length of stay	5. 7	5. 5	5. 7
Newborn births	101	94	81
Newborn hospital days	423	314	262
Newborn average daily census	1. 2	. 9	. 7
Newborn average length of stay (days)	4. 3	3. 2	3. 2
Outpatient visits to facility	11, 958	12, 026	12, 312

RELOCATE OBSTETRICAL SUITE

The existing delivery room with adjacent facilities and the O.B. beds are located on opposite sides of a main public corridor. The nursery is located at the far end of this corridor. The O.B. facilities, due to their location, are subjected to possible contamination because of unavoidable public and personnel traffic. The recent Environmental Health Survey conducted in May 1965, included a recommendation that the O.B. facilities be relocated to a remote portion of the hospital to minimize general traffic and possible contamination hazard.

Remodeling will be done to provide an obstetrical unit consisting of a delivery room, labor room and patient beds, and will be separated from the mainstream of the hospital. The O.B. suite will be located adjacent to the existing nursery. Installation of smoke and fire doors in the corridors of the hospital will be provided for patient's safety.

IMPROVEMENTS TO DIETARY AREA

The existing facility was constructed during the 1930's. No major improvements have been made to the dietary area of the hospital. The existing kitchen and dishwashing facilities are antiquated in respect to layout, equipment, and minimum standards of the Environmental Health Survey conducted in July 1965.

It is proposed to accomplish alterations in the kitchen and supporting facilities to provide better facilities and equipment which will result in a more efficient operation.

The project would replace the dishwashing machine (a surplus machine installed nine years ago); removal of the existing walk-in refrigeration unit with a modern unit; provide hoods for the range and dishwasher; replace the original two-compartment sink; and replace antiquated equipment. The project would improve the lighting, provide ventilation for the dishwashing and storage areas and rearrangement of the layout which will result in a dietary area that will: (1) be acceptable to Environmental Health Standards and (2) improve the work flow.

Total, Aberdeen area	$64,500

Albuquerque area

Shiprock Hospital, Shiprock, N. Mex	$102,600

Project cost estimate

Feasibility study funds appropriated in 1967	$42,000
Planning funds requested in 1968	102,600
Construction funds to be requested in 1969	1,832,500
Subtotal	1,977,100
Equipment funds to be requested under "Indian health activities in fiscal year 1970"	105,000
Total estimated project cost	2,082,100

In 1967 Congress appropriated $42,000 to plan expansion of the outpatient department and field health area. These funds will be used to conduct a feasibility study to determine the course of action best suited to provide health services to this group of beneficiaries.

EXISTING FACILITY

The existing 75-bed hospital was authorized in 1953 to replace an old and very poor 43-bed hospital. Estimates then of the population to be served ranged between 12,500 and 13,600. However, by 1957, due to the accelerated industrial activity and additional employment on the irrigation projects, the population reached an estimated 14,000. When the hospital was completed in 1960, it was already too small to meet the growing population needs and the new demands on health facilities generated by the expanded preventive health and field health services. At the present time it serves an estimated population in excess of 18,000 and it is expected that by F. Y. 1972 it will be serving a population of 22,000.

The present outpatient facility, which also serves the adjacent 1,000 student boarding school, requires expansion of space and supporting facilities in order to provide a more adequate and comprehensive base for health services, integrated with the field health activities. The present ancillary, field health and outpatient areas are too small to meet the needs of the present program effectively, and will be completely inadequate to meet the needs of the expected population. The present overcrowding in service areas poses a potentially hazardous situation which will get more critical as the demands increase. An additional 25 beds will permit an average occupancy rate of 80%.

POPULATION SERVED

The 1960 U.S. Census enumerated approximately 16,000 Indians residing in the Shiprock Service Unit. It has grown since that time at a rate conservatively estimated at 2.5% per annum. It is anticipated that the hospital service population will reach approximately 22,000 by F.Y. 1972.

By contrast with other Navajo service units, this area of reservation is distinguished by industrial activity and serves as the center of the irrigation farming complex. In more recent years the Tribal public works program has further accelerated activity.

Expansion of schools and the mobility of the population within the area have placed greater demands on the services and program conducted through the hospital which is the base for a complete and comprehensive field health program.

The age distribution of the Navajo beneficiaries in the service unit resembles the pattern of the Navajo generally. Nearly 50 percent of the population is under 15 years of age and almost 60 percent is under 20 years old.

The socio-economic circumstances, educational level and the accessibility of health facilities, especially hospital beds, to a large segment of the population (Shiprock community itself has more than 4,000 Navajo) affect the degree of utilization and influence the demand for services.

Although their socio-economic level is more favorable than the western Navajo, the median family income (about $1,500) is well below the $3,000 considered the national "poverty threshold."

A sampling of 1960 census data for Indians of San Juan County, New Mexico (Shiprock Service Unit) revealed that about 45 percent of the persons 25 years and over had not attended school; the median years of school completed was about two years.

This service unit has a large proportion of young people attending school. There are twelve day and boarding schools in the area with a total enrollment of over 3,100 and the Bureau of Indian Affairs plans the expansion of several. In addition, at six locations about 1,400 students are attending public schools.

GEOGRAPHY AND ROADS

The Shiprock service unit in the northeastern portion of the Navajo reservation is the only Navajo service unit which involves parts of three states—New Mexico, Arizona and Utah. The area encompasses about 2.8 million acres—4,400 square miles in what is commonly referred to as the Four-Corners area of the reservation. Three classes of roads traverse the area: surfaced U.S. Highways 666 and 550, graded semi-graveled roads which go to the main community areas and trails which lead to the homes of the beneficiaries. Bus service is limited to points between Shiprock and Gallup, Farmington and Cortez.

Industrial development has contributed to road construction and transportation improvement. This in turn has resulted in greater accessibility of the hospital and its clinics to many more communities in the service area; and consequently unusual demands are made on the facilities and services, which were not originally contemplated. This results in need for more referral and follow-up services.

The distances to Shiprock from some of the larger communities are: Aneth, Utah, (population 1,500) 55 miles; Fruitland, New Mexico, (population 2,600) 15 miles; Red Rock, Arizona, (population 700) 46 miles; Sweetwater, Arizona, (population 1,000) 58 miles; and Sanostee, New Mexico, (population 2,125) 32 miles.

MORBIDITY AND MORTALITY

The demographic pattern, especially the high birth rate (between 45 and 50 per 1,000 Navajo population), the growing population and the high percentage of young people (59 percent under 20 years of age and 28 percent between the ages of 20 and 45) influence the morbidity and mortality patterns and the utilization of the facilities—outpatient as well as inpatient and the field health activities.

Leading notifiable diseases reported in 1965 were otitis media, pneumonia, gastroenteric illnesses, trachoma, and measles. These are shown below and compared with leading diseases reported in 1963 and 1964 (calendar year).

Notifiable diseases

	Total cases reported		
	1963	1964	1965
Gastroenteritis	1,323	247	347
Dysentery	79	23	32
Influenza	141	10	29
Pneumonia	471	473	599
Otitis media	591	577	720
Measles	260	1	264
Hepatitis	22	5	35
Trachoma	73	106	169
Strep sore throat	68	65	119
Tuberculosis	52	66	55

MORTALITY—LEADING CAUSES OF DEATH

Infant deaths represent between 25 and 30 percent of the total deaths reported by the service unit. Leading causes are diseases of early infancy (prematurity, birth injuries, etc.), influenza and pneumonia, and gastroenteritis.

Leading causes for all ages are accidents, gastroenteritis, malignant neoplasms and influenza and pneumonia.

This pattern suggests that causes are associated with deficiencies in the environment and lack of sanitation facilities, as well as limited service for mothers and infants.

HOSPITALIZATION

Deliveries and complications related to pregnancy were the leading reasons for hospitalization in 1965, and constituted 32 percent of the discharges. Accidents were second leading (about 12%), influenza and pneumonia third (8.1%) and gastroenteritis fourth (1.6%).

A third of the discharges in 1965 were pediatric patients.

Discharges, fiscal year 1965—Age distribution of discharges and hospital days

	Number of discharges	Hospital days	Percent of total	
			Discharges	Days
Total, excluding newborn	2,857	21,190	100.0	100.0
Total pediatric	964	9,001	33.7	42.5
Under 1 year	377	4,411	13.2	20.9
1 to 4 years	320	2,656	11.2	12.5
5 to 14 years	267	1,934	9.3	9.1
Total adults	1,893	12,189	66.3	57.5
15 to 44 years	1,493	8,080	52.3	38.1
45 to 64 years	240	2,388	8.4	11.3
65 and over	160	1,721	5.6	8.1

NOTE.—Thirty percent of the pediatric patients were hospitalized for treatment of influenza and pneumonia, gastroenteritis and dysentery. Other common reasons for hospitalization were about 20 percent for accidents and diseases of eye and ear and skin.

Hospital discharges, fiscal year 1965

Leading causes	Discharges	Percent
Total discharges, excluding newborn	2,857	100.0
Deliveries and complications of pregnancy	926	32.4
Accidents	339	11.9
Digestive system diseases, including dysentery	334	11.7
Gastroenteritis and colitis	(189)	(6.6)
Respiratory system diseases	333	11.7
Influenza and pneumonia	(232)	(8.1)
Genitourinary system diseases	116	4.1
All other causes	809	28.2

UTILIZATION OF OUTPATIENT SERVICES

Definitive outpatient morbidity data reported for the communicable and notifiable diseases and the inpatient discharges by diagnosis reflect the morbidity seen in outpatients. The high maternity workload results in demands for prenatal and postnatal services. The facilities are inadequate to meet these needs as well as the need for well child services, immunization clinics, nutritional services and public health nursing.

Similarly, the existence of the large BIA boarding school and the public schools and dormitories for Indian students in Shiprock and Farmington, with a total combined enrollment of nearly 2,000, (further expansion contemplated) places extremely heavy demands on the hospital outpatient services and supporting activities, which the present facility cannot accommodate.

A comprehensive school health program involves physicals prior to entering school, and periodic examinations including eye and hearing tests, tuberculin testing, consultation services for students with emotional problems and referral services for correction of defects found upon examination. Dental needs are great and the dental workload is steadily increasing. The Division plans to establish a dental internship program at Shiprock, as well as an expanded service to meet far more effectively and completely the needs of the young adult population.

Shiprock is the location of the BIA agency and center of industrial activity in the Four-Corners area. Beneficiaries of the service unit depend upon Shiprock for non-health services. Although there is a community hospital in Farmington (106 beds) which is used to a limited extent for inpatient hospitalization under contract, its facilities are not organized to provide the comprehensive outpatient and preventive services which are most needed by Indian beneficiaries.

The San Juan County Health Department staff provides selected services to a limited number of off-reservation Navajos. Off-reservation Indian students, however, are referred to Indian health facilities for immunizations.

The preventive health program is broad in terms of its components—maternal and child health, public health nursing, dental, nutrition, health education, social service and environmental health—but the Shiprock facilities are overcrowded and so inadequate, that the management of a comprehensive and complete field health service and a comprehensive preventive health program for the population in and adjacent to Shiprock is ineffective.

Waiting space, radiology, laboratory and related auxiliary services are not even sufficient to support the present outpatient workloads and patients must be moved through quickly, or not seen at all, to the detriment of their health. Field medical services organized out of the hospital are extended regularly to the field locations, and especially the BIA day and boarding schools. Examinations are conducted at the schools and individuals requiring follow-up are referred to the hospital for consultation. This workload is increasing and cannot be adequately met with the present facilities.

Summary of major workloads

	1963	1964	1965	1966	Projected
Beds available	75	75	75	75	100
ADPL	64	60	62	59	80
Admisions	3,032	2,473	2,956	2,767	3,500
Births	692	691	759	673	750
Average length of stay per discharge, excluding newborn	7.6	8.8	7.7	7.8	8
Outpatient visits	53,616	52,067	57,829	59,202	76,000
Shiprock Boarding School	4,715	2,833	3,236	1,970	2,000
Dental workload:					
Dental services provided	13,139	14,123	11,275	12,764	19,000
Patients examined	5,742	6,123	4,410	3,903	6,000
Shiprock Boarding School	973	978	972	648	1,000

Nearly 8,000 visits were recorded at satellite field clinics in the Shiprock Area in fiscal year 1966. Scheduled clinics were held at least once a month at the locations listed:

Cove, Arizona
Newcomb, New Mexico
Aneth, Utah
Sanostee, New Mexico
Bisti, New Mexico
Immanuel Mission, Arizona
Oak Springs, Arizona
Toadlena, New Mexico

The reduction in admissions in 1966 was due to a combination of several factors: a limited and overworked nursing service; treating as outpatients some cases because of the closeness of their residence to the hospital; and to some extent a lack of appreciation on the physician's part concerning the unsatisfactory home environment of the patients.

Besides the referral of patients to general community hospitals under contract, (Farmington, New Mexico, Southwest Memorial Hospital, Colorado) patients with complicated medical and surgical conditions are referred to Gallup and general hospitals in Albuquerque for specialty care. Tuberculosis and mental patients are also referred to other appropriate facilities. To achieve continuity and effective medical management, facilities must be available at the base hospital for complete diagnostic workup and post-hospital follow-up and treatment.

PROPOSED PLAN

The projected plan is to construct a 25-bed addition to the existing 75 bed GM&S hospital, expand existing outpatient and field health facilities, and expand the ancillary facilities to handle the increasing demands being placed on this facility.

The expanded hospital will provide general medical, surgical, obstetrical, pediatric and dental care on an inpatient and outpatient basis. Limited ophthalmological, otolaryngological and orthopedic services will also be provided. Complete radiological and pathological services will be available to the staff on a full-time basis to assist in diagnosis. All ancillary services needed for a well developed clinical program will be provided.

In addition to provision of the above clinical services on an inpatient and outpatient basis, the hospital will also serve as a base for a complete and comprehensive field health and preventive program.

Extremely complicated medical or surgical problems will be referred to the DIH hospital at Gallup for care. State and other resources will be utilized for mental and allied services. Other DIH facilities and contract hospitals will be utilized for tuberculosis care.

ANTICIPATED BED DISTRIBUTION

The following shows the bed distribution and estimated average daily census, by major clinical service, after construction:

	Beds	ADPL
Total, excluding newborn bassinets	100	80
Medical	15	13
Surgical	24	20
Pediatric	45	37
Obstetrics	16	10
Bassinets	(18)	

The projected number of admissions and the ADPL reflect a hospital admission rate of 160 per 1,000 population, with an average stay of 8 days. The proportion of pediatric patients represents about 43% of the total load. An increased field health program (case finding, home visit, expansion of school clinics with increased school enrollment), will result in an increase in outpatient visits and also more referrals for hospitalization.

With special emphasis on earlier prenatal care, postnatal services and well-child care, the high obstetrical workload and outpatient clinical workload is expected to increase.

Expectant mothers will be referred from field clinics to hospital clinics for more comprehensive prenatal examinations and services earlier in pregnancy, in order to reduce the complications of pregnancy and delivery. Improved prenatal service is expected to influence the infant mortality rates over a period of time.

More complete diagnostic services (laboratory, pathology, specialty consultation services) are needed as is also screening of the older population to uncover existing conditions requiring medical attention. Since many patients are referred to other facilities for inpatient hospitalization, a comprehensive follow-up service must be organized and a system established for examining patients after discharge from the hospital, and before they return to their homes in order to provide continuity in medical management. Consequently, plans for expansion of the Shiprock outpatient clinic services and hospital supporting facilities, as a base for coordinating expanded services at satellite field locations, is the priority proposal.

Additional services are required for infants, pre-school and school children (examinations and immunizations), as well as increased prenatal services for expectant mothers. Intensification of these services is expected to result in more referrals to the hospitals where comprehensive diagnostic and treatment services are available.

Crownpoint Hospital, Crownpoint, N. Mex	$29,000

Project cost estimate[1]

Feasibility study funds requested in 1968	29,000
Planing funds to be requested in 1969	120,000
Construction funds to be requested in 1970	1,736,000
Subtotal	1,885,000
Equipment funds to be requested under "Indian health activities in fiscal year 1971"	193,000
Total estimated project cost	2,078,000

[1] Estimate based on modernization.

PROPOSED PROJECT

It is proposed that a feasibility study be conducted to determine the most economical method of modernizing the 56-bed physical plant used to provide health services to the beneficiary population of the Crownpoint Service Unit. If the feasibility study indicates that a new facility is required, the proposal would be to construct a replacement GM&S hospital with a chassis capable of supporting future expansions.

EXISTING FACILITY

The present hospital is a frame construction with sandstone veneer. Recent fire and safety inspection by a consulting firm proves that the building in its present condition is unsafe for inpatient services. The hospital was constructed in 1939.

In the outpatient area overcrowding is critical. Examining rooms are curtained cubicles in what was a patient ward; there is no privacy. There is only a makeshift emergency room. The outpatient waiting area is in the corridor. The pharmacy is located in what was originally two small baths and a private bedroom, greatly limiting storage and compounding space. The record room has exceeded storage space for currently active records; it is far removed from the outpatient examining area. The laboratory is far removed from both outpatient and inpatient areas and is located in a small storeroom and the old obstetric scrub room. The dental clinic and X-ray are cramped for space; X-ray films are stored in the dental clinic.

The administrative area is located in the most congested part of the building, being sandwiched between outpatient service areas. There is no library or conference room.

Community Health Service staff are located in a temporary Camp Pickett house in the quarters compound.

There is no operating room; the former operating room has been converted into a delivery room and labor room. Only minimal private, semi-private rooms for isolation, intensive or terminal care are available.

The kitchen and the staff dining room are in the basement—as are the storerooms, morgue, and maintenance shop. This area is serviced by an ancient, malfunctioning elevator.

Steam heat for the hospital is from a central plant operated by BIA. Because of relocation of the boarding school and subagency office, the BIA plans early abandonment of this plant.

POPULATION TO BE SERVED

Based on 1960 census data, the current population approximates 8,000. However, other sources indicate a population considerably higher. For this project, the 1960 census data are used and can be considered conservative. Projections, of these data indicate a population of 9,000 upon completion of project.

GEOGRAPHICAL BACKGROUND

The Crownpoint Service Unit exists for the most part off the Navajo Reservation's southeast corner, in what is known as the checkerboard area. This is an area of mixed ownership—private, tribal, state and Federal. The area within the official boundaries of the Service Unit amounts to about 2,600 square miles, while the area actually served by the hospital is approximately 3,500 square miles and extends roughly 25 miles south and west from Crownpoint, 50 miles north and 75 miles east. It is located primarily in the eastern portion of McKinley and San Juan Counties and extend slightly into Sandoval County, New Mexico.

Until recently nearly all roads crossing the area were unpaved, poorly maintained, and exceedingly rough. At present, the only paved roads are U.S. 66 bordering on the south, a recently paved road, New Mexico 56 from U.S. 66 north to Crownpoint, and the incompletely paved road from U.S. 66 east to Crownpoint. Eventually, New Mexico 56 will be paved north to Farmington and the western road extended to Cuba, New Mexico and New Mexico Route 44.

The nearest other hospital facilities are Gallup, 57 miles, and Grants, 54 miles, and a 17-bed mission hospital at Otis, 80 miles.

NATALITY AND MORTALITY

The birth rate in the Crownpoint Service Unit is high, between 45 and 50 per 1,000 population, over twice the rate for the U.S. population (21.0 in 1964). Similarly, the infant death rate is high, approximately 40 per 1,000 live births, nearly twice the rate for the U.S. (24.8 in 1964). Leading causes of infant deaths are immaturity and other diseases of early infancy, influenza and pneumonia and gastroenteric conditions.

MORBIDITY—NOTIFIABLE DISEASES

Among the notifiable diseases, the principal causes of illness reported in 1965 were: otitis media (693 cases), gastroenteritis and dysentery (654 cases), streptococcal sore throat (643 cases), and gonorrhea (115 cases). Other diseases of importance were the communicable diseases of childhood, trachoma, and hepatitis. Tuberculosis, although it has declined in incidence in recent years, is still a major health problem.

HOSPITALIZED PATIENTS

Deliveries and complications of pregnancy accounted for 20.2% of the discharges from Crownpoint Indian Hospital in fiscal year 1965. The respiratory system diseases (15.4%), ranked second, accidents (12.1%), ranked third, and diseases of the nervous system and sense organs (8.3%), ranked fourth. A relatively large younger population was served by the hospital. The pediatric patients accounted for 43.9% of the discharges compared with 56.1% for adults. Of the total hospital days, 59.5% were utilized by pediatric patients. Among the under age 5 pediatric patients, 65% were hospitalized because of respiratory system diseases, 20% because of gastroenteritis, including dysentery, and 10% because of accidents.

Crownpoint Hospital discharges, fiscal year 1965

Leading causes	Discharges	Percent
Total discharges, excluding newborn	1,630	100.0
Deliveries and complications of pregnancy	329	20.2
Respiratory system diseases including influenza and pneumonia	251	15.4
	(175)	(10.7)
Accidents	197	12.1
Diseases of nervous system and sense organs	135	8.3
Digestive system diseases including gastroenteritis including dysentery	127	7.8
	(96)	(5.9)
Infective and parasitic diseases	120	7.4
All other causes	471	28.8

Discharges by age group, fiscal year 1965

Age group	Discharges	Percent
Total, excluding newborn	1,630	100.0
Total, pediatric	716	43.9
Under 1 year	245	15.0
1 to 4 years	234	14.4
5 to 14 years	237	14.5
Total, adults	914	56.1

Hospital workload

	Fiscal year 1964	Fiscal year 1965	Fiscal year 1966	Projected
Admissions	1,605	1,662	1,716	1,930
Births	232	258	273	275
ADPL	38	44	44	49
Average length of stay	9.3	9.0	9.3	9.3
Outpatient visits:				
Hospital	15,487	19,176	20,963	22,700
Field	4,517	4,655	4,569	5,000
Dental:				
Patients examined	2,323	2,495	1,870	4,500
Services provided	4,739	6,957	7,030	7,500

COMMUNITY FACILITIES

Community resources are almost non-existent. There is a 17-bed mission hospital at Otis, staffed by one physician which is the only other inpatient resource in the checkerboard area. The Navajo are well-known for their caution in dealing with strangers. From the standpoint of inaccessibility, unwillingness to deal with the "white man" and the special relationship between the Navajo and "his" Federal hospital, the Navajo is almost totally dependent on the PHS Indian Hospital for the provision of health services.

Gallup Hospital, Gallup, New Mex	$226,000

Project cost estimate

Construction funds requested in 1968	$226,000
Equipment funds to be requested under "Indian health activities in fiscal year 1969"	17,000
Total estimated project cost	243,000

Since the construction of the PHS Indian Hospital in Gallup, New Mexico, the dental clinic has been operating in space that is inadequate for efficient and effective work flow. In Fiscal Year 1966 a dental intern training program was initiated in this already inadequate space. Two dental interns were trained during the first year of this minimal program. There were two other dentists on the staff of the hospital.

This renovation is proposed because:

(1) Increase of staff and expansion of the intern training program is not possible in the current facility.

(2) The efficiency in the utilization of the available manpower is greatly hampered by the cramped conditions.

(3) Modern dental equipment, which improves the efficiency in the provision of dental services, cannot be utilized in the present facility because of inadequate space.

The expansion of the present four-operatory clinic to an eight-operatory clinic is necessary to house a more effective dental care program and intern training activity in this hospital. The staffing plans include three staff dentists, four interns and nine dental assistants. The comparative anticipated workload is as follows:

	Fiscal year 1966	Estimated, fiscal year 1967	Estimated after renovation
Patients examined	3, 587	3, 600	5, 100
Services provided	13, 422	13, 500	19, 000
Total, Albuquerque area, $357,600.			

Billings area

Crow Hospital, Crow, Mont $27, 000

REPLACE SEWAGE LIFT SYSTEM, $7,000

It is proposed to replace the 50-gpm (gallons per minute) sewage lift station with a 150-gpm unit. The existing pumps are inadequate, causing sewage to back up into the basement drains in periods of high discharge loads. New personnel quarters authorized in 1967 for construction will add to the load. It is imperative that the pumping capacity be increased to 150 gpm to handle this load.

FIRE SPRINKLER SYSTEM, $20,000

The project would provide an automatic fire sprinkler system and alarms in the hospital for the safety of patients and employees.

The hospital presently has no sprinkler system. To comply with the requirements of the American Hospital Association accreditation references, a sprinkler system must be provided in many areas of the building. A recent addition to the hospital has an adequate alarm system but the original portion of the building has none.

It is proposed to install a wet line sprinkler system in the basement and a dry line system in the attic with complete automatic alarm system throughout the hospital.

Total, Billings area $27, 000

Phoenix area

Sells Hosiptal, Sells, Ariz $8, 000

CORRECT FIRE AND SAFETY DEFICIENCIES

To correct fire deficiencies and provide safety to patients and employees it is proposed to replace plain glass with safety glass in the hospital interior, enclose areas over the smoke barrier doors, and replace non-fire resistant ceiling in the mechanical room with fire retardant materials. These deficiencies were identified by a Plant Evaluation Survey and correction is essential to comply with existing fire prevention practices.

Keams Canyon Hospital, Keams Canyon, Ariz $73, 600

INSTALL BOILER ROOM AND BOILERS, $66,600

The hospital currently receives high pressure steam from a plant operated by Bureau of Indian Affairs. Since Bureau of Indian Affairs now obtains electric energy from the Arizona Public Service, only a low pressure system is required for their purposes. However, it is necessary to maintain the plant at full capacity to service the Public Health Service Indian Hospital. It is proposed to construct an area (and steam lines and tunnels) to house two high-pressure boilers of sufficient size to heat and operate the hospital. The steam required for operation of the hospital could be generated at approximately one-fourth the present cost. To provide this project, funds in the amount of $66,600 are requested in 1968.

CORRECT FIRE AND SAFETY DEFICIENCIES, $7,000

Certain deficiencies were identified by a Plant Evaluation Survey and their correction is essential to provide safety to patients and employees.

To alleviate these deficiencies it is proposed to provide fire exits at dead-end corridors; replace plate glass with wire glass in interior windows and doors; install fire doors in the stairwells; construct smoke barriers in the hospital attic; and install an air horn alarm system from the hospital to quarters which are several miles away.

Sacaton Hospital, Sacaton, Ariz	$7,000

CORRECT FIRE AND SAFETY DEFICIENCIES

To correct fire deficiencies and provide safety to patients and employees, it is proposed to replace selected panel and hollow core doors with proper fire rated doors and to install smoke barriers. These deficiencies were identified by a Plant Evaluation Survey and correction is essential to comply with existing fire prevention practices.

Yuma Hospital, Winterhaven, Calif	$18,000

CORRECT FIRE AND SAFETY DEFICIENCIES

To provide safety to patients and employees, certain deficiencies which were identified by a Plant Evaluation Survey are to be corrected.

The project would provide a sprinkler system, fire alarms, attic fire barriers, correct inadequate ventilation of janitor closets and provide filters in the kitchen range hood.

Total, Phoenix area	$106,600

Anchorage area

Bethel Hospital, Bethel, Alaska	$27,000

INVESTIGATE FOUNDATION PROBLEMS

This project would provide for engineering studies of receding perma-frost and the effect it has on the piling systems. The buildings are erected on systems of piling driven into the permanently frozen earth. Apparently some thermic source is causing the upper level of the perma-frost to recede, allowing settling of the piling.

An engineering study is required to determine (1) the present perma-frost level, (2) the probable continuation of this recession, (3) the thermic source which effects this change and (4) recommendations to reclaim the perma-frost or otherwise protect the hospital from damage by continual settlement.

Kotzebue Hospital, Kotzebue, Alaska	$247,300

FOUNDATION REPAIR PROJECT, $80,300

Project cost estimate

Planning and Construction funds in 1968	$80,300
Construction funds for phase II in 1969	92,400
Construction funds for phase III in 1970	80,800
Total estimated project cost	253,500

Uneven consolidation of the fill under the slabs on grade of the hospital and service buildings has caused differential settlement of the floors of the hospital buildings. The Cold Region Research and Engineering Laboratory was engaged to make a study of the causes of the problem and to recommend the remedial action to repair the damage and prevent recurrence.

The first phase will provide funds for the project design and the repair and stabilization of the most critical areas.

Pending the receipt of the study findings, temporary measures have been taken to shore up the structure at critical points and to repair underslab waste lines. This project will utilize the results of the study to design the proper corrective measures and to complete the repair and stabilization work. The repair and stabilization work is phased in three years to enable the actual construction to be limited to portions of the structures which will enable the hospital to operate continuously throughout the repair and stabilization work.

SEWAGE TREATMENT PLANT, $167,000

In 1967, Congress appropriated $500,000 for the construction of a sewage treatment plant. In order to satisfy requirements of a more urgent nature, funds in the amount of $167,000 were reprogrammed with the approval of the Congressional Committees and the project deferred. It is requested that the reprogrammed funds be restored to enable the Public Health Service to complete the project.

All wastes from the Alaska Native Hospital and Bureau of Indian Affairs School in Kotzebue are discharged into Kotzebue Sound at a point 550 feet from the beach and at a depth of 80 feet below the water surface. The report of the Natural Resources and Power Sub-Committee of the Committee on Government Operations directed attention to the lack of primary treatment of waste material being discharged. It is proposed to construct a primary treatment plant for the sewage load of the Division of Indian Health Hospital, the Bureau of Indian Affairs day school and the supportive facilities such as staff quarters, which are operated as a portion of the hospital and school complexes. The plant will provide the minimum treatment required by the State of Alaska Administrative Code.

Mount Edgecumbe Hospital, Mount Edgecumbe, Alaska	$80, 000

INCINERATOR, $80,000

In 1967 Congress allowed partial funds to implement site preparation for an incinerator at Mt. Edgecumbe. The balance of project funds is requested to complete the project in 1968.

At present all dry garbage and burnable waste is burned by open fire on the beach on Mt. Edgecumbe Island. No fill material is available for constructing a sanitary fill type area for waste disposal. The present method of open burning is unsightly and insanitary. Gulls and vermin infest this disposal area and frequent the residential, school and hospital sites. It is proposed to clear the site and install an incinerator plant for burnable wastes which will provide a modern sanitary method of waste disposal in accordance with approved practices.

Ten thousand dollars was appropriated in 1967. The amount requested here is to complete the project in 1968.

Total, Anchorage area	$354, 300

COMMUNITY HOSPITALS SERVING INDIANS AND NON-INDIANS

1968 request	$250, 000

Under Public Law 85–151 the Surgeon General, where such an alternative appears more desirable and effective, is authorized to financially participate in the construction of needed hospital facilities in a community for joint use by Indians and non-Indians rather than to construct a separate Federal facility. To date, the Public Health Service has participated in 15 projects providing 327 beds of which 110 have been funded from this appropriation for the use of Indian beneficiaries. Under this authority, an amount of $250,000 is requested in 1968 to participate in a community project.

CONSTRUCTION OF INDIAN SANITATION FACILITIES

1968 request	$10,464,000

The request for 1968 includes:

(1) $8,000,000 for construction of 65 projects to correct existing gross sanitation deficiencies and for investigations, emergency works, supplies and equipment, and

(2) $2,464,000 for construction of sanitation facilities in Indian communities where they are needed to complement Federal and Tribal housing programs conducted by the Public Housing Administration, Bureau of Indian Affairs, Office of Economic Opportunity, or Tribal groups in accordance with mutual understandings.

With the completion of all projects and assistance to housing authorized through Fiscal Year 1967, improved sanitation facilities will have been made available to more than 37,000 Indian and Alaska Native families. This level of accomplishment represents 38 percent of the required effort to provide all existing families with both running water in the home and adequate waste disposal facilities. The request for 1968 will enable facilities to be made available to another 9 percent of the families.

Sanitation Facilities Construction Projects ($8,000,000)

Provision of basic sanitation facilities for Indian communities and homes is essential in the prevention of diseases and is basic to the improvement of health services and the fight against poverty. During the past seven years the Public Health Service has worked with Indians and Alaska Natives in a cooperative effort to correct the gross insanitary conditions existing in their communities and homes. While progress has been made, the lack of safe available water supplies and waste disposal facilities continues to be a major deficiency in the Indian environment. This condition is in large measure responsible for the high incidence of preventable disease that still prevails among Indians and Alaska Natives.

Health Problems

1. Gastroenteritis ranks second among the leading reportable diseases for Indians; incidence rates for amebic and bacillary dysentery is more than 50 times higher than the rate in the general population.

2. The Indian infant death rate is 1½ times (2 times in Alaska) that of the general population, and for infants who have returned to their home environment after hospital births and particularly for infants one month through eleven months of age, the death rate is about three times (for Alaska Natives, about five times) that of comparable age groups in the general population, a condition in large part associated with the lack of sanitation facilities in the Indian home and extremely crowded living conditions.

3. Approximately twenty percent of all reported Indian deaths in a year are infant deaths (under 1 year of age) compared with 5.4 percent for this age groups in the general population.

4. More than 35 percent of the Indian patients discharged from hospitals were treated for infectious diseases (respiratory, other infective and parasitic, and skin diseases) and their residuals most of which are associated with lack of running water, insanitary conditions and the overcrowded home environment.

Environmental Conditions

Contributing to these health problems is the widespread scarcity of water among Indians and Alaska Natives for even elemental household purposes. Thousands of Indians on many reservations haul water in a primitive manner for distances of a mile or more. In such instances, use of water for domestic purposes is as low as one to three gallons per capita per day as compared to five times this amount for the poorest rural families in the non-Indian population. A delivery charge is made of $1 to $3 per barrel for unsafe water. Contaminated streams, irrigation ditches, stock ponds and unprotected wells and springs are often the only available supply. The excessive amount of time which Indians and Alaska Natives must thus expend combating the rigors of their environment is another major contributing factor to the continuing impoverished conditions under which they live.

The lack of adequate facilities for the disposal of human and other household wastes (both liquid and solid) also contributes to the health problem of the Indians and Alaska Natives. The absence of these facilities result in (1) spread of micro-organisms responsible for diarrheas, and dysenteries, (2) insect and rodent infestations both in Indian homes and communities, (3) contamination of foods and domestic water supplies, and (4) general nuisance conditions.

Indian Participation and Training

Public Law 86–121 enables the Public Health Service to help alleviate the substandard environmental conditions that have been described. This law authorized construction of domestic water supplies, waste disposal facilities, and other sanitation facilities for Indian homes, communities, and lands. The Public Health Service administers the program in consultation with Indian Tribes, Alaska Native groups, and State and local health agencies. Participation by the Indians in project execution is stressed and tribes are assisted in assuming responsibility for continued operation and maintenance of completed community sanitation facilities. Education and training activities are conducted to assure utilization, protection and maintenance of household sanitation facilities.

Projects for Indian beneficiaries include one or more of the following features: *water*—source development, treatment, storage facility, distribution systems; *waste (liquid and solid)*—collection system, sewage treatment, disposal facility; *household appurtenances*—sanitary pit privy or flush toilet, kitchen sink, connecting plumbing; *drainage*—facilities for control of insects, systems to permit subsurface waste disposal.

It should be noted that the results of these efforts have produced an increasing awareness by the Indian people of the advantages of adequate sanitation facilities. This has been demonstrated by the many requests from the Indians for assistance under this program and by the substantial contributions of labor, money, and materials made by the Indians which total about one-third of the overall construction effort. Indian governing bodies have shown a willingness to adopt the necessary measures which are required for continued operation and maintenance of completed facilities. These measures include appointment of responsible maintenance personnel, establishment of water and sewer charges, and adoption of sanitary regulations. Each of these actions embraces a new concept in the Indian methods of government.

Construction progress

Since the beginning of this activity seven years ago, through Fiscal Year 1966, a total of 511 sanitation projects have been undertaken. These include: 393 construction projects (61 of which serve Federal housing projects) and 118 engineering investigations, emergency works and other special projects. Of these, 367 are completed or in operation, and 127 are underway as of June 30, 1966. The remainder are projects to complement new Federal Housing construction and are in the final stages of planning and negotiation with the Indian tribes.

The F.Y. 1967 appropriation included $3,859,000 for 39 sanitation facilities construction projects. This will enable improved sanitation facilities to be made available to more than 5,000 Indian and Alaska Native families in more than 50 different geographic locations. It also included $1,736,000 for the construction of facilities to serve approximately 1,600 new housing units being constructed under Federal and Tribal Housing Programs.

Work Planned for Fiscal Year 1968

The 65 projects planned for 1968 are urgently needed on 37 Indian reservations throughout the country and in 21 communities in Kansas, Oklahoma, South Dakota, and Alaska. They will meet needs in areas where (1) essential sanitation facilities are lacking or in need of major rehabilitation, (2) rates of preventive diseases attributable to gross environmental sanitation deficiencies are high, (3) work is feasible and most nearly ready to be undertaken from an engineering and economic standpoint, (4) ability and willingness of Indians to assume responsibility for maintenance and operation have been indicated, and (5) willingness of Indians to contribute to and participate in the work has been shown.

Included in the 65 projects is a special project planned to provide water and waste disposal facilities for approximately 100 Indian families residing in the vicinity of Rapid City, South Dakota. This work will be part of a Demonstration Community Health Project planned by the Division of Indian Health to establish a model Community Health Program to serve indigent people.

The request also provides: for investigation and planning funds for urgently needed construction projects for which additional technical information is necessary before a solution can be recommended; for correction of emergency problems related to Indian sanitation facilities such as occur from severe drought conditions, floods, failure of well casings and pumping equipment; and for other unforeseen conditions which may require provision of materials, supplies, and equipment for completing the construction or repair of sanitation facilities. The following table summarizes the history of this program:

Summary of construction of Indian sanitation facilities, Public Law 86–121

Fiscal year	Federal funds	Number of construction projects	Families benefitted [1]	Cumulative percent of known facilities needs programed [2]
1961–66	[3] $30, 469, 000	393	30, 000	34
1967	5, 736, 000	[4] 37	6, 600	38
1968 request	10, 464, 000	[4] 65	8, 000	47

[1] Some families included are not provided all basic sanitation facilities at this time.

[2] Based on a formula designed to compute relative percentage of families that will have all basic sanitation facilities. (Number of beneficiary families is currently estimated to total 69,000).

[3] Includes $5,170,000 made available for 42 projects authorized in fiscal year 1963 and 1964 under the Public Works Acceleration Act. (Public Law 87–658).

[4] Does not include undetermined number of projects to assist Federal and tribal housing program for Indians.

Assistance to Federal Housing Program ($2,464,000)

Since 1965 the Public Health Service by mutual agreement has been coordinating its sanitation facilities construction efforts with the Public Housing Administration, the Bureau of Indian Affairs, the Office of Economic Opportunity, and Tribal groups to complement new Indian housing construction. During this period the Service has participated in housing projects which will provide 1,700 units of new housing and accommodate approximately 10,500 Indians. Additional projects to provide sanitation facilities for approximately 2,400 units of new housing are currently in the planning stages.

The request for funds to assist Federal and Tribal housing projects during Fiscal Year 1968 will permit the construction of sanitation facilities for an estimated 2,000 new homes. The majority of these homes will be built under programs of the Public Housing Administration. The request includes funds required to complete the 1967 program.

Sanitation facilities projects, fiscal year 1968

Reservation	Community	State	Project description	Estimated Federal cost
Aberdeen area:				
Cheyenne River	Cherry Creek, Ziebach County	South Dakota	Sewer collection and water treatment	$90,000
Lac Courte Oreilles	New Post and rural Sawyer County	Wisconsin	Community water and individual waste	70,000
Rosebud	Soldier Creek, Mellette County	South Dakota	Individual water and waste disposal	92,000
Red Lake	Redby, Beltrami County	Minnesota	Community water and sewerage	144,000
Standing Rock	Wakpala, Corson County	South Dakota	do	171,000
Turtle Mountain	South Belcourt, Rolette County	North Dakota	Water and sewer extensions	125,000
White Earth	White Earth, Becker County	Minnesota	Community water and sewer	226,000
Albuquerque area:				
Santa Anna	Santa Anna, Sandoval County	New Mexico	do	250,000
San Juan	Rural area, Rio Arriba County	do	Community water and individual waste disposal	100,000
San Felipe	San Felipe, Sandoval County	do	Community water and sewerage	269,000
Acoma	Acomita, rural Valencia County	do	Community water and individual waste disposal	74,000
Ute Mountain	Towaoc, Montezuma County	Colorado	Community water and sewerage	165,000
Laguna	Old Laguna, Valencia County	New Mexico	Community sewerage	50,000
Window Rock:				
Navajo	Scattered locations	Arizona, New Mexico, and Utah.	Construct and develop shallow wells and springs	100,000
Do	do	do	Community water and sewerage and individual waste disposal.	200,000
Do	Fruitland-Kirtland rural Navajo Area, phase I, San Juan County.	New Mexico	Community water and individual waste disposal	551,000
Do	Iyanbito, McKinley County	do	do	90,000
Do	Salt Springs Wash, San Juan County	do	do	90,000
Do	Saw Mill area, Apache County	Arizona	do	75,000
Do	Sheep Springs, San Juan County	New Mexico	do	45,000
Do	Chinle Valley, phase I, Apache County	Arizona	do	75,000
Do	Lupton, Apache County	do	do	45,000
Do	Cove, Apache County	do	do	40,000
Anchorage area:				
Kotzebue	Election District 22	Alaska	Construct water transmission line	400,000
Good News Bay	Election District 16	do	Community water	90,000
New Kolignek	Election District 15	do	Communal water and individual waste disposal	25,000
Middle Yukon Group (3 villagets)	Election Districts 17 and 24	do	do	130,000
Saxman	Election District 2	do	Community water and sewerage	100,000
King Cove	Election District 14	do	do	170,000
Barrow	Election District 21	do	Waste collection system	60,000
Billings area:				
Flathead	Camas-Hot Springs, Sanders County	Montana	Individual water and waste disposal	150,000
Fort Peck	Brockton-Riverside, Rosevelt County	do	Individual and community water and waste disposal	92,000
Do	Frazier-Wiota, Valley County	do	do	125,000
Crow	Crow Agency, phase II, Big Horn County	do	Community sewerage	220,000
Wind River	Mill Creek-Boulder Flat, Fremont County	Wyoming	Individual water and waste disposal	53,000
Do	Dry Creek Ranch, Fremont and Hot Springs Counties.	do	do	68,000
Blackfeet	Seville-Badger-Fisher, Pondera and Glacier Counties.	Montana	do	188,000

Oklahoma City area:				
Jackson and Brown Counties	Horton district	Kansas	do	90,000
Seminole County	Seminole district	Oklahoma	do	75,000
Pontotoc County	Pontotoc district	do	do	75,000
Cherokee and Mays Counties	Spring Creek district	do	do	90,000
Cherokee Reservation	Tomtla district Cherokee County	North Carolina	do	60,000
Latimer and Le Flore Counties	Talihina district	Oklahoma	do	75,000
McIntosh County	Pierce district	do	do	50,000
Adair County	Greasy district	do	do	102,000
Delaware County	East Kansas district	do	do	75,000
Custer and Washita Counties	Clinton district	do	do	60,000
Kay County	Marland district	do	do	60,000
Comanche County	Cache district	do	do	60,000
Phoenix area:				
Duck Valley	Northern section Elko County	Nevada	do	152,000
Gila River	Maricopa, Pinal County	Arizona	Community water and individual waste disposal	140,000
California Rancherias	Scattered locations	California	do	48,000
Round Valley	Entire reservation, Mendocino County	do	Individual water and waste disposal	120,000
Gila River	West Casa Blanca, Pinal County	Arizona	Community water and individual waste disposal	50,000
Papago	3 villages, Pima County	do	do	122,000
Fallon Colony	Fallon, Churchill County	Nevada	do	30,000
Hopi	Second Mesa, phase I, Navajo County	Arizona	Community water	95,000
Gila River	Stotonic San Tan, phase II, Pinal County	do	Community water and individual waste disposal	155,000
San Carlos	Gilsen Wash, Graham County	do	do	135,000
Portland area:				
Western Washington	Five scattered locations	Washington	Individual and community water and individual waste disposal.	207,000
Colville	Nespelem community, Douglas County	do	Community water and sewerage	139,000
Do	Nespelem-Coulee Dam, phase II, Okanogan County.	do	Individual water and individual waste disposal	37,000
Yakima	White Swan community, Yakima County	do	Community water and sewerage	199,000
Fort Hall	Fort Hall, Bingham County	Idaho	do	91,000
Special project	Demonstration community health project, Rapid City.	South Dakota	do	200,000
All areas			Investigations, emergency works, supplies, and equipment.	200,000
Subtotal—Sanitation facilities construction projects.				8,000,000
All areas			Assistance to Federal and tribal housing program for Indians. For the construction of sanitation facilities in Indian communities where they are needed to complement Federal and tribal housing programs conducted by the Public Housing Administration, Bureau of Indian Affairs, Office of Economic Opportunity, or tribal groups. (Approximately 2,000 units of housing.) This request includes funds to complete the 1967 program.	2,464,000
Total, 1968 request for sanitation facilities.				10,464,000

BIA–PHS CRITERIA

Chairman HAYDEN. In the highlight statement supplied with your justifications you indicate that the projects requested have been evaluated under the Public Health Service-Bureau of Indian Affairs criteria. What are these criteria?

Dr. RABEAU. This document, Mr. Chairman, was done originally at the request of the Deputy Director of the Bureau of the Budget early in 1963. He requested that the Chief of the Division of Indian Health and Commissioner of the Bureau of Indian Affairs come up with a joint document that would define—would set up criteria and guidelines that could be used to decide whether or not a health facility, a hospital, is needed, and if one is needed, how could the need best be met—for example, through a construction of a Division of Indian Health facility, or the use of a community facility. Some of the criteria that this document covers are official tribal desire, geography, the behavioral dynamics, the particular problems of the difference in culture between the Indian and what he encounters in a community hospital, such things as diseases and related patterns, and the factors of comprehensive health programing.

These are the major criteria that were developed in this document.

INCREASED COSTS OF PROJECTS

Chairman HAYDEN. Also, I note with regard to projects which were deleted from the fiscal year 1967 program, and funds for which are again asked in this budget, are expected to cost more because of increases in the construction cost index since estimates were first formulated. What is this increase?

Dr. RABEAU. $211,000.

STEWART BOARDING SCHOOL

Chairman HAYDEN. You are asking for $26,000 to plan a replacement of the school health center at Stewart, Nev. Is this center to be located on the same site as the one to be replaced?

Dr. RABEAU. Yes, sir. The Bureau of Indian Affairs is modernizing and expanding the boarding school at Stewart, which is just outside of Carson City, Nev. We have a very antiquated and dangerous, from a safety viewpoint, structure there at the present time. It will be on the same grounds.

PERSONNEL QUARTERS

Chairman HAYDEN. Your justification statement indicates that the estimated cost of the 195 units of personnel quarters reflect prefabricated type units. Are all of these units to be prefabricated?

Dr. RABEAU. This year, all of the three-bedroom units are prefabricated, and with this coming year, all the one-bedroom units, in addition, will be prefabricated.

SHIPROCK HOSPITAL

Chairman HAYDEN. With respect to your statement concerning the Shiprock Hospital, last year's appropriation was based on your request for planning funds for expansion of the outpatient department and field health facilities at the 75-bed hospital at Shiprock, which you estimated would cost $585,500. This year you are asking $102,000 for planning funds, indicating that $1,832,500 will be proposed in the fiscal year 1969 budget. I note also that it is planned to construct a 25-bed addition to the present hospital. Is this a change in your planning from last year, and, if so, what is the reason?

Dr. RABEAU. Yes, sir, Mr. Chairman. This does represent a change in our planning. Two things have come about. The Shiprock area is the most rapidly growing of the entire Navajo country. Industry has moved into Shiprock. This was not anticipated, at least, not to the degree that it has occurred. For example, in this past year, there is an electronics plant there that has doubled the number of Navajos that it employed. It has gone from 300 to 600 employees.

In addition, construction of a dam is going to provide, I think, 110,000 acres of irrigated land, and my people tell me that they anticipate there are going to be canning plants, frozen food plants at this location, and that there is going to be a great demand for not only employees for these, but also for working on the farms.

In view of this we felt that it would be necessary, because of the influx of population, to increase the number of beds that we have at Shiprock. It was felt that it would be better to do the entire alteration at one time rather than just the outpatient wing. Incidentally this hospital has the largest volume of outpatient visits of any of our hospitals on the Navajo.

One of the favorable arguments is, if we put the addition on at the same time, this will allow us the least amount of disruption of the hospital. In other words, you could build the addition, the patient-care beds first, and this would allow you then to move into the modernization of the out-patient wing.

One other factor, and I very ruefully say this, we have had a great deal of difficulty in the past in our cost estimates. I am also happy to say that with the transfer of our construction branch into the new Division of Buildings and Facilities, in the Office of the Surgeon General, this deficit will be corrected as they have a professional cost estimator. I would like to assure the committee that we can now present cost estimates that we can live with.

TUBA CITY HOSPITAL

Chairman HAYDEN. In fiscal year 1967 when planning funds were provided for the Tuba City hospital, it was indicated that the construction cost would be $3,112,000. However, the budget for fiscal year 1968 indicates that construction funds are needed in the amount of $4,230,000, an increase of $1,118,000. Is this all due to increased construction costs, or have the plans been expanded? So far as I can determine, the hospital description is almost the same in both budget justifications.

Dr. RABEAU. Mr. Chairman, it is partially due to a faulty cost estimate. It is also partially due to escalation in building costs. Mr. Chadwick, do you want to add something to that?

Mr. CHADWICK. Mr. Chairman, this project has been somewhat involved, because we now have a 75-bed hospital that is not too old, and we found that we had to do much more modernization than we had thought we would to start with. And the modernization and addition of those beds were of such magnitude, after we did our feasibility study, that we found that there was very little difference between this and a new hospital. So this is what we now have, but the difference in cost relates directly to that magnitude we first thought, versus what we finally ended up with, after the feasibility study.

CHINLE HOSPITAL

Chairman HAYDEN. With respect to the planning funds asked for the coming fiscal year for the Chinle Hospital in the amount of $288,000, I recall that last year for planning funds $132,000 was provided. This is an increase of more than two times. What is the cause of this?

Dr. RABEAU. Mr. Chairman, it was necessary to reprogram the planning funds that we were appropriated last year. The increase from $132,000 to $288,000 is based on our experience plus a much more accurate cost estimate.

COMMUNITY HOSPITALS

Chairman HAYDEN. In order to finance community hospitals serving Indians and non-Indians under Public Law 85-151, there is a request for a $250,000 appropriation. How much was provided for this purpose in fiscal year 1967?

Dr. RABEAU. None, sir.

Chairman HAYDEN. None?

Would you please place in the record an indication of where this money will be used, and how much will be provided for each recipient?

Dr. RABEAU. We would be happy to.

(The information follows:)

The amount of $250,000 was included in the budget for a Public Law 151 project at Juneau, Alaska. However, since the preparation of the 1968 budget, this project has not progressed as expected. A project for a Community Hospital at Roosevelt, Utah, has progressed faster than expected, and is currently the most appropriate project for consideration. In the event that the Division of Indian Health finalizes its plans to assist in this construction project we will seek necessary approval to reprogram these funds for this project.

WATER AND WASTE DISPOSAL FOR RAPID CITY

Chairman HAYDEN. I note that within the work planned for fiscal year 1968, there is a special project to provide water and waste disposal in Rapid City, S. Dak. Would you please describe just what is planned?

Dr. RABEAU. Yes, sir. In the Rapid City area we have put in a demonstration family health center. The sanitation facilities project is part of the program. This will supply running water and waste disposal facilities to approximately 100 Indian families who are living in the Sioux addition. It is outside the city limits of Rapid City, but will be connected with the city water and sewerlines. The division is working very closely with both the county health department and the city on this project.

OTHER REPROGRAMING

Chairman HAYDEN. Aside from the four construction projects to which you refer in your justification statement, has it been necessary to reprogram any other construction projects? If so, which are they?

Mr. CHADWICK. We haven't had to reprogram any further at this time, Mr. Chairman.

PROJECTS NOT UNDERWAY

Chairman HAYDEN. Will you please place in the record a table of the authorized construction projects which are not yet underway, and indicate the reason why construction activity has not begun?

Dr. RABEAU. Yes, sir.

(The information follows:)

Status of projects not under construction, construction of Indian health facilities, Public Health Service

Activity-project-description	Percentage of completion of program of requirements and/or working drawings	Remarks
HOSPITALS AND CLINICS		
Hospitals:		
Phoenix Medical Center, Arizona, 200-bed hospital replacement.	20	Working drawings under development; estimated completion of working drawings September 1967; estimated bid opening November 1967.
Mescalero Hospital, New Mexico, 15-bed hospital replacement.	95	Estimated bid opening April 1967.
Philadelphia Hospital, Mississippi, 30-bed hospital replacement.	2	Program of requirements under development; appropriated for planning only.
Harlem Hospital, Montana, 33-bed hospital replacement.	2	Do.
Claremore Hospital, Oklahoma, 60-bed hospital replacement.	2	Do.
Clinics, health stations (HS) or health centers (HC):		
Fort Wingate HC, New Mexico, construction.	95	Working drawings completed; estimated bid openings April 1967.
Wanblee HC, South Dakota, construction.	2	Program of requirements under development; estimated bid opening August 1967.
Riverside HC, California	10	Program of requirements completed; appropriated for planning only.[1]
Many Farms HC, Arizona	2	Program of requirements under development; appropriated for planning only.[1]
Chilocco HC, Oklahoma	2	Do.
Mandaree HS, North Dakota	75	Working drawings under development; estimated bid opening May 1967.
Twin Buttes HS, North Dakota	75	Working drawings under development; estimated award of contract May 1967.
New Town HS, North Dakota	75	Working drawings under development.[1]
Lower Brule HS, South Dakota	75	Working drawings under development; estimated bid opening May, 1967.
Cannonball HS, North Dakota	75	Do.
Red Lake HS, Arizona	75	Do.
Rough Rock HS, Arizona	75	Do.
Wellpinit HS, Washington	75	Do.
Queets HS, Washington	75	Do.
Taholah HS, Washington	75	Do.
Lapwai HS, Idaho	75	Do.
Big Cypress HS, Florida	95	Working drawings under development; estimated bid opening March 1967.
PERSONNEL QUARTERS (NUMBER)		
Belcourt, N. Dak. (construction) (17)	100	Estimate of award of contract March 1967.
Wanblee, S. Dak. (construction) (5)	100	Do.
Winnebago, Nebr. (construction) (7)	100	Do.
Fort Yates, N. Dak. (construction) (14)	100	Do.
Pine Ridge, S. Dak. (construction (14)	100	Do.
Crownpoint, N. Mex. (construction) (33)	100	Estimate of award April 1967.
Shonto, Ariz. (construction) (5)	100	Do.
Kaibeto, Ariz. (construction) (5)	100	Do.
Lower Greasewood, Ariz. (construction) (5)	100	Do.
Crow, Mont. (15)	100	Estimate of award of contract March 1967.
Lame Deer, Mont. (3)	100	Do.
Rocky Boy, Mont. (4)	100	Do.
Browning, Mont. (11)	100	Do.
Poplar, Mont. (9)	100	Do.
Fort Washakie, Wyo. (7)	100	Do.
Mescalero, N. Mex. (11)	75	Working drawings under development: estimated bid opening April 1967.
ALTERATIONS		
Winnebago, Nebr., planning and remodeling OB ward.	100	Contract documents completed; estimated award of contract April 1967.
Shonto HS, Arizona, addition to HS for dental clinic.	75	Working drawings under development; estimate of award of contract June 1967.
Gallup Hospital, New Mexico, install smoke partitions and doors.	100	Plans completed; estimated award contract April 1967.
Tuba City Hospital, Arizona, planning funds.	2	Program of requirements under development; funds to be used to develop contract document (working drawings). [1]
Mount Edgecumbe Hospital, Alaska, planning funds for sewage treatment plant.	2	Planning under development.
Tablequah Hospital, Oklahoma, alterations to hospital.	25	Planning under development; estimate award of contract May 1967.

See footnotes at end of table.

Status of projects not under construction, construction of Indian health facilities, Public Health Service—Continued

Activity-project-description	Percentage of completion of program of requirements and/or working drawings	Remarks
ALTERATIONS—Continued		
Cherokee Hospital, Oklahoma, planning for additions.	10	Program of requirements under development; funds to be used to develop contract document (working drawings).
Talihina Hospital, Oklahoma, feasibility study and planning for alterations and addition.	15	Do.
Sells Hospital, Arizona, converting space in hospital to health office space.	100	Working drawings completed; estimated award of contract April 1967.
Shiprock Hospital, N. Mex., planning funds for expansion and alterations.	2	Program of requirements under development.[2]
Pine Ridge Hospital, S. Dak., planning funds for alteration.	2	Program of requirements under development; funds to be used to develop contract document (working drawings).
Red Lake Hospital, Minnesota, planning funds for modernization.	2	Do.
Rosebud Hospital, South Dakota, planning funds for additions and alterations.	2	Do.
Whiteriver Hospital, Arizona, planning funds for additions and alterations.	2	Do.
Owyhee Hospital, Nevada, planning funds for modernization.	2	Do.
Browning Hospital, Montana, planning funds for alterations and expansion.	2	Do.
Warm Springs, HC, Oregon, remodel health center.	100	Working drawings completed; estimated award of contract June 1967.
Kotzebue Hospital, Alaska, sewage plant	25	Engineering feasibility study completed and being reviewed; working drawings will be developed based on approved engineering study.
Anchorage Hospital, Alaska, site stabilization.	100	GSA proceeding with site approval, report due May 8, 1967; working drawings complete.
Mount Edgecumbe Hospital, Alaska, planning incinerator.	2	Planning requirements to clear site and design incinerator foundations.[1]
Anchorage Hospital, Alaska, feasibility study funds.	2	Program of requirements under development.
Rocky Boys HC, Box Elder, Mont	90	Working drawings under development; estimated bid opening, May 1967.

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[1] Construction funds requested in 1968.
[2] Balance of planning funds in 1968.

PHOENIX MEDICAL CENTER

Chairman **HAYDEN**. Some 6 years ago a medical center was authorized at Phoenix. Each year you come before this committee and report little if any progress for this project over the previous year. How long has it been since you developed the requirement for this hospital?

Dr. **RABEAU**. The original program requirements were developed in 1959, sir.

Chairman **HAYDEN**. Planning funds were appropriated in fiscal year 1962. What specific actions have been taken since that time? Summarize them briefly and then place a full statement in the record to include the officer or agency making each review of this project, and the time required for each review.

Dr. Rabeau. We would be happy to submit the more detailed one for the record.

Mr. Chairman, Congress appropriated the planning money in fiscal year 1962. Alternate programs were then studied at that time, including whether we should use the VA hospitals or go into community hospitals. In 1963, $60,000 was apportioned for the feasibility study to determine whether we should modernize the existing structure, or whether a new one was preferable.

In early 1964 the A. & E. contract was awarded for the feasibility study, and at the same time, the study was conducted as to whether or not a wing added onto the VA hospital would be feasible. By early 1965, the feasibility study showed that a new facility was needed. Congress then in fiscal year 1966 appropriated the construction money for a new hospital. In the fall of 1966, the balance of the planning money was apportioned, and from this point we have made great strides. In early 1966, the architect-engineering planning contract was awarded, and we have progressed rapidly. There has been a long delay in this project. Part of this is that assurance was needed that this was the best type of facility for the Indian; that this would be the most suitable. The second factor is this is not only a medical center, but it is also having a research unit in it. This has been done in consort with the National Institute of Arthritis and Metabolic Diseases. At the present time, I am happy to report that the working drawings are, as of this date, 20 percent completed, we anticipate the invitation to bid to be October of this year, the contract to be awarded in November of 1967, and the hospital to be completed within 18 months or by March of 1969.

(The statement follows:)

Chronology of the PHS Indian Medical Center, Phoenix, Ariz.

1. Program of requirements summary was developed in 1959. The committee was advised in May of 1961 by Secretary Ribicoff that planning funds would be requested in the 1963 budget.

2. Congress authorized $350,000 in the 1962 appropriation to plan a new replacement facility.

3. Subsequent to the appropriation of planning funds in 1962, a new program was developed in conjunction with Public Health Service, Department of Health, Education and Welfare and the Bureau of the Budget which considered (1) the use of the Veteran's Administration Hospital in Phoenix, (2) the use of community facilities including the possibilities of supplementary P.L. 85-151 funds. Conclusion of study was that a separate Public Health Service Indian Medical Center would best meet the health needs of the beneficiaries.

4. Feasibility funds of $60,000 against the authorized planning funds of $350,000 were apportioned by the Bureau of the Budget in the fall of 1963 for a feasibility planning study by a private Architect/Engineer to determine whether modernization or a complete new facility was the most economic method of meeting the health needs of the Indian beneficiaries. On the basis of this feasibility study, it was determined to construct a completely new facility. The study was completed February 1965.

5. Planning funds of $290,000 were apportioned by the Bureau of the Budget in October 1965.

6. Congress authorized $4,950,000 for the construction of the facility (1966 appropriation).

7. The architect-engineering contract to prepare the working drawings was awarded in February 1966.
8. The working drawings are currently 20% complete.
9. Invitation for bids for the construction contract will be requested in October 1967.
10. The hospital will be completed March 1969.

ADDITIONAL FUNDS REQUIRED

Chairman HAYDEN. In fiscal year 1966 $4,950,000 was appropriated for construction. Will this be sufficient? If not, how much do you now estimate is required, and what is the reason for the additional costs?

Dr. RABEAU. Mr. Chairman, this amount will not be sufficient. We need approximately $1,425,000 in additional funds. There are about three segments of requirements. You will recall that the 1966 Senate-House conferees agreed that if we needed $500,000 more than the original construction funds authorized at that time, to request it.

Another segment of almost equal size is needed for the 25-bed research wing that we are going to incorporate in this hospital. The balance, a little over $400,000, is due to cost escalation since the original appropriation.

Chairman HAYDEN. You indicate that a portion of the approximately $1,500,000 additional required at this date is related to the inclusion of research beds under the auspices of NIH. If this be true, why isn't this portion of the funds provided by NIH rather than the Division of Indian Health?

Dr. RABEAU. Mr. Chairman, the research will be for Division of Indian Health beneficiaries and therefore part of our program. The National Institutes of Health is providing us with the research expertise and consultation necessary to put in this department.

REASONS FOR DELAY IN CONSTRUCTION OF PHOENIX MEDICAL CENTER

Chairman HAYDEN. What is the reason for delaying on this hospital construction when other hospitals to be built and operated by the Public Health Service for Indians are planned within a year or so and constructed promptly after funds are available? There must be a reason.

Dr. RABEAU. There are several. It does take longer to plan a medical center of this magnitude. The last one that we constructed at Gallup also required a number of years to design and construct.

Secondly, we are particularly desirous that it will be an outstanding example of the latest in hospital design and in research competency.

Senator BARTLETT. Well, did the Budget Bureau throw any roadblocks in your way at all?

Dr. RABEAU. No, sir.

Senator BARTLETT. They have gone along fully?

Dr. RABEAU. Yes, sir, we are very pleased with the assistance that we have had, during my experience in the program, with the Bureau of the Budget.

Chairman HAYDEN. Well, may I have your personal assurance that the contracts on this hospital construction will be let during the first half of fiscal year 1968 at the latest?

Dr. RABEAU. Yes, sir.

Mr. NEIL. Mr. Chairman, could I just add to that, speaking for the Department, that we are discussing with the Budget Bureau the problem of this cost overrun and trying to determine what steps we should take to deal with it.

CONSTRUCTION OF FACILITIES IN NORTH AND SOUTH DAKOTA

Chairman HAYDEN. Will you please prepare for the record responses to these questions posed by Senators Mundt and Young.

(The questions and answers follow:)

RESPONSES TO QUESTIONS BY SENATOR MUNDT

Question. Can you tell us just what is involved in the $97,000 for alterations at Pine Ridge outlined on page 77 of the justifications?

Answer. The $97,000 for alteration projects as outlined on page 77 of the justification provides funds for six alteration projects which include projects for Pine Ridge, South Dakota—$10,000; Sells, Arizona—$8,000; Sacaton, Arizona—$7,000; Crow, Montana—$27,000; Winterhaven (Yuma) California—$18,000; and, Bethel, Alaska—$27,000.

The estimate of $97,000 includes $10,000 for an alteration project at Pine Ridge, South Dakota. The project as proposed will extend water mains for fire protection to the new personnel quarters constructed in 1967.

The existing domestic water supply system provides fire protection only to the presently available personnel quarters and the Pine Ridge hospital. The new personnel quarters authorized in 1967 make it essential to provide a 6-inch water main extension loop including necessary fire hydrants and manholes. To provide this system it will be required to relocate 500 feet of sewer line.

Question. Your estimate on page 148 of the justifications includes $60,000 for three units of quarters at Wagner. Will this complete the quarters program at Wagner? If not, how many more units will be needed? What about your other locations in South Dakota? Do you have adequate quarters?

Answer. The three quarters requested for Wagner will complete the quarters program at Wagner. In the State of South Dakota only one additional quarter is required at Sisseton to replace a sub-standard unit.

Question. I note on page 164 of the justifications your discussion of the extension of the water main at Pine Ridge to serve quarters authorized in 1967. How are you coming on those quarters? Will the $10,000 requested give you a completely adequate line?

Answer. The construction for fourteen units of quarters for Pine Ridge will be awarded March 27, 1967. It is anticipated that construction of these quarters will be completed by December 16, 1967.

The $10,000 requested for the extension of the water main at Pine Ridge to serve the personnel quarters authorized in 1967 will provide a 6-inch extension of the existing 4-inch water main. The work proposed will provide fire protection for the personnel quarters authorized for construction during 1967.

In order for the total water supply system to meet the fire code requirements of the National Fire Protection Association, the existing 4-inch water main line will have to be replaced sometime in the future.

Question. I note on page 211 of the justifications your discussion of Sanitation facilities requested for Cheyenne River, Rosebud and Standing Rock in fiscal 1968. Would you provide for the record and a copy to my office a breakdown of other sanitation facilities needed at various locations in South Dakota?

Answer. The following table provides this information.

Known Indian sanitation facilities needs for South Dakota locations (over and above fiscal year 1968 request)

Reservation	Community or district	County	Project description	Order of magnitude cost
Yankton	Phase I	Charles Mix	Individual water and waste	$130,000
Sisseton	Lake districts	Roberts	do	168,000
Cheyenne River	Promise	Ziebach	do	66,000
Standing Rock	Bullhead	Corson	Community water and waste	384,000
Rosebud	Parmalee district	Mellette	Individual water and waste	80,000
Do	Ring Thunder	Todd	do	60,000
Standing Rock	Little Eagle	Corson	Community water and waste	50,000
Cheyenne River	Moreau River	Dewey	Individual water and waste	90,000
Do	Red Scaffold	Ziebach	Combination water and individual sewer.	200,000
Crow Creek	Rural	Buffalo	Individual water and waste	130,000
Yankton	Phase II	Charles Mix	do	130,000
Pine Ridge	American Horse Creek.	Shannon	do	112,000
Standing Rock	Kenel district, phase I.	Corson	do	120,000
Pine Ridge	Lakeside and Grass Creek.	Bennett	do	57,000
Lower Brule	Rural	Lyman	do	40,000
Pine Ridge	Rockyford	Shannon	do	66,000
Cheyenne River	La Plant district No. 9.	Dewey	Combination water and individual sewer.	200,000
Yankton	Phase III	Charles Mix	Individual water and waste	120,000
Standing Rock	Wakpala district	Corson	do	366,000
Do	Bullhead district	do	do	360,000
Do	Little Eagle	do	do	272,500
	Little Eagle district, phase I.			
Do	Kenel district, phase II.	do	do	90,000
Do	Little Eagle district, phase II.	do	do	272,500
Cheyenne River	Four Bear	Dewey	do	51,000
Rosebud	Grass Mountain	Todd	do	40,000

NOTE.—Above list based upon requests for assistance received from Indian tribes. Additional project requests may be received.

RESPONSE TO QUESTIONS BY SENATOR YOUNG (N. DAK.)

Question. Doctor, we have had a problem in getting funds for Health Stations and Health Centers on the Fort Berthold Reservation. As you know, funds have been appropriated and re-programmed in the past. These facilities are badly needed. Are there funds in this year's Budget?

Answer. Funds are included in the 1968 request.

Question. If funds are appropriated, is there a possibility that they will be diverted again for some other use?

Answer. Funds will not be diverted.

Chairman HAYDEN. Do you have any questions, Senator?

Senator BARTLETT. Oh, lots. Thank you.

Off the record.

(Discussion off the record.)

MENTAL HEALTH

Senator BARTLETT (presiding). Perhaps, Dr. Rabeau, I ask you this question every year, and then forget your answer, and so I apologize. What is the incidence of mental health among the Indian people as compared with the white population?

Dr. RABEAU. Our best records show that it is about the same; however, there are some significant indexes that show that mental health is a problem among the Indians. For example, the suicide rate is about three times that of the non-Indian population. The violent death rate—this includes not only accidents but homicides as well—is also more than double that of the general population. Part of the latter is attributable to the conditions of living.

Senator BARTLETT. Not necessarily associated with mental illness.

Dr. RABEAU. Yes, sir.

Senator BARTLETT. Senator Hayden asked you a question about the Alaska community health aid training program for which you have a budgetary request of $95,000. My recollection is that you told him that this was a new program?

Dr. RABEAU. It is new insofar as that what we have done heretofore has been done entirely by the staff, and has been done on a very limited extent, at some of our facilities. We have been unable to pay the people that are undergoing this training. This will be a much longer and much more intensified course. We have developed materials. We have a manual that we developed for community health training that is being used all over the country. This will be a much longer course. Our courses in the past have only been, at the best, a week or two. This will be at least a 4-month didactic course. This will be a formal one. In the past, we have had a small one on an informal scale.

Senator BARTLETT. A rather hit-or-miss program before.

Dr. RABEAU. Yes, sir.

FUNDS BUDGETED FOR ALASKA

Senator BARTLETT. Now what is your budgetary request this year—$82 million?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. How much of that is for Alaska?

Do you know?

Dr. RABEAU. I would be happy to supply it for the record. Offhand, Senator, roughly one-fifth of our appropriation has gone to Alaska.

Funds budgeted for Alaska from the Indian Health Activities Appropriation follow:

Fiscal year	*Amount*
1966 actual	$14, 264, 000
1967 estimate	15, 554, 000
1968 request	16, 485, 000

CONTRACT MEDICAL CARE

Senator BARTLETT. Well, how much of this budgetary request is intended to be used for contract medical care?

Dr. RABEAU. Our contract medical care figures this year are just under $14 million—$13,960,000. This is a net decrease of $200,000 over fiscal 1967.

Senator BARTLETT. Just how does this contract program work?

BASIS FOR CONTRACT PROGRAM

Dr. RABEAU. The basis for our contract program is to utilize community facilities and community health resources, private health practitioners, dentists, other members, in locations where they are the most available and accessible health resources to the Indian and Alaskan native. We also utilize contracts to provide specialized services that would not be feasible or economical in our own facilities.

Much of this provides physician, dental and hospital services to Indians and Alaska natives that are not close to our facilities.

In Alaska, for example, a great amount of our funds is spent in Fairbanks, Juneau, Sitka, and Nome.

Senator BARTLETT. The philosophy here being that it would be more expensive to transport them than to treat them locally. Is that right?

Dr. RABEAU. Yes. Not only more expensive, but that it is in the best interest of the patient that they be treated as close to home as possible.

Senator BARTLETT. Now, you said that there was a reduction of $200,000 for fiscal year 1968 as compared with the current fiscal year?

Dr. RABEAU. Yes, sir. This is a net decrease.

Senator BARTLETT. How does this come about?

Dr. RABEAU. Well, we have an increase of $775,000 for rising costs of our program operation. This is predicated on a 5-percent increase in hospital costs.

We also have $5,000 for statutory pay increase for the personnel involved in contract medical care supervision. The $980,000 decrease, representing a decrease of 54 patients a day, that we alluded to in our budget is the anticipated effect of the medicare legislation on our program. These add up to a net decrease over fiscal 1967 of $200,000.

Senator BARTLETT. Now, you projected a 5-percent boost in hospitalization rates for fiscal 1968, over fiscal 1967. Now was that projection made before or after you had had experience with the Medicare Act?

Dr. RABEAU. It was made before, Senator.

Senator BARTLETT. Well, is it accurate?

Dr. RABEAU. Well, figures that were just released in departmental studies show that hospital charges have gone up an average of 16.5 percent in 1966, and that physicans' fees went up an average of 7.8 percent.

I might add, I just saw in the newspaper earlier this week that the Bureau of Labor Statistics showed that in the January Price Index, that just for the month of January 1967, hospital rates went up 2.8 percent, and that physican and dental fees rose one-half of 1 percent.

Senator BARTLETT. So your 5-percent projection as of now has no relation to the realities of the situation which could not have been foreseen at that time. Am I right in making that statement?

Dr. RABEAU. Yes, sir. We made, I think, basically a premature estimate. The second thing is, there was considerable doubt as to whether there would be a significant increase in hospital costs. There was quite a bit of discussion, pro and con, on this matter throughout the country.

SPECIFIC EXAMPLE OF CONTRACT COST INCREASES

SENATOR BARTLETT. Can you give us anything specific resulting from these increased rates? An example?

Dr. RABEAU. Well, our own experience is now showing us that we may run into even larger increases. Part of it is due to the fact that in some areas we had been receiving rates equivalent to the welfare departments—for example, physicians' fees. In several States the medical societies have now abolished this, which, of course, in turn, then means that we are going to pay not only the increase in fees that have gone up, but also this differential that we had received heretofore.

As to hospitals, our experience with negotiation of contracts has been that the rates are going up significantly.

Senator BARTLETT. All right, then. In view of that, in view of the fact that you earlier stated that there is no way to foretell how many additional States will implement title 19, what would your estimate be now as to the additional amount of money needed to serve those you are privileged to care for medically?

Dr. RABEAU. Well, anything that I say on this, Senator, would only be a pure estimate based on the 5-percent increase for which we received $775,000, and not knowing what will be the impact of medicaid, for it is not only a problem of the enactment of title 19, but it is also a problem of how liberal, how restrictive the legislation will be. My estimate, and this would be a very crude estimate, would be roughly—and this is arithmetic done in my head—I would say about one and a quarter million.

Senator BARTLETT. If you are going to do the kind of job that you are supposed to do.

Dr. RABEAU. Yes, sir. I must add that we really don't know, we really won't know until we get into 1968 what our experience will be as far as the impact of medicare goes.

All we can say is that we will attempt to carry out the program to the best of our ability. If it proves to be inadequate with these amounts, it will, of course, be necessary to decrease the scope of the services we provide under this.

ALASKA CONSTRUCTION

Senator BARTLETT. Are there any funds in your budget for construction in Alaska?

Dr. RABEAU. In 1968?

Senator BARTLETT. Yes.

Dr. RABEAU. No, sir.

Senator BARTLETT. Well, I have had continuing association with this health problem in Alaska for a good many years, and it was my understanding that the Division intended to launch out upon a program of constructing health stations.

Have those plans been dropped?

Dr. RABEAU. Senator, Mr. Chadwick just reminded me that we have requested sanitation facilities construction funds in 1968. Mr. Johnson, do you have an estimate for 1968?

Mr. JOHNSON. Yes, we will expend, if the funds are appropriated for fiscal year 1968, approximately $1 million in Alaska.

Senator BARTLETT. For what purposes?

Mr. JOHNSON. For purposes of constructing sanitation facilities to serve the villages and communities, that is, native villages and communities, in Alaska.

Senator BARTLETT. What types of sanitation facilities?

Mr. JOHNSON. A situation which will give you one specific example that I am sure you are aware of, is the project for Kotzebue.

Senator BARTLETT. Unfortunately, yes.

Mr. JOHNSON. That project has been started. We did start some preliminary work in Kotzebue during fiscal year 1967, at which time we will develop a water supply source using a couple of tundra lakes and small dams, and a pipeline to bring the water down to the community of Kotzebue.

This will be the first time that they will have, if we are successful in this venture, an all-year round supply of water to serve the community.

We would like to supplement this in fiscal year 1968 with the construction of a large storage reservoir in the community, that will give further insurance to a full year supply of water.

Under our long-term plans in the future we would anticipate some type of community distribution system.

Senator BARTLETT. And you have—when I said, "unfortunately, yes," I was referring to the wrong town. I was thinking of Unalakleet. You had a little disaster there, didn't you?

UNALAKLEET WATER SYSTEM

Mr. JOHNSON. Yes, sir. Unalakleet was the first recirculating type water system in a native village in Alaska. We are very proud of our construction at this location. Unfortunately, very recently, we had a fire that caused some $60,000 worth of damage. We are in the process of developing the plans to replace the pumphouse that was burned out. This construction will be done some time this summer.

We will take steps to prevent this kind of happening occurring in the future. We hope that perhaps we can negotiate with the electric utilities in that community to perhaps preclude the need to use oil or other kinds of heat, supposedly the kind of problem that causes this type of disaster.

Senator BARTLETT. Do you have the money available?

Mr. JOHNSON. Yes. Through the very kind offices of Congress, who authorized some funds to take care of emergencies of this type. From these emergency funds, we will be in a position to put the system at Unalakleet back into operation.

Senator BARTLETT. That is well.

COST OF HEALTH STATIONS AND QUARTERS IN ALASKA

Now, Dr. Rabeau, returning to these health stations, have you dropped those plans for construction of health stations?

Dr. RABEAU. No, sir, we have deferred them, while we look into cheaper methods of construction.

Senator BARTLETT. What do you mean?

Dr. RABEAU. Our construction costs in Alaska are running much higher than that in the continental United States, both quarters and health stations. We have always built, in Alaska, conventional construction quarters, which was also the case in the continental United States until recently. We are now constructing prefabricated housing, which reduced our cost about 35 percent. Thus, our plans have been deferred this year on construction of any Alaskan health stations and quarters while we investigate other possible means of construction or the use of different materials.

FUNDS FOR THREE HEALTH STATIONS DISALLOWED BY BUDGET BUREAU

Senator BARTLETT. Well, did the budget of the U.S. Public Health Service contain any money for any of these stations or for any quarters to be with them?

Dr. RABEAU. In the President's budget for 1968?

Senator BARTLETT. No.

Dr. RABEAU. In our budget?

Senator BARTLETT. In your budget as it left the U.S. Public Health Service.

Mr. CHADWICK. Yes, sir, the budget as we submitted it had funds for three health stations.

Senator BARTLETT. Three. Where were they to be located?

Dr. RABEAU. Minto, Unalakleet, and Alakanuk.

Senator BARTLETT. Now, how much would that have cost?

Dr. RABEAU. Our original budget proposal was $95,000.

Senator BARTLETT. $95,000 each?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. And how much for the quarters that would be required?

Mr. CHADWICK. We had 18 units of quarters requested, sir, at a total of $1,523,000. They would cost almost $90,000 each, $80,000 to $90,000.

Senator BARTLETT. And was this budgetary request chopped off in the HEW, or at a later date?

Mr. CHADWICK. At a later date, sir.

CONSTRUCTION COSTS IN ALASKA

Senator BARTLETT. And my understanding is, Dr. Rabeau, that construction costs in Alaska had some bearing upon this.

Dr. RABEAU. Senator, a typical health station in the continental United States costs about $56,000, so you can see that it is almost double in Alaska.

Our prefabricated quarters are now running us around $20,000, while our quarters in Alaska will cost us about four times as much. Yes, we were requested to determine if there wasn't some way that this could be done at less cost. These are, as you are personally well aware, extremely high.

We were requested not only to look into new methods of construction or the use of new materials, but also the possibility of the utilization of community buildings. This is what we are doing, or will do.

Senator BARTLETT. Well, those in charge of money management in Washington ought not to have been surprised, in my judgment, to discover that building costs in Alaska are higher than they are in States to the south, and that notwithstanding this, Government agencies and private business continue to build there.

What are you supposed to do at this late date to find a new form of construction adapted to Alaska that will match in cost like buildings in Arizona, for example?

INVESTIGATION OF OTHER METHODS OF CONSTRUCTION

Dr. **Rabeau.** Well, it is hoped that we ought to look beyond conventional methods of construction. We historically had this same problem with our quarters that we were building in the continental United States.

Our cost kept going up. The executive branch directed us to investigate other methods, specifically, the use of prefabricated buildings. This has reduced our costs.

It is hoped, possibly by looking into what is available, that we may be able to find some way. I really don't know whether this will materialize or not.

Possibly precut buildings may be the solution, because the problem with prefabrication, as you well know, is that it costs you a great deal to ship them to Alaska, because with water shipment, volume is the measurement of cost. Also, in most of the villages there is no method of taking such a large object off of a ship or putting it up on location. Machinery is not available.

Senator **Bartlett.** Well, without asking for any comment from you, I should say that this burden ought not to be imposed upon the Division of Indian Health, whose building program in Alaska is peanuts compared to that of some other Government agencies.

For example, right now, money has been released heretofore appropriated and held up for a while for the construction of quarters on military bases in Alaska, and they are not going to be prefabs; they are going to be conventional, and they are going to cost a lot more money than a similar home would cost in Louisiana, and I fail to discover the logic requiring you to find out if there isn't someway to reduce construction costs in Alaska.

This is scarely in your field, I should think.

PLANNING FUNDS FOR ALTERNATE CONSTRUCTION METHODS

Now, you have, notwithstanding, been directed to do this. Do you have any planning money in the budget, or available to you now, that would permit you to embark upon this search immediately?

I suggest it will be a rather expensive undertaking, and will constitute a failure when it is completed, but what I want to know is can you proceed on this search right now?

Mr. **Chadwick.** We would do this, Senator, in the same means we did with the prefabrication of quarters in the continental United States; namely, we would seek ways and means to do this with our ongoing staff. We would not need additional funds for the purpose of trying to find more economical ways of construction.

Senator **Bartlett.** Well, bless you.

You have enough money now to do this.

Dr. **Rabeau.** We have no additional funds for planning or study of such projects. We would do whatever our staffs could accomplish. We would ask our people at our Anchorage area office, for example, to investigate the possibilities of using any precut or prefabricated dwellings that are available in Alaska.

Senator **Bartlett.** Well, this is a major undertaking, and I suspect that it is one that you won't direct your attention to as a matter of first priority on account of the enormity of he task, which has been approached by many other agencies, which are more completely in the field of construction than you are.

So it seems to me that at a very minimum, we are going to have a 2-year delay in the construction of the first health station, maybe more.

Would you agree with that estimate?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. What if day after tomorrow your construction people said,

> Eureka! We have found it! We have found a system whereby we can construct these health facilities at costs comparable to that in the lower States.

So could you move then, or would you have to come back at a later date for money for purchase and installation and construction?

Dr. RABEAU. I am not sure that I have ever had the experience of moving that fast on construction. I don't think our history is very demonstrative of it. No, we would not be able to; we would immediately seek to put it in our 1969 budget.

Senator BARTLETT. I am almost through, Doctor.

COORDINATION WITH THE ARCTIC HEALTH RESEARCH CENTER

Do you work—does your division work in Alaska in cooperation or coordination with the arctic health program?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. Arctic Health Research Center?

Dr. RABEAU. Yes, sir.

Senator BARTLETT. I was talking with Dr. Scott earlier this year, who is Chief of the arctic health program, and he related two very interesting accounts to me, about which I should like to ask you.

Off the record.

(Discussion off the record.)

INCIDENCE OF SUCCINYLCHOLINE IN ALASKA

Senator BARTLETT. I have a memorandum from Dr. Scott—a rare medical event which involved Alaska native patients and succinylcholine, commonly used during surgical procedure as a muscle relaxant. If there is no objection, I am going to insert this memorandum in the record in full, because I think it is intensely interesting.

(The memo follows:)

PSEUDOCHOLINESTERASE DEFICIENCY IN ESKIMOS

Succinylcholine is commonly used during surgical procedures as a muscle relaxant. Its effect is of short duration, because an enzyma in normal blood, called pseudocholinesterase, rapidly destroys the drug. In 1962, a patient was found in England who lacked this enzyme. Giving this patient succinylcholine caused a cessation of breathing for about 3 hours requiring use of a respirator. No other effects of the enzyme deficiency have been observed. This condition is inherited, but is exceedingly rare in most populations, and up to the present only 7 cases in 6 families have been described throughout the world.

In early 1966, Dr. Brett Gutsche, anesthesiologist at the Alaska Native Medical Center, Anchorage, had two patients who stopped breathing for 3 to 4 hours after surgery, and suspected that pseudochlinesterase deficiency might be the cause. Investigations at the Arctic Health Research Center confirmed the deficiency of the enzyme. Since the families of both patients had their origin in the Mountain Village-Pilot Station area, a field investigation was begun.

The results have been that 19 persons in 11 families who lack pseudocholinsterase have been identified. All 19 individuals live in the area between Unalakleet and Hooper Bay and between Pilot Station and the mouth of the Yukon River. The investigation is still incomplete and it is anticipated that other enzyme deficient persons will be found.

The investigation is being actively pursued so that as many as possible of these people may be identified. The hospital records of these persons will be marked so that should an operation be indicated the use of succinylcholine will be avoided and other drugs be substituted. In addition, the remarkably high prevalence of the condition within this limited area offers a unique opportunity for scientific study of the enzyme deficiency.

ARTHROGRYPOSIS

Senator BARTLETT. Dr. Scott also reported a form of congenital—and I am going to spell this next one out, too—arthrogryposis has been found in 17 Eskimos in southwest Alaska.

This disease is familial, and is evident as an inability to move the joints freely. People with this condition usually are not able to walk. Researchers at Arctic Health Research Laboratory have discovered that this condition can be corrected by surgery. I was wondering, Doctor, if—I am sure you are fully aware of all this—if you have anything to add?

Dr. RABEAU. Well, sir, since the advent of the Arctic Health Research Center, we have worked closely with them, and have supplied material particularly on clinical research. They in addition, of course, do a great amount of basic research.

We are planning in the modernization of our Anchorage Medical Center to request a research unit similar to the one that will go in the new Phoenix Medical Center, and will be working very closely, not only with the National Institutes, but also with the AHRC in the utilization of this research unit.

Senator BARTLETT. Thank you.

Without objection, I am going to place the memorandum on arthrogryposis in the record.

(The memorandum follows:)

CONGENITAL ARTHROGRYPOSIS IN ESKIMOS

A form of congenital arthrogryposis has been found in 17 Eskimos in southwest Alaska. This disease is familial and is evident as an inability to move the joints freely. The patients are usually incapable of walking; two middle-aged brothers in Tanunak have walked on their knees all their lives.

Arthrogryposis can result from any of several causes; muscle disease, poor transmission in nerves, bone disease or involvement of tendons. The cases in Alaska are unusual in that they are accompanied by a peculiar abnormality of bone development.

Studies by the Arctic Health Research Laboratory have shown that in Alaskans with arthrogryposis the muscles are normal but weakened from disease, and that nerve conductance is normal. Accordingly, surgical treatment was begun at the Alaska Native Medical Center. The results have been encouraging; one fourteen-year-old boy is now walking for the first time in his life.

The cause of the disease is still unknown. Further research is needed to determine this, in the expectation of preventing the immobilization and thus avoiding surgery. Because of the considerable number of cases in a small population group, the opportunity for this research in Alaska is especially promising.

Senator BARTLETT. Dr. Rabeau, I want to thank you and your associates for your helpful testimony.

SUBCOMMITTEE RECESS

The committee will adjourn until 10 a.m., Thursday, March 16, when witnesses representing the National Gallery of Art and the Smithsonian Institution will be heard.

(Whereupon, at 12:20 p.m., Wednesday, March 15, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, March 16, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

THURSDAY, MARCH 16, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senators Bartlett and Young.

NATIONAL GALLERY OF ART

SALARIES AND EXPENSES

STATEMENT OF JOHN WALKER, DIRECTOR; ACCOMPANIED BY E. JAMES ADAMS, ADMINISTRATOR; ERNEST R. FEIDLER, SECRETARY-TREASURER; LLOYD D. HAYES, DEPUTY ADMINISTRATOR

BUDGET REQUEST

Chairman HAYDEN. The subcommittee will be in order. There will be placed in the record the justification statement submitted by the National Gallery of Art in support of its budget estimate for fiscal year 1968 in the amount of $3,085,000. This is an increase of $263,000 over the amount appropriated for the past fiscal year.

(The justification follows:)

The 1968 appropriation proposed for "Salaries and Expenses, National Gallery of Art," is $3,085,000. This amount exceeds the current year's requirement of $2,822,000 by $263,000.

PROGRAM

Of the $263,000 increase, $240,000 is to provide additional space, personnel, and equipment for long-established activities where the workload is determined by the interest and participation of the general public in the Gallery's program, rather than by management decisions. The remaining $21,000 is for preliminary work in the acquisition and preparation of sculpture for a National Sculpture Garden.

NATIONAL SCULPTURE GARDEN

On May 21, 1966, the White House announced the agreement between the National Gallery of Art and the Department of the Interior for the establishment of a National Sculpture Garden. The Garden will be located just west of the Gallery on the four-acre area known as L'Enfant Square which is under the jurisdiction of the Department of Interior. Under the establishing agreement the National Gallery of Art is obligated to acquire the sculpture, prepare it for exhibition, supervise its installation, and maintain its condition. The Gallery is also responsible for conducting an educational program for the benefit of visitors to the Garden. All the sculpture pieces will be acquired by gifts or purchases from nonappropriated funds. In this request for 1968, $21,000 is included for the employment of a Curator of Sculpture and a Museum Technician to assist in the preparatory work for which the Gallery is responsible. One or two additional employees for the Sculpture Garden's education program may be required after the Garden is completed.

NEW POSITIONS FOR ESTABLISHED FUNCTIONS

In addition to the two positions for the new National Sculpture Garden, five new positions are requested to sustain the continuous growth of existing activities—three in the educational and curatorial activities, and two in administrative functions. The brief tabulation below provides some measure of the increased public interest in the National Gallery over the past ten years in comparison with the increase in staff during the same period.

	1957	1966	Percent increase
Visitors	942, 146	1, 577, 108	67
Participants in education activities (excludes extension service program)	85, 643	156, 609	83
Requests for expert opinions by private owners of art objects	346	1, 669	382
Average number of all employees	316	333	5

ALTERATIONS AND IMPROVEMENTS IN BUILDINGS

The largest and most urgent item of increase in 1968 is for alterations and improvements in the Gallery building to provide additional storage, library, office, and other work space. This project is planned for completion over a five-year period at an estimated cost of $200,000 per year. The 1968 request for this item is $193,000. An early start of the project is basic to the growth of public service and supporting functions which must be expanded if the Gallery is to meet its ever-growing nation-wide obligations.

AUTHORIZING LEGISLATION

This request for an appropriation is based on the premises contained in section 4(a) of the Joint Resolution of Congress, March 24, 1937 (20 U.S.C. 71–75) in which:

"The faith of the United States is pledged that * * * the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the Board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge."

Salaries and expenses

Appropriation, 1966, including supplemental of $66,000	$2, 531, 000
Appropriation, 1967, including anticipated supplemental of $104,000	2, 822, 000

SUMMARY OF INCREASES AND DECREASES

1. To pay, on a full-year basis, wage-board pay increases effective Dec. 4, 1966	+7, 687
2. To pay within-grade promotions and wage-board step increases	+15, 570
3. To pay salaries and benefits for 2 new positions due to the establishment of the National Sculpture Garden	+20, 875
4. To pay salaries and benefits for 2 new administrative positions due to increased workload	+15, 752

Salaries and expenses—Continued

5. To pay salaries and benefits for 3 new positions due to increased workload in educational services	+$26, 816
6. To pay for alterations and improvements in the Gallery building to permit better utilization of space	+193, 000
7. To pay for new equipment to increase efficiency in accounting and duplicating activities	+18, 000
8. To pay for other increases	+9, 500
9. Reduction due to lower accident compensation payments and 1 less compensatable day	−9, 300
10. Reduction due to completion of building repairs and equipment purchases	−34, 900
Net change, 1968	+263, 000
Budget estimate, 1968	3, 085, 000

EXPLANATION OF INCREASES AND DECREASES

1. Extra cost in 1968 to pay wage-board increases granted December 4, 1966, $7,687

On December 4, 1966, pay increases, as authorized by law (5 U.S.C. 1082(7)), were granted to 80 employees in trades, crafts, and manual labor positions. Thus, for the current year the increases will be paid for only 15 bi-weekly pay periods. In 1968 the increases will be paid for the full year of 26 bi-weekly pay periods. The cost of the increases for the additional 11 pay periods is $7,687.

2. Within-grade promotions and wage-board step increases, $15,570

The estimated net cost of within-grade promotions and wage-board step increases was derived from an analysis of each position and present incumbent. This analysis gave consideration to: the incumbent's past service at the Gallery, his age, general health, step in grade, and prospects for promotion.

3. Participation in establishment of National Sculpture Garden, $20,875

The White House announced, May 21, 1966, the agreement between the National Gallery of Art and the Department of the Interior covering the establishment of the National Sculpture Garden. The Garden will be located on the four-acre area just west of the Gallery, known as L'Enfant Square. Under the establishing agreement, the Interior Department, which has jurisdiction of the land, undertakes the suitable development of the area for the agreed purpose. The National Gallery of Art is obligated to acquire the sculpture, prepare it for exhibition, supervise its installation, and maintain its condition. Also, the Gallery is responsible for conducting an educational program benefiting visitors to the Garden. All the sculpture pieces will be acquired by gifts or purchases from non-appropriated funds.

Although the Gallery has in its collections over 1700 works of art classed as sculpture, we have not employed an expert in this field of art for over 20 years. The responsibilities of the National Sculpture Garden greatly intensify our need for such an expert. The funds requested are for the employment of a curator, grade GS–13, and a museum technician, grade GS–7. The curator will participate in the appraisal, attribution, and selection of sculpture for the Garden, and the museum technician will assist the curator in the installation, care, preservation, and renovation of all sculpture in the custody of the Gallery.

4. Two new administrative positions due to growth in staff for substantive functions, $15,752

In the past 20 years only 1 new position has been requested for the offices providing administrative services for the Gallery's program—a GS–5 accounting clerk in the 1959 budget. Actually in 1948 there were 28 man-years employed in the administrative function compared to 25 man-years available in the current year. The tabulation below indicates the administrative overhead ratio for the years 1957, 1966, 1967 and 1968:

	Average number of all employees			
	Actual, 1957	Actual, 1966	Estimate, 1967	Proposed, 1968
(*a*) Administrative services personnel	29.8	25.0	25.0	27.0
(*b*) Program personnel	286.2	307.7	329.8	334.8
(*c*) Total all employees	316.0	332.7	354.8	361.8
Overhead ratio (percent) (a÷c)	9.4	7.5	7.0	7.5

The administrative problems and routine workload generated by the additional hours the Gallery is open to the public, from April 1 through Labor Day, are far greater than expected. As an example, during the past spring and summer we made 96 appointments of part-time guards to realize an average of 44 on duty—our plan called for an average of 52 on duty. Payroll work during the period, due to the heavy turnover, leave without pay, and overtime work was more than double that anticipated. Processing of personnel records for these and other part-time summer employees ran far beyond normal completion periods.

One payroll and leave clerk, GS–5, is proposed for 1968. This will provide 2 employees to devote full-time to that activity. The total time given to the function will be about 2.5 man-years compared with the 1.5 now available.

The second new employee requested for administrative services in a GS–11 administrative officer. For the past 10 years the Administrator has had no staff personnel to assign to management improvement projects, to assist in budget preparation and execution, or to prepare the increasing number of administrative reports to other agencies. Many internal directives and regulations have become obsolete during that period; others urgently needed to promote efficient operations have not been written. A revived records management program would relieve space and equipment pressures. In addition to the general administrative functions, building maintenance, space planning, protection, and public service activities for which the Administrator is responsble are requiring more executive direction with the growth in basic functions.

In our judgment, there is no need more critical in the interest of effective management than the two positions justified above.

5. Three new positions for educational programs, $26,816

Three new positions are requested for Gallery educational programs serving the public. Two positions, a GS–7 and GS–5, are for the Education Office. The third position, a GS–13 curator is for the Index of American Design.

The Education Office program for the benefit of Gallery visitors is presented in the following forms:

a. Information services available at both public entrances,
b. Regularly scheduled tours,
c. Scheduled tours by appointment.
d. Leaflets, in exhibition rooms, relating to the works of art,
e. Taper talks on works of art for LecTour reception in exhibition rooms,
f. Taped talks on special exhibitions for Acoustiguide users,
g. Printed texts on a different work of art each week,
h. Weekly Sunday program in auditorium on some aspect of art, and
i. Preparation of printed material and training of volunteers who conduct tours for area school children.

In addition, except for the summer, weekly radio talks are presented at the intermission of Sunday concerts.

The professional staff presently authorized for the Education Office consists of these positions:

1 curator, GS–13.
1 docent, GS–9.
3 docents, GS–7.
4 junior docents, GS–5.

Two additional professional positions are proposed for 1968—1 docent, GS–7, and 1 junior docent, GS–5.

Educational program workload (actual 1964–66, estimated 1967–68)

	1964	1965	1966	1967	1968	1968 over 1966 (percent)
Number of visitors served by tours and lectures	140, 458	141, 656	156, 600	164, 000	174, 000	11
Number of tours by appointment	460	467	610	700	800	31
Number of volunteer docents trained	130	126	159	166	176	11

In addition to better service to visitors through an increased number of tours, the additional 2 employees for this office will permit an increase in the number of galleries in which leaflets are available to visitors without charge.

The GS–13 curator requested for the Index of American Design will permit the continuation of the Index function at a relatively low level of activity in 1968 compared with years prior to 1960. In July of 1960 the staff of the Index was assigned the added responsibility of establishing and operating an extension service. At that time the staff consisted of the curator, a museum aid, and a secretary. Due to the phenomenal growth of the extension service, the effort now being devoted to the Index of American Design is that of one museum aid.

The Index collection consists of some 17,500 water color renderings of the crafts and folk arts of his country from before 1700 to about 1900. It was produced during the depression of the 1930's by the Works Progress Administration's Federal Art Project as a part of its program for providing work for artists. The Index was placed in the permanent custody of the National Gallery of Art in 1944. Renderings and records of the Index of American Design give students and the general public an opportunity to become familiar with the designs and craftsmanship of the early American cultural pattern. It provides artists, designers, and craftsmen with a source for an organic development of indigenous American design.

From 1945 to 1959 the Curator, Index of American Design wrote six books and twenty articles about the Index. Since 1959, the Index staff has lacked time to produce any written material on the Index for publication. Also, the number of people seeking material from the collection, which the staff has been able to assist, has decreased from 406 in 1959 to 304 in the past year. The new position will permit better service to the public seeking information from the collection, and provide the professional knowledge needed for better utilization of the collection for educational purposes.

6. *Alterations and improvements in Gallery building, $193,000*

Additional storage, library, office, and other work space is urgently needed for the supporting activities of the Gallery's program. Space occupied for these purposes has not been significantly increased since the opening of the Gallery in 1941. Growth in these activities over the past quarter-century and prudent planning for the future make it imperative to seek better utilization of present space. Also, certain alterations in the approach to the 7th Street Entrance are needed to make it suitable as a public entrance when the National Sculpture Garden is completed. To meet these present and future needs certain alterations and improvements are proposed for completion over the five-year period, 1968–1972. A brief outline of this plane, in the general order of precedence, follows.

Building Alteration and Improvement Projects for Fiscal Years 1968–1972

(1) Entrances to building from 7th Street:

(a) Widen 7th Street Drive to public entrance to provide two traffic lanes. (Present single lane was constructed for use as sidewalk.)

(b) Construct branches from 7th Street Drive to provide vehicular access to both northwest and southwest moats. (This is necessary to provide full utilization of areas hidden by moat walls.)

(c) Construct walk from 7th Street to entrance—to provide ready accessibility between Gallery and National Sculpture Garden.

(d) Relocate northwest moat wall to conform more closely to design of northeast moat wall in order to provide adequate service area for delivery of materials to the basement.

(e) Install elevator adjacent to west building wall in northwest moat to provide suitable means of moving materials in and out of basement.

(2) Construct building, with basement, in northwest moat for housing Extension Service activity.

(3) Install metal decking in general storeroom (G-137) east of north-south ceiling beam to provide storage on deck for the equipment parts, plumbing supplies, etc. now in bin storage at ground-floor level. The ground-floor level vacated to be used to meet need for additional storage space for Publications Fund sales merchandise.

(4) Rearrange or relocate in basement the present basement shops and move carpenter and paint shops (now on ground floor) to basement.

(5) Make necessary alterations in vacated carpenter and paint shops for occupancy of these spaces by the Supply Office and Duplicating Unit.

(6) After minor alterations in present area occupied by Supply Office and Duplicating Unit, move Publications Office to that space with needed expansion of the facilities for the mail-order activity.

(7) Remodel present Main Floor Publications and Check Room to be largely vacated by consolidating all sales facilities on Ground Foor. This room and the long area to the west which has never been fully utilized should provide facilities for Information, checking, LecTour and guard activities.

(8) Construct laborers locker rooms in upper area of east end of Fan Room 164 and Cleaning Equipment Room 163 and vacate present rooms 144 through 149 used for that purpose.

(9) Remodel Photographic Laboratory and extend it into spaces vacated in (8) above as necessary—installing new automatic processing equipment.

(10) Construct two or more partitions in Office 101-C to provide two additional offices for general administrative functions.

(11) Vacate Office 131-A to provide additional facilities for Registrar and Expert Opinion activities.

(12) Erect wall running north and south across open area adjacent to Registrar's storeroom, office, and vault to provide additional secure space for works of art received or awaiting shipment.

(13) Construct gardening shop and storage facility in southwest moat and extend greenhouse, thereby vacating space 73-75 which will be needed for exhibition rooms. (All space requirements for the complete gardening function to be provided in this new facility.)

(14) Construct new Restoration Studio over unfinished area 73-75 on Main Floor.

The $193,000 request for building alterations and improvements to be undertaken in 1968 is the estimate made by the General Services Administration, at the request of the Gallery, for the following work: Widen 7th Street Drive to public entrance to permit two-way traffic. Relocate granite curb; install bronze gates at moat walls at two locations. Relocate northwest and southwest moat walls.

7. *Equipment to increase efficiency of duplicating and accounting activities, $18,000*

Duplicating services for the Gallery are provided by 1 employee who operates an offset duplicator, an embossing machine for making addressing machine plates, and an addressing machine. With the present machines the operator is unable to carry the duplicating workload. Of the some 1¼ million pages duplicated in the past year more than half were printed on both sides of the paper sheets. A machine with two duplicating heads would have saved an estimated 400 hours of the operator's time. While such a machine costs $7,500, we believe its use will solve the duplicating workload problem without the assignment of additional personnel to the function.

The accounting and posting machine used in the recording of payrolls and other fiscal operations was purchased in 1959. The capacity of this machine is not sufficient to accumulate totals on all payroll items which must be recorded and reported. To that extent the efficiency to be gained from machine posting is largely lost. A modern machine with adequate capacity for all fiscal operations will cost an estimated $10,500.

8. Other increases, $9,5000

(1) *Payment to the Civil Service Commission for recruiting services.*—By letter of September 19, 1966, from the Chairman of the Civil Service Commission, we were given an estimate of $7,300 as the Gallery's share of the costs for operation of the interagency recruiting program. The letter states that the amount was computed under a formula approved by the Bureau of the Budget. This estimate exceeds by $3,900 the charge for the service in the current year.

(2) *Frames for George Catlin paintings.*—In the past year 351 paintings by George Catlin were received as a gift from Paul Mellon. The paintings are to be loaned for exhibition by smaller museums throughout the country. Most of these paintings must be framed before they can be exhibited. The $5,600 requested will provide frames for about one-third of the paintings. Additional funds for this purpose will be requested in subsequent years.

9. Decrease in accident compensation payments and one less compensable day, —$9,300

Accident compensation costs for fiscal year 1966 were $600—$1,600 less than for 1965. Reimbursement to the Department of Labor for 1965 costs of $2,200 is from the current year's appropriation. The reimbursement in 1968 will be for the $600 covering 1966 costs.

In the current year there are 261 compensable days. Only 260 compensable days occur in fiscal year 1968. For this reason, total personnel compensation payments in 1968 will be $7,700 less than in 1967.

10. Completion of building repairs and equipment purchases, —$34,900

The non-recurring items in the current-year budget are:

Repair of granite platform	$25,000
Repair of ventilating fans	6,500
Film inspecting machine	3,400

EXPLANATION OF PROPOSED CHANGES IN APPROPRIATION LANGUAGE

1. The addition of the words, "alteration, improvement," provides the authority required to use the appropriation for the construction work proposed for 1968.

2. Change of the $15,000 limitation for restoration and repair of works of art provides a reasonable allowance over the $13,000 annual contract for restoration of paintings should work beyond the scope of the contract be necessary. No additional amount over that available for the current year is requested for 1968.

STATUS OF PROGRAM

CHANGES IN MANAGEMENT REQUIREMENT

The average employment in 1966 (including the full-time equivalent of part-time and intermittent employment) was 333—11 man-years under the approved figure of 344. Our inability to achieve the planned level of employment was due primarily (as in other recent years) to the shortage of suitable applicants for laborer and guard positions. Employee turnover was unusually heavy, especially in the part-time positions related to the extended hours the gallery was open during the summer and spring. Overtime work due to periodic guard shortages and the lack of dependable part-time help cost about $24,000 more than planned.

Estimated average employment for the current year is 354—about 6 under the number planned prior to pay increases. The cost of pay increases in the present year totals over $123,000. A supplemental appropriation of $104,000 is being requested to help pay this additional expense. Based on operating costs of the past year, supplies, utilities, etc. required in the operation of the gallery are expected to run some $20,000 higher than estimated in the 1967 budget.

Funds are requested for fiscal year 1968 to support an average employment of 361. This increase of 7 over the current year includes: (*a*) 2 new employees due to the establishment of the National Sculpture Garden; (*b*) 2 additional employees in administrative services; and (*c*) 3 new employees for educational services provided the general public. The major item of increase over the current year covers certain alterations and improvements of the Gallery building to permit better utilization of space and provide suitable public access to the building from Seventh Street and the new National Sculpture Garden. The work planned for 1968 is estimated to cost $193,000.

ACCESSIONS

During the 1966 fiscal year 380 works of art were acquired, including the Paul Mellon collection of paintings by George Catlin.

SPECIAL EXHIBITIONS

The following exhibitions were held at the National Gallery of Art during the fiscal year 1966:

The Chester Dale Bequest—continued from the preceding fiscal year.

Graphic Arts from the Chester Dale Collection—continued from the preceding fiscal year through August 18, 1965.

Exhibition Illustrating Richard Bales' Index of American Design Suite No. 4—continued from the preceding fiscal year through August 6, 1965.

Exhibition of Rembrandt's Portrait of the Artist's Son Titus—on loan from the Norton Simon Foundation—continued from the preceding fiscal year through December 5, 1965.

Sketches by Constable from the Victoria and Albert Museum—continued from the preceding fiscal year through July 5, 1965.

White House Festival of the Arts Exhibition—continued from the preceding fiscal year through July 11, 1965.

19th and 20 Century European Drawings—July 11 through August 29, 1965.

19th and 20th Century Prints—August 6 through November 4, 1965.

British Mezzotints from the 18th and Early 19th Centuries—September 18 through October 31, 1965.

John Singleton Copley: A Retrospective Exhibition—September 19 through October 31, 1965.

Treasures of Peruvian Gold—October 14 through November 28, 1965.

Christmas Prints—November 5, 1965 through January 12, 1966.

Dürer and His Time—November 14 through December 12, 1965.

Modern French Prints from the Rosenwald Collection—December 11, 1965 through March 9, 1966.

Fifteenth-Century Woodcuts and Metalcuts from the Collection of the National Gallery of Art—December 19, 1965 through January 30, 1966.

Bruegel Prints from the Rosenwald Collection—January 13 through March 8, 1966.

French 18th Century Prints from the Widener Collection—March 9, 1966, to continue into the next fiscal year.

Etchings by Rembrandt in the Collection of the National Gallery of Art—March 11, 1966, to continue into the next fiscal year.

Drawings from the Collection of the National Gallery of Art—February 5 through April 17, 1966.

French Paintings from the Collections of Mr. and Mrs. Paul Mellon and Mrs. Mellon Bruce—March 17 through May 1, 1966.

Twenty-Five Years of National Gallery Publications—March 17 through May 1, 1966.

Art Treasures of Turkey—June 5, 1966, to continue into the next fiscal year.

Exhibitions of recent accessions: The Wife of Hasdrubal and Her Children by Ercole Roberti, *Elizabeth Throckmorton* by Largilliere, and *Portrait of a Man* by Corneille de Lyon—August 10 through October 25, 1965; *The Marquise de Pezé and the Marquise de Rouget with Her Two Children* by Vigée-Lebrun—November 9, 1965 through January 12, 1966; *Daniel in the Lions' Den* by Rubens—January 12, 1966, to continue into the next fiscal year; *Saint George and the Dragon* by Rogier van der Weyden—May 6, 1966, to continue into the next fiscal year; and *A Lady in Writing* by Vermeer—May 20, 1966, to continue into the next fiscal year.

CURATORIAL SERVICES

Advice was given regarding 1,669 works of art brought to the Gallery for expert opinion, and 36 visits to collections were made by members of the staff in connection with offers of gifts. About 6,771 inquiries, many of them requiring research, were answered verbally and by letter. The material in the Index of American Design was studied during the year by 304 persons doing special research or seeking material for publication and design.

EXTENSION SERVICE

This service circulates to the public traveling exhibitions, Gallery films, slide lecture sets, and film strips. There are 149 exhibits in circulation, lent free of charge except for transportation costs. These were circulated in 1,122 bookings and were seen by an estimated 561,000 viewers. Eleven special exhibits, lent to a church organization for circulation in 190 bookings, were seen by 66,414 viewers. One copy of a large panel exhibition *Physics and Painting* circulated by the Traveling Exhibition, Smithsonian Institution in 8 bookings, was seen by an estimated 5,600 viewers. Fifty copies of three films on paintings in the National Gallery of Art were circulated in 417 bookings and were seen by an estimated 125,100 viewers. A total of 2,160 sets of slide lectures on 14 subjects were circulated in 6,872 bookings and seen by approximately 412,320 viewers. In the past year the Extension Service reached approximately 1,170,434 people, an increase over last year of 199,371. In addition, the Index of American Design had 31 traveling exhibits (booked 65 times), and there were 135 bookings of Index slide sets.

EDUCATION OFFICE

The staff of the Education Office continued to give daily tours and talks in the galleries, morning and afternoon, throughout the year. The attendance for the scheduled tours was 40,123. Lectures, conferences and tours given by special appointment served 20,888 visitors. There were 50 Sunday auditorium lectures illustrated with art films or slides, attended by 14,975 persons. Members of the Education Office prepared and recorded 30 radio broadcasts during the year.

LIBRARY ACQUISITIONS

During the year the Gallery Library acquired 724 books, 2,575 pamphlets, and 3,136 periodicals. The Library now has 23,613 books, 20,494 pamphlets, and 1,944 bound volumes of periodicals.

PHOTOGRAPHIC LABORATORY

The Photographic Laboratory of the Gallery made 31,188 color slides, 83 black and white slides, 2,443 negatives, 784 color transparencies, and 115 infrared and ultraviolet photographs, in addition to the prints required for study work and sale to the public.

CONCERTS

The Sunday evening concerts in the East Garden Court, which are provided from private funds, were continued throughout the year. These concerts are free to the public.

ATTENDANCE AND MAINTENANCE

There were 1,577,108 visitors to the Gallery during fiscal year 1966. This represents an increase of 324,006 over the 1965 attendance. From July 1 through Labor Day, 1965, and April 1 through June 30, 1966, the Gallery was open to the public from 10 A.M. to 10 P.M. on weekdays and from noon to 10 P.M. on Sundays. For the remainder of the year the Gallery was open to the public every day save Christmas and New Year's Day on a schedule of 10 A.M. to 5 P.M. on weekdays and 2 P.M. to 10 P.M. on Sundays. Visitors during the additional hours in the summer of 1965 and the spring of 1966 numbered 154,911. The average daily attendance for the year was 4,345. The Gallery as a whole was maintained at a standard in keeping with the conditions of the gift of the building and the initial collection of works of art.

Obligations by object classification

		1966 actual	1967 estimate	1968 estimate
11	Personnel compensation	$2,071,942	$2,294,900	$2,368,700
12	Personnel benefits	142,458	162,300	165,900
21	Travel and transportation of persons	8,436	8,000	8,000
22	Transportation of things	331	400	400
23	Rent, communications, and utilities	150,537	154,300	154,300
24	Printing and reproductions	10,554	27,000	27,000
25	Other services	44,433	69,500	44,500
	Services of other agencies	1,375	4,800	8,700
26	Supplies and materials	81,233	89,400	88,500
31	Equipment	18,770	11,400	26,000
32	Lands and structures			193,000
	Total obligations	2,530,069	[1] 2,822,000	3,085,000

[1] 1967 column includes anticipated supplemental of $104,000 for pay act and wage board increases.

PREPARED STATEMENT

Chairman HAYDEN. Mr. Walker, would you please submit your prepared statement for the record, and highlight it for the committee?

Mr. WALKER. Yes, sir; I would be delighted to.

We have submitted our statement.

(The statement follows:)

The 1968 appropriation proposed for "Salaries and Expenses, National Gallery of Art," is $3,085,000. Authorization for the appropriation is based on the Joint Resolution of Congress, approved March 24, 1937, in which the faith of the United States is pledged to provide the funds necessary for the upkeep, administrative costs, and operating expenses of the Gallery. Appropriated funds are not used to purchase works of art. All works of art in the Gallery's collections have been acquired solely by gifts from private collectors, and purchases from funds donated for that purpose.

The net increase of $263,000 over the requirement for the current year is due primarily to the phenomenal growth of the collections over the past quarter century, the ever-increasing interest of the general public in the arts, and the need for building improvements and alterations to provide the physical facilities to support that growth.

Specifically, the items of increase are:

(1) $20,900 for two new positions to assist in the acquisition and preparation of sculpture for the National Sculpture Garden;

(2) $193,000 for alterations and improvements required to provide suitable access to the Gallery building from Seventh Street;

(3) $42,600 for five new positions to meet workload increases in educational and administrative functions;

(4) $23,200 for within-grade promotions, wage-board step increases, and the full-year cost of a wage-board rate increase granted last December;

(5) $18,000 for the purchase of new equipment to improve the efficiency of duplicating and accounting activities;

(6) $5,600 for the purchase of 100 picture frames; and

(7) $3,900 for an increase in the payment made to the Civil Service Commission for the interagency recruiting program.

The first increase mentioned relates to the establishment of the new National Sculpture Garden which was announced by the White House on May 21st of last year. In this undertaking the National Gallery of Art is joining with the Department of the Interior to create and maintain an outdoor garden of sculpture on the plot just west of the Gallery. This four-acre area, known as L'Enfant Square, is under the jurisdiction of the Interior Department. Our obligation consists of: acquiring the sculpture, preparing it for exhibition, supervising its installation, maintaining its condition, and conducting an educational program benefiting visitors to the Garden.

The location of the National Sculpture Garden across the street from the west entrance to the Gallery creates a need to open that entrance for public use. Moreover, the entrance must be opened when work specified in the Mall and Pennsylvania Avenue plans cuts off vehicular traffic to the Sixth Street entrance on Constitution Avenue. The $193,000 requested for alterations and improvements covers the construction of appropriate drive and walkways from Seventh Street to the west entrance, as well as other building modifications adjoining that work which are necessary to gain suitable access to space in the basement. Without that access the basement area can never be fully utilized.

Full utilization of the basement area and other non-exhibition space allotted to supporting activities has become imperative for two reasons:

(1) storage, office, and other work areas are now inadequate, and

(2) unfinished areas planned, and now needed, for exhibition rooms are presently being used for supporting purposes.

Our total plan for improved utilization of non-exhibition space extends over a five-year period at an estimated annual cost of $200,000. During the same period additional exhibition rooms will be constructed as needed within unfinished areas allotted for that purpose. That construction of new exhibition rooms will be financed, as in the past, from private funds.

This private-fund program for the completion of unfinished exhibition space, as required due to the growth of the collections, is in accord with the intent of the donor of the building. Over the past twenty years, twenty-seven new exhibition rooms have been constructed from private funds at a cost of some two and one-half million dollars. At the present time, we have 112 completed rooms and reserved space for the construction of about 20 more. There are private funds for the completion of these rooms. There are no private funds for the alterations and improvements I have described. The growth of the Gallery's program makes such alterations necessary at this time.

That growth is the result of the ever-increasing public interest in the National Gallery, and is the prime reason for the increases in staff which we are requesting. Some measure of the increased public interest is: the 700 percent increase over the past five years in the persons benefiting from our extension program; the 83 percent increase over the past ten years in the visitors participating in Gallery education activities; and the 67 percent increase in attendance over the past ten years. The increase in employment over the same period has been only five percent.

Last year 1,577,108 persons visited the National Gallery of Art for an increase of 26 percent over the preceding year.

NATIONAL SCULPTURE GARDEN

Mr. WALKER. I will summarize the increases for you, sir, if I may. There is an increase of $20,900 for two new positions to assist in the acquisition and preparation of sculpture for our National Sculpture Garden. You may remember that the White House announced that just west of the National Gallery of Art, opposite the Archives, the Interior Department and the National Gallery are to collaborate to have a sculpture garden there. We need a curator to help us collect the sculpture, but we also need a curator for the gallery itself, because we started out with 23 pieces of sculpture in 1958 and today we have 1,700 pieces of sculpture, including probably the greatest collection of medals, plaquettes, and small bronzes there is anywhere in the world. In Renaissance sculpture, neither of Louvre nor the Victoria and Albert Museums nor the German Museums can surpass what we have here in Washington.

BUILDING ALTERATIONS AND IMPROVEMENTS

The largest item in the increases is the sum of $193,000 for alterations and improvements required to provide a suitable access to the gallery building from Seventh Street. I think we need this money for several reasons I consider vital, but if I may, sir, I would like to ask the Administrator, Mr. Adams, to tell you about that item.

Chairman HAYDEN. Well, you can finish your statement, and we will hear from him later.

Mr. WALKER. All right, fine.

NEW POSITIONS

Then there is another item for $42,600 for five new positions to meet workload increases in educational and administrative functions. I will speak about the educational requirements; Mr. Adams will speak later about the administrative ones.

EDUCATIONAL SERVICES

I am sure you will be pleased to know, sir, that we now reach, through our extension services, a million four hundred thousand people around the country. That is almost as many people as come to the gallery itself. We send them movies and slide lectures, and material of this kind, so that when they do come to Washington—and most of them do, eventually—the gallery is more meaningful.

This extension service has increased 700 percent in the last 5 years. Within the gallery itself there has been an 83-percent increase in the number of visitors who use our educational services, and we simply need more help to give our lectures, our tours, our radio broadcasts.

Though we have gone up 700 percent in extension services and 83 percent in educational activities, and 67 percent in the people who visit the gallery, I am very proud to say that we have gone up in employees only 5 percent in the past 10 years; so I think we really do need these people very badly. Of course, when we have more visitors, then there is more work in the administrative section. Mr. Adams will speak about that later. And also we need about $18,000 for new equipment. We are asking a small amount, $3,600 for the purchase of a hundred picture frames. Paul Mellon gave us 351 paintings by Catlin, the famous painter of Indians. This is one of the two important collections of Catlin's work. The other is at the Smithsonian Institution.

CATLIN PAINTINGS

In the case of the Catlin paintings in the National Gallery, it is Mr. Mellon's wish and our intention that these be placed on long-term loans in smaller museums, especially in the West. We have lent to the Buffalo Bill Museum in Cody, Wyo., 72 paintings; to the Jefferson National Expansion Memorial in the old courthouse in St. Louis 26 paintings; to the Joslyn Art Museum, Omaha, Nebr., 35 paintings; and to an artmobile in Arkansas, 18 paintings. We want to frame a hundred more pictures and send them out in the same way.

VISITOR ATTENDANCE

I am sure, sir, that you will be pleased to know that last year 1,577,000 people visited the National Gallery of Art, which represents an increase of 26 percent over the preceding year.

That concludes my part of the statement, sir. I know Mr. Adams will be glad to fill you in on the other part.

NATIONAL SCULPTURE GARDEN

Chairman HAYDEN. A portion of the increase is for personnel necessary to establish the National Sculpture Garden. Would you please describe what is proposed for the garden, and indicate, if you can, when it is to become operative?

Mr. WALKER. George Hartzog of the Park Service, Department of the Interior, tells me that he hopes to begin actually constructing the sculpture garden shortly after the first of July. I think it will take about a year to complete, but while it is being completed, we ought to begin ordering, out of private funds—because we have raised private money for this—the sculpture to adorn it.

Chairman HAYDEN. Have any pieces of sculpture yet been acquired for it?

Mr. WALKER. No, sir; not as yet. We are waiting to get the design for the garden, and we hope to begin commissioning them after July.

Chairman HAYDEN. Of the 1,700 pieces of sculpture which you indicate are now in the gallery, are any of these to be placed in the garden?

Mr. WALKER. No, sir; they are too fragile, and too precious to be shown out of doors. Only certain kinds of sculpture can be shown in the park in all weather.

NEW POSITIONS

Chairman HAYDEN. I see. Aside from the two positions sought for the National Sculpture Garden, five employees are being sought. Would you please explain the need for these employees, and their proposed duties?

Mr. WALKER. In 1961 we started our extension service, which I spoke about. This service has been immensely successful. It sends moving pictures, slide lectures, and exhibitions around the country. In 1961, I took the curator of the Index of American Design and put him in charge of this. Due to the extraordinary expansion of our extension services, he has not been able to fulfill his duties in both jobs. We need a second man to take care of the Index of American Design which is a very important part of our collection. Two of the other jobs are for docents to take care of the increased number of visitors coming to the gallery. There are some increases of personnel for administration. Jim, would you talk about those?

ADMINISTRATIVE POSITIONS

Mr. ADAMS. Mr. Chairman, in the past 20 years, we have had only one new position for administrative services for the gallery's program. That was a GS-5 accounting clerk, which was included in our 1959 budget. Actually, we now have three fewer employees in the administrative function than we had in 1948. Our administrative overhead ratio, that is, the number of employees performing administrative services divided by the total number of employees, in 1957 was 9.4 percent; in 1966, it was down to 7.5 percent. In 1967, the current year, it is down to 7 percent. If you allow us the two administrative positions we are asking for, the ratio would come back up to 7.5 percent, where we were last year.

PAYROLL CLERK

One of the positions we are asking for is a helper for our payroll clerk. We have only one man who is responsible for the preparation of our payroll. We have a very complicated payroll, because we have a 24-hour operation, 7 days a week, which involves numerous differentials and premiums. Furthermore, as you know, deductions such as for health insurance, life insurance, United Giver's Fund, and State taxes, have increased the complexity of the payroll operation.

Our summer evening hours have added to the complexity. Last summer, it was necessary for us to hire 96 temporary guards to produce an actual average of 44 on the payroll. These comings and goings slowed down the payroll work during the period, and the processing of our personnel records ran far behind. We were criticized on several occasions in the press for being slow pay. In fact, on one occasion, when the papers were criticizing an entirely different agency, for emphasis they said, "Why, those people are even worse than the National Gallery of Art."

Finally, the man who is our payroll clerk is now crowding the mandatory retirement age, and we think it would be wise to be bringing somebody up behind him.

ADMINISTRATIVE OFFICER

The second new employee we are requesting for administrative services is a GS–11 administrative officer. For the past 10 years, we have had no staff personnel to assign to management improvement projects, to assist in the preparation of this budget now before you, to aid in execution of the budget, and to prepare the increasing number of reports required by other agencies. Many of our own internal directives and regulations have become obsolete during this period; others urgently needed to promote efficient operations have not been written. A revived records management program would relieve space and equipment pressures.

In addition to the general administrative functions, building maintenance, space planning, protection, and public services activities are requiring more executive direction, with our growth in basic functions. We believe this is a real and critical need and that these additional positions will pay for themselves in increased efficiency.

BUILDING ALTERATIONS AND IMPROVEMENTS

Chairman HAYDEN. Also, I believe you should explain briefly what you propose by way of alterations and improvements in the National Art Gallery building.

Mr. WALKER. Would you speak about that?

Mr. ADAMS. Mr. Chairman, when our building was constructed, it was designed to allow for the expansion of exhibition space over the years. When the building was opened, we had 85 exhibition galleries finished. In the past 25 years, we have completed 27 additional exhibition galleries, and we have space available for about 20 more exhibition galleries to be finished in the future; but there is no room available for the expansion of offices, shops, and other work areas required for the services which support the activities of the gallery. The only course available is to modernize our existing facilities so as to provide for the most efficient use possible of the finite space we have available for that purpose. I am speaking now of such mundane but necessary matters as supply storage, art storage, our carpenter shop, our machine shop, our paint shop, our electrical shop, our duplicating unit, locker rooms, checking facilities, photo lab, cleaning equipment rooms, gardeners' shops, and the like.

We are proposing to you a long-range plan for this purpose. The first step in the plan is to move toward gaining more effective access to our basement, in order to better utilize the space available there, by moving shops from the ground floor space, and thus freeing ground floor space for more appropriate use. Other steps would follow in succeeding years as outlined on pages 13 to 16 of our submission, which you have.

Now it happens that our basement exists only at the west end of our building, so that the first step we are proposing will serve the additional purpose of improving that entrance to the building, which is now closed, for use in connection with the sculpture garden to which Mr. Walker referred. The sculpture garden will be right across Seventh Street from that entrance. Also, that entrance will have to be used as the main ground grade entrance to the building during the period of construction when Constitution Avenue is being lowered to pass under Pennsylvania Avenue as proposed by the Pennsylvania Avenue Commission. Specifically, our request is for $193,000 for this work. We would widen the Seventh Street drive to the public entrance to permit two-way traffic. We would relocate the granite curb. We would install bronze gates in our moat walls in two places, and we would relocate the northwest and southwest moat walls.

In short, we are bursting at the seams, and we need your help to rearrange ourselves to take better advantage of the limited space available to us. We need to start at the earliest possible time, because at best it will be 2 or 3 years before we gain any actual usable space, from our own program.

SALES FACILITIES

Chairman Hayden. With respect to your sales facilities, how large a sales staff do you now have?

Mr. Hayes. We would have about 18 all together. Part of those are paid from the income from the fund. As a matter of fact, a majority of them are, at this time.

Chairman Hayden. What is the cost of your sales operations?

Mr. Adams. The cost to the Government? About $80,000 in payroll costs.

Chairman Hayden. What gross income do you have from the sales operation?

Mr. Adams. Gross income, Mr. Chairman, is right around a half million dollars. This sales operation is a very interesting and fascinating system, which has grown up from practically nothing, over the years until it is now, as the sales indicate, a very large operation. It is very complicated. We would be more than delighted if you or any member of the committee or Mr. Eaton could come down some day and go through the entire operation with us, to see how we decide what we are going to sell, how we order it, how we produce it, how we stock it, how we sell it, and how we account for the proceeds.

GINEVRA DE'BENCI BROCHURE

Now let me give you an example, if I may, if you are interested, Mr. Chairman, in how it works. This, of course, is our new picture, which we just acquired, to which we have invited Members of Congress to a preview tonight, and which will go on exhibition to the public tomorrow. We felt that we had a duty to provide information about this picture to the public, so we have prepared quite hastily but, we think, very well, a small booklet about our new acquisition, which we will sell through this program. It costs us 7.6 cents to produce this booklet, to get if off the press. Our expenses run about one-third, so we are selling this for a dime to the public, as a service, to the citizens of this country and the visitors to the gallery. I believe we could probably get 50 cents easily for this, or possibly even a dollar; but it is not our purpose, with this operation, to make money. It is our purpose with this operation to provide information and educational services to the public.

Senator YOUNG. May I ask a question? How much does it cost you?

Mr. ADAMS. 7.6 cents, and we are selling it for a dime, up a third.

Senator YOUNG. Off the record.

(Discussion off the record)

Mr. ADAMS. I believe this would sell at a dollar or more, but we are trying to make it available to as many people as we possibly can. Therefore, we are trying to keep the prices in this operation at a level which makes possible a wide distribution for educational purposes.

We had to buy, I may say, 125,000 of these, in order to get the price down to 7.6 cents, so we have a lot of selling to do.

Senator YOUNG. Where did you get that printing done?

Mr. ADAMS. This printing was done by the H. K. Press here in Washington.

Senator YOUNG. You must have done some shopping around. That is a real cheap price for that kind of publication.

Mr. ADAMS. We believe we have a bargain here, and we are passing the bargain on to the visitors to the gallery, and, I may say, many people who order by mail. This is a catalog of all the material that we have in this sales operation for the public. There is a provision by which you can order through the mail, and we would expect to sell a great number of these through the mail.

SALES RECEIPTS

Chairman HAYDEN. Now are these receipts paid into the general fund of the Treasury, or what do you do with them?

Mr. ADAMS. The receipts revolve, Mr. Chairman. We take the receipts and use them to buy more merchandise, including buying more merchandise than we had before, so that our inventory is constantly expanding to support larger sales. Our aim is to have represented here for sale a reproduction of every work of art that is on exhibition at the gallery.

Chairman HAYDEN. We thank you for your appearance.

Mr. WALKER. Thank you, sir.

THURSDAY, MARCH 16, 1967.

SMITHSONIAN INSTITUTION

STATEMENT OF S. DILLON RIPLEY, SECRETARY; ACCOMPANIED BY JAMES BRADLEY, ASSISTANT SECRETARY; SIDNEY R. GALLER, ASSISTANT SECRETARY (SCIENCE); WILLIAM W. WARNER, DIRECTOR, OFFICE OF INTERNATIONAL ACTIVITIES; AND EDWARD H. KOHN, DIRECTOR, OFFICE OF PROGRAMING AND BUDGET

BUDGET REQUEST

Chairman HAYDEN. The Smithsonian Institution.

Mr. RIPLEY. Mr. Chairman, good morning.

Chairman HAYDEN. Good morning, sir. There will be placed in the record the general statement submitted with the budget justification of the Smithsonian Institution, together with a number of other statements containing information about the Institution.

(The statements follow:)

GENERAL STATEMENT

The Smithsonian Institution, established by the Act of August 10, 1846, is devoted to public education, basic research, and national service in science, learning, and the arts. The Institution, with its wide array of research and education facilities for both the scholar and the general public, is richly endowed with many of the resources that can create a fuller and more meaningful life for the American people.

In dedication to the high purposes of its founder, "the increase and diffusion of knowledge among men," the Smithsonian for well over a century has been concerned with the nature of man, the organization of life, and the nature of the physical universe.

The Institution performs fundamental research and publishes the results of studies, explorations, and investigations. In the National Collections it holds for study over 60 million valuable items of scientific, cultural, and historical interest. It presents public exhibitions in the arts, history, and science.

The museums and art galleries are a powerful but still little understood force for the free education of approximately thirteen million of our fellow citizens who visit these exhibitions every year. The rewarding experience of these visits is made possible only because, in our conception, this Institution constitutes a company of scholars, brought together to use and to interpret the National Collections and to pursue original investigations and research. One of our concerns is the study of what constitutes the creation of awareness and interest in people as a result of viewing exhibits. We believe the solution of this problem can represent a significant contribution to the educational process.

The "Salaries and Expenses" appropriation finances the continuing operations of the Smithsonian Institution. The Institution maintains public exhibits representative of the arts, American history, aeronautics, space, technology, anthropology, geology, and biology; preserves for reference and study purposes millions of valuable objects of scientific, cultural, and historic interest; conducts research in the natural and physical sciences and in the history of cultures, technology, and the arts in the United States and in many foreign countries; and participates in the international exchange of scientific literature and art. The areas of research in the sciences include anthropology, biology, earth sciences, solar radiations, and astrophysics. The Smithsonian is also undertaking an extensive program of classification and study of marine organisms collected in connection with the Government's expanded oceanographic program.

The Institution administers 3 museums, 5 scientific programs, 4 art galleries, the Armed Forces Museum Advisory Board, and associated international programs. It is responsible for the operation and maintenance of 7 main exhibition buildings; the Astrophysical Observatory in Cambridge, Massachusetts; the Tropical Research Institute in the Canal Zone; the River Basin Surveys in Lincoln, Nebraska; and seven other research, storage and service facilities.

Under the "Salaries and Expenses" appropriation, funds in the amount of $25,100,000, an increase of $2,577,000, are requested in order to fulfill more adequately our two primary objectives—

The education and inspiration of the Public through museum and art gallery presentations and services; and

The advancement of knowledge through original research and scholarship in history, art and science.

The United States National Museum requires an increase to serve the accelerating national interest in the preservation and study of natural and manmade objects as a basis of understanding our history, our civilization, and man's environment. An expanded program of museum training, publication and consultation will be supported. The care of permanent exhibits and preservation of valuable objects will be made more adequate, and the effectiveness of museum presentations will be studied.

The Museum of History and Technology, with its emphasis on the development of the United States, requires an increase to stepup its preparation for the commemoration of the Bicentennial of the American Revolution. Additional specialists and technicians are required in order that this museum may utilize its collections as a living center for exhibition and research on American cultural growth.

The Museum of Natural History, an international center for the natural sciences with the Nation's largest collections of scientific material and specimens, requires an increase to alleviate substandard levels of technical staffing support. Access to its great stores of data must be modernized to meet a growing demand for cooperative research and education with national and international agencies and universities.

The National Air and Space Museum, in carrying out its responsibilities under the Act of July 19, 1966, requires an increase to develop exhibits to reflect space flight accomplishment, update present exhibits and acquire notable representations for its planned new building.

The National Collection of Fine Arts and the National Portrait Gallery respectively charged with the missions of establishing in the Nation's Capital a permanent survey and presentation of American art and of portraiture and statuary of the contributors to the Nation's history and development, require increases to prepare notable openings of their great new galleries to the American Public in 1968.

The Joseph H. Hirshhorn Museum and Sculpture Garden requires a small initial staff to commence planning for the newly authorized Museum to house the gift to the American people of the Hirshhorn collection of paintings and sculpture.

The Astrophysical Observatory, in continuing its basic research program on the origin and the matter of the solar system and the universe, needs additional funds for planned stages of growth in the fields of radio and gamma-ray astronomy, meteorites, meteors and comets, theoretical astrophysics, optical observations, and planetary and lunar studies.

At the Tropical Research Institute in the Canal Zone small increases in staff and technical support are needed to continue its program of research and inter-American cooperation for tropical research in environmental biology and other natural sciences.

The Radiation Biology Laboratory requires funds to alleviate marked deficiencies in supporting staff and equipment while carrying on its pioneering research on the effects and controls of radiation on the functions of living organisms.

In order to engage more efficiently the many resources of the Smithsonian in the national and world effort to study man and his environment, a small increase is sought for the coordinating efforts of our Office of Ecology.

The Smithsonian's program in marine science serves growing national and international requirements for research on the future harvest of the food and mineral resources of the seas. Efforts to determine what the crops are and where they will grow require faster identification of specimens from ocean surveys and expeditions. Increased funds are sought so that the Smithsonian Oceanographic Sorting Center can meet this growing demand.

The Buildings Management Department, with forty percent of the Smithsonian's employees, requires added funds to perform its operation, maintenance and protection of more than 3,000,000 square feet of laboratory, service and exhibition areas, with their priceless collections, in 15 different sites.

The Office of Education and Training's increase would allow measured growth in the use of the Smithsonian's extensive collections and laboratories by visiting scholars, students and for school programs.

In International Activities an increase is sought to administer an accelerated Excess Foreign Currency Program and to meet increased costs and volume for international exchange of publications.

The Administrative and Technical Support divisions require increases to overcome deficiencies to meet existing demands, particularly in the library, press and automatic data processing areas, and to keep pace with the substantive programs of the Institution.

Provision has also been made in the 1968 estimates of appropriations for an expanded Special Foreign Currency Program to accommodate the strong interests of American universities and museums to finance research overseas though the advantageous use of foreign currencies excess to the needs of the United States.

In the construction program for 1968, emphasis has been placed on planning; construction proposals have been held to a minimum in accord with present austerity and the need for economies.

Funds are requested for the planning of the Joseph H. Hirshhorn Museum and Sculpture Garden, and for planning of the continuation of a twelve-year capital improvement program at the National Zoological Park and for rectifying a water pollution problem in one of its areas.

The Restoration and Renovation of Buildings appropriation includes necessary modifications to existing buildings and sites at a level of 40% under 1967.

SALARIES AND EXPENSES

Report of the number of permanent positions by organization unit

	1966 actual	1967 estimate	1968 estimate	Increase, 1968 over 1967
United States National Museum	202	208	220	12
Museum of History and Technology	149	150	155	5
Museum of Natural History	236	252	272	20
National Air and Space Museum	34	37	45	8
National Armed Forces Museum Advisory Board	4	7	8	1
Freer Gallery of Art	5	5	7	2
National Collection of Fine Arts	30	45	57	12
National Portrait Gallery	15	19	27	8
Joseph H. Hirshborn Museum and Sculpture Garden	0	0	3	3
Astrophysical Observatory	46	51	53	2
Tropical Research Institute	18	21	28	7
Radiation Biology Laboratory	24	25	33	8
Office of Ecology	5	5	10	5
Office of Oceanography and Limnology	18	18	35	17
Buildings Management Department	730	723	809	86
Education and Training	0	10	15	5
International Activities	16	18	24	6
Administrative and technical support	165	198	244	46
Grand total	1,697	1,792	2,045	253

Report of obligations by objects

	1966 actual	1967 estimate	1968 estimate	Increase, 1968 over 1967
11 Personnel compensation	$12,161,000	$13,957,000	$15,129,000	$1,172,000
12 Personnel benefits	858,000	1,016,000	1,109,000	93,000
21 Travel and transportation of persons	239,000	240,000	322,000	82,000
22 Transportation of things	117,000	135,000	169,000	34,000
23 Rent, communications, and utilities	1,155,000	1,273,000	1,363,000	90,000
24 Printing and reproduction	400,000	470,000	546,000	76,000
25 Other services	1,674,000	2,731,000	3,168,000	437,000
26 Supplies and materials	852,000	920,000	1,054,000	134,000
31 Equipment	1,439,000	1,956,000	2,239,000	283,000
42 Insurance claims and indemnities	0	1,000	1,000	0
Total obligations	18,895,000	22,699,000	25,100,000	2,401,000
Appropriation adjustments:				
Proposed supplemental for cost of wage-board salary increases	0	−176,000	0	+176,000
Unobligated balance lapsing	+26,000	0	0	0
Appropriation or estimate	18,921,000	22,523,000	25,100,000	2,577,000

EXHIBITS PROGRAM, MUSEUM OF HISTORY AND TECHNOLOGY, FISCAL YEARS THROUGH 1966 AND 1968

A. Halls installed and opened to the public as of June 30, 1966:

1. Flag Hall
2. First Ladies Hall
Everyday Life in the American Past:
3. 17th Century Furnishings
4. 18th and 19th Century Furnishings.
5. Historic Americans
6. American Costume
7. Light Machinery (Timekeeping, Typewriters, Phonographs, and Locks)
8. Tools
9. Farm Machinery
10. Autos and Coaches (partial)
11. Railroads
12. Temporary Exhibits Gallery (first floor)
13. Civil Engineering (Bridges and Tunnels)
14. Watercraft
15. Philately and Postal History
16. Glass
17. Graphic Arts: Hand Processes
18. Graphic Arts: Photomechanical Processes
19. Graphic Arts Salon
20 & 21. History of the Armed Forces I (through Civil War)
22. Ordnance, and the gunboat *Philadelphia*
23. Special Exhibits (third floor)
24. Medicine, Dentistry and Pharmacy (Medical Sciences)
25. Physics
26. Ceramics
27. Electricity I

B. Additional Halls to be installed and opened to the public by June 30, 1967:

1. Heavy Machinery
2. Growth of the United States II and III
3. Petroleum
4. Underwater History
5. Automobiles and Coaches (completion)

C. Additional Halls to be installed and opened to the public by June 30, 1968:

1. Photography
2. Armed Forces II
3. Textiles
4. Electricity II

RENOVATION OF EXHIBITS

In 1968 the Smithsonian will continue its program of revitalizing the exhibits in the United States National Museum.

A. Completed and opened to the public in 1966:

1. Gem and Jade Sections of Gems and Minerals Hall.
2. Reptile Section of Cold-blooded Vertebrates Hall.

B. Halls to be completed and opened to the public by the end of 1967:
  1. Osteology Hall (Completion).
  2. Meteroite Section of Physical Geology Hall.
  3. Peoples of Asia and Africa Hall (Completion).
  4. Fish Section of Cold-blooded Vertebrates Hall.

C. Construction partially completed by the end of 1967:
  1. Physical Geology Hall (6 units).
  2. Classical Archeology.
  3. Life in the Sea.

D. During 1967, drawings for the Hall of Insects will be partially completed and contracts will be awarded for certain individual cases and units for this hall.

E. During 1968, contract will be awarded for the Hall of Insects, and the Botany Hall will be architecturally designed.

TEMPORARY AND SPECIAL EXHIBITS

Fiscal year 1967	*Fiscal year 1968*
Australian Prints	Early Chicago Architecture
World Exposition of Photography	Copp Textiles
Victorian Needlework	Urban Planning
Rembrandt Landscape Prints	Presidents' Pastimes
Vinland Map	Genteel Female
Six Danish Graphic Artists	Alexander Graham Bell
Irish Architecture	Revolutionary Bicentennial
World War Posters and Art	Slavery exhibit Part 1
Wedgwood Exhibit	Slavery exhibit Part 2
The Face of Chile	A Panorama on the Arts and Crafts
Washington Beautification	Tunisian Mosaics

Grants to the Smithsonian Institution, fiscal year 1966

Granting agency and title of grant	*Actual amount*
Department of Defense: Potential vectors and reservoirs of disease in Africa	$21,000
National Aeronautics and Space Administration:	
Study of meteorites	100,000
Satellite tracking program	5,300,000
Prairie network	230,000
Environmental	135,000
Miscellaneous small grants	70,000
Total, National Aeronautics and Space Administration	5,835,000
National Science Foundation:	
Undergraduate research program	20,000
Studies of Antarctic biology	50,000
Recording of data for specimens collected during the U.S. Antarctic program	43,000
Sorting of U.S. Antarctic research program biological collections	67,000
Mineral collection	43,000
Miscellaneous small grants	27,000
Total, National Science Foundation	250,000
Total grants, fiscal year 1966	6,106,000

Research by the Smithsonian Institution on contracts, fiscal year 1966

Contracting agency and research field	*Actual amount*
Atomic Energy Commission: Plant physiology	$83,000
Department of Defense:	
Astrophysics	185,000
Oceanography	50,000
Zoology	250,000
Miscellaneous	90,000
Total, Department of Defense	575,000
National Science Foundation: Science information exchange	1,900,000
National Aeronautics and Space Administration:	
Celescope	3,174,000
Astrophysics	797,000
Total, National Aeronautics and Space Administration	3,971,000
Total, research contracts, fiscal year 1966	6,529,000

Grants to the Smithsonian Institution, fiscal year 1967

Granting agency and title of grant	*Estimated amount*
National Aeronautics and Space Administration:	
Study of meteorites	$175,000
Prairie network	150,000
Satellite tracking program	5,500,000
Miscellaneous small grants	100,000
Total, National Aeronautics and Space Administration	5,925,000
National Science Foundation: Estimated miscellaneous grants	50,000
Total grants, fiscal year 1967	5,975,000

Research by the Smithsonian Institution on contracts, fiscal year 1967

Contracting agency and research field	*Estimated*
Health, Education, and Welfare: Various research projects	$200,000
Atomic Energy Commission: Plant physiology	90,000
Department of Defense: Various research projects	1,000,000
National Science Foundation: Science information exchange	2,000,000
National Aeronautics and Space Administration: Astrophysics	4,000,000
Total research contracts, fiscal year 1967	7,290,000

SMITHSONIAN INSTITUTION

SCHEDULE OF BUILDING PROJECTS

Fiscal Years	1961 and prior years	1962	1963	1964	1965	1966	1967	1968	1969	1970
Remodeling of Civil Service Commission Bldg. (for Art Galleries)	Pre-planning studies	Planning apprn. received, $400,000		Under Construction Apprn. received, $5,465,000	Apprn. received, $1,000,000		April 1967 completion	April 1968 opening		
National Air and Space Museum Building	Pre-planning studies			Planning apprn. received, $511,000	Remainder of planning apprn. received, $1,364,000				Scheduled to be under construction Request apprn., $44,300,000	
Construction and Improvements, National Zoological Park		Planning apprn. rec'd. (DC) $85,000	Construction and Improvements in Progress Apprn. received, $1,275,000	Apprn. received, $1,275,000	Apprn. received, $1,525,000	Apprn. received, $1,539,000	Apprn. received, $1,589,000	Apprn. requested, $485,000	Request apprns. of various amounts for twelve-year program	
Restoration and Renovation of Buildings						Apprn. received, $2,248,000	Apprn. received, $2,300,000	Apprn. requested, $1,353,000	Request appropriations of various amounts	
Joseph H. Hirshhorn Museum and Sculpture Garden								Planning apprn. requested, $803,000	Scheduled to be under construction Request construction apprn., $13,200,000	

PREPARED STATEMENT

Chairman HAYDEN. Dr. Ripley, would you please file your written statement for the record, and then summarize it for the committee?

Dr. RIPLEY. Thank you, sir; I would be very happy to.

(The statement follows:)

HIGHLIGHTS OF 1968 APPROPRIATION REQUEST

The Smithsonian's total request of $33,841,000 for the fiscal year 1968 is an increase of $5,113,000 over the current level of $28,728,000.

SALARIES AND EXPENSES

For Salaries and Expenses, the increase is $2,577,000 over the present level of $22,523,000.

The increase will permit a start on the training and consultation program authorized by the National Museum Act of 1966.

In the Museum of Natural History we will be able to add supporting staff for better utilization of our research scientists.

For the National Collection of Fine Arts and the National Portrait Gallery, $398,000 are required to prepare these two major galleries for the public opening of the Fine Arts and Portrait Galleries next year.

For research in astrophysics, in tropical biology, radiation biology, ecology, and oceanography, an increase of $421,000 will provide additional instrumentation and additional research workers in these important fields of Smithsonian scientific interest, now at the level of $2,703,000.

The Smithsonian operates and maintains its own buildings. The Buildings Management Department requires an increase of $530,000 over the current allotment of $6,740,000 to provide for the operation of additional building space. The Fine Arts and Portrait Galleries is scheduled for public opening in April of 1968. In addition to the cost of operating this building, four new exhibition halls will be opened in the Museum of History and Technology. Service in all buildings was curtailed by the need to offset the pay raise cost in 1967. It is now planned to bring the buildings up to normal levels of cleaning and maintenance.

The administrative and technical services which are necessary to support the substantive programs require an increase of $467,000.

The Smithsonian would like to persuade this Committee that it needs automatic data processing, as other Governmental agencies and industrial concerns use the process. We have the same administrative operations, such as payroll, fund accounting, and property inventory, as does any other organization. But we have never had the opportunity to employ an appropriate, small-scale, automatic data processing system to our needs. (We have now three positions and $55,000. We need as a minimum an increase of five positions and $80,000.)

In addition to our administrative load, we have a truly massive collection of scientific specimens which can only be utilized to their full value by being known to the scientific community. In lieu of the employment of a great body of cataloguers, subprofessionals and professional employees, automatic data processing provides an effective and economical means for the storage and retrieval of information that today is locked into these scientific and historical collections. I trust that the Committee will allow us this increase for automatic data processing, on a small scale.

FOREIGN CURRENCY PROGRAM

In our foreign currency program, the strong interests of American universities and museums for archeological research, systematic and environmental biology, and related museum programs, is reflected in an increase from the 1967 level of $2,316,000 to the 1968 request of $6,100,000.

Initiated in 1966, this program of grants to American universities and other institutions of learning utilizes foreign currencies in countries where the supply will be greater than the normal requirements of this country, namely, Burma, Ceylon, Guinea, India, Israel, Pakistan, Poland, Tunisia, United Arab Republic, and Yugoslavia. The use of these currencies for these purposes is of benefit to the United States as well as to the countries concerned. We are advised by the Budget Director that these currencies would not otherwise be used and their use in these proposed programs will provide benefits to the United States at no increased cost to the American taxpayer. The benefit to this country results from increased exploration concessions and research opportunities for American institutions in the host countries. This results also in the increased sharing of knowledge of archeological treasures and in the enrichment of collections. Secondly, the preservation and restoration of ancient monuments makes a positive contribution to United States relations with the host countries and directly supports foreign aid objectives, since properly restored monuments are a stimulus to tourist industries and also represents aid which goes to all sectors of society, from the considerable number of laborers employed in the larger projects, to the foreign scholars and scientists working side by side with Americans.

The requested increase from $2,316,000 to $6,100,000 will be used as follows:

Increased archeological research	$468, 000
Systematic and Environmental biology	2, 537, 000
Museum programs	500, 000
Astrophysics	130, 000
Scientific publications	17, 000
Program administration	132, 000
Total	3, 784, 000

Among the archeological projects are the Lawrence Radiation Laboratory of the University of California which is undertaking to X-ray Egyptian pyramids to discover unknown interior chambers. The University of Missouri, working with the Corning Museum of Glass, is excavating Phoenician glass factories along the Israeli coast. The American Academy of Benares is conducting long-range studies to document and photograph archeological sites throughout India.

Included in the request is $3,553,000 for systematic and environmental biology projects. This will contribute to the objectives of the international biological programs. Included will be such projects as the establishment of an oceanographic sorting facility in India and additions to the national collects in entomology, botany, and zoology.

CONSTRUCTION

The construction program has been reduced below this year's level of $3,889,000. $2,641,000 is requested. Of this amount $485,000 will continue the program of improvements at the National Zoological Park, providing principally for the construction of the waterfowl area and the elimination of a source of pollution of Rock Creek.

For the renovation of building $1,353,000 is requested, principally to complete the renovation of the Smithsonian Institution Building, for additional improvements to the Fine Arts and Portrait Galleries, and to relocate the Radiation Biology Laboratory at the old Bureau of Standards site.

$803,000 is requested for the preparation of plans and specifications for the Hirshhorn Museum and Sculpture Garden. The authorization of this new gallery was enacted into law on November 7, 1966. It is planned during the fiscal year to prepare drawings and specifications for this gallery to be located on the Mall between 7th and 9th Streets. The Gallery and Sculpture Garden will house more than 1500 pieces of sculpture and 4,000 paintings and drawings, which have been given by Mr. Hirshhorn to the American people through the Smithsonian.

SALARIES AND EXPENSES

Dr. RIPLEY. The Institution is requesting, this year, a total request of $33,841,000, which represents an increase of $5,113,000 over the current level of $28,728,000.

This increase represents about $2½ million in "Salaries and expenses" over our present level. One of the purposes of this increase, sir, is to give us a start on a new program which was authorized by the Congress last year, known as the National Museum Act of 1966. We will have a chance to start on training and consultation under this program.

TECHNICAL SUPPORT FOR SCIENTISTS

In the Museum of Natural History, sir, we would be able to add what I have been particularly keen to develop during my brief tenure here of 3 years, and that is the appropriate support for our scientists. It is quite difficult to employ high-grade scientists in an institution like the Smithsonian, unless we can give them the research assistance and the laboratory backup support which are equivalent, at least, or partially equivalent, to what goes on in present-day laboratories and universities, not only in the private universities around the country, but in the Federal Government laboratories.

Now the Smithsonian, because of lack of this support, has difficulty, often, in recruiting high-level people to work for us, and I have been anxious each year to try and make up, as it were, for this shortage which I consider to be an area of hardship and neglect in the Institution's payroll situation.

We are at about one-third of what is considered to be the optimal position for support for senior scientists in the Institution, compared to universities and Federal laboratories on an ideal scale. The Federal laboratories are now close to two-thirds of what they should be in the way of the ideal support, and universities are around 80 percent of what they should be.

FINE ARTS AND PORTRAIT GALLERIES OPENING

We are going to have one principal cultural event in the year 1968, which will be the major one, I believe, in Washington, D.C., during that entire year, the year of the next election. This will be the opening of that magnificent building on F and Eighth Streets, the old Patent Office Building, where the first patent office models were displayed in the basement, in the 1840's, and which by the kindness of the Congress was authorized in 1958 to be transferred to the Smithsonian.

As you know, sir, we have been scheduling, every year, a gradual increase in the attempt to renovate and restore this building for two purposes: One is the National Portrait Gallery, and the other is the National Collection of Fine Arts. These two museums, we hope, can open in 1968, in April. It should be a very distinguished event. It should be, in fact, a revelation to the cultural world of the resources and the facilities of the Capital, and will represent the other great major art resource that the Federal Government is responsible for, in addition to the National Gallery.

We are particularly keen that these galleries should be opened, and for them, the absolute minimal support that we need is just under $400,000. I know that this is a year of tremendous austerity, and that the problems of the war and the difficulties with getting new programs underway have placed a tremendous strain on our national resources; but I make a special plea for the opening of these two new galleries in the F Street building, because I feel that this is part of a cumulative plan which has been developing over 6 years, and has been faced each year in stages. If we cannot do this, we will be letting down our side.

SCIENTIFIC RESEARCH RESPONSIBILITIES

For research in various types of science which the Smithsonian pursues: astrophysics, biology in the tropics, radiation biology, ecology, and oceanography, we request an increase of $421,000, to add instrumentation and additional research workers in these fields. In a number of these fields we are specifically charged with and perform unique responsibilities of particular value to related Government agencies which are concerned that we maintain appropriate capability to provide information and data from our collections and research. Such service is often essential to their purposes.

BUILDINGS OPERATION AND MAINTENANCE

We operate and maintain our own buildings, sir, as you know, and we request an increase of half a million dollars for the maintenance and operation of the existing buildings, and particularly for the opening of these two new galleries, the Fine Arts Collection and the Portrait Gallery, in April 1968.

We are also gradually phasing the opening of new halls in the wonderful new Museum of History and Technology, which continues to be, next to the Capitol of the United States, the largest single tourist attraction in Washington. Last year, it is estimated that about 7 million people visited the Capitol, and about 5 million people visited the new Museum of History and Technology. This building has been a winner, and has, I think, made a tremendous impact on the American people; and we are gradually, each year, opening just a little bit more in the way of new halls.

We have had to curtail maintenance services in that building because of the freeze in employment in 1967 to offset the pay raises. But we would like to continue gradually this phased opening of the building's halls.

AUTOMATIC DATA PROCESS FOR COLLECTIONS

We are keen to get into the important area of automatic data processing for our millions of specimens. Last year, the Senate supported us in our request for these funds. This year again I have made a very strong plea, as strong as I could, to the House that we make a start. The kinds of specific and utilitarian services which we can perform for other agencies of the Government can be greatly speeded up in terms of information retrieval by the use of some of these systems. There is absolutely no comparison to the degree of service which we could perform if we make a good start in automatic data processing. We feel this is quite proved and demonstrated now, and we therefore request a small increase in this area.

USE OF EXCESS FOREIGN CURRENCIES

The main part of our budget, in a sense, reflects the very strong interest that has developed in the 3 years since we have been administering a segment of the foreign currency appropriation, and we request a major increase of over $3 million above the fiscal year 1967 level for these purposes. The success of this program has been great. We are the sole, concerned agency in the Government which has been stimulating archeology abroad, and allowing American institutions to participate in major programs, particularly in the Middle East and the Mediterranean Basin. As I often note, the young citizens of the countries where we work under this foreign currency appropriation tend to be greatly interested in their own history, their own national history, and in archeology. The foreign ministers and the prime ministers of tomorrow, in many of these cases, are people who are graduate students in universities in these areas, working with American scientists under American institutions in the field on historical archeology. This is a fascinating area, one in which there is no stress from adverse American publicity, or anything of this sort. It is purely a people-to-people program, which I think has enormous potential effect—a scholar-to-scholar program. The dominant political figures, so often, in countries like, let us say, Tunisia, are people who participated as students in strong cultural programs in their own national history.

Senator YOUNG. They have a lot of history, there, too.

Dr. RIPLEY. Yes, sir.

Senator YOUNG. I think it is fascinating. Would you hire me sometime?

Dr. RIPLEY. Some of the work is perfectly fascinating. At the moment, the Lawrence Radiation Laboratory in California has received a grant, through this program, to X-ray by special techniques the interior of the Great Pyramid in Egypt, to find out if there are those hidden chambers which people have always assumed there were and which have never been discovered. By new techniques, with radiation X-ray, they are hoping to penetrate through the stones and be able to get soundings on whether the chambers are there.

In another case, the University of Missouri is working with the Corning Museum of Glass in New York on Phoenician glass factories, along the Israeli coast, a subject which is very little understood, the whole evolution of the making of glass in the Eastern Mediterranean. And in India, we have been helping the American Academy in Benares to study, document, and conserve sculpture and very fragile, early cultural and historical objects.

LIMITED BUILDINGS RESTORATION AND FUTURE PLANNING

We have a rather small and modest construction program this year, sir. We request $2,641,000. This is 32 percent below the level of 1967. About one-half a million dollars of this would permit construction to protect against the zoo's contributing to water pollution, and planning to continue in future years, the approved reconstruction program for the national zoo. We have had to cut down this materially. Normally, this has been funded at a rate of about $1.5 million a year. Now we are asking for half a million, which will keep the program going along, despite the cutback in construction. We request a renovation sum of about $1.3 million, principally to complete the restoration of our wonderful old red stone castle on the Mall, and for undertaking improvements for the Radiation Biology Laboratory's new site in a building released to us at the National Bureau of Standards previous site on Connecticut Avenue. And we request $803,000, sir, for the preparation of plans and specifications for the Hirshhorn Museum. The legislative authorization of this gallery was approved on November 7, 1966. We hope during the fiscal year 1968 to prepare drawings and specifications for the new building and sculpture garden. As you know, sir, this has to be done within a stated period of time, under the agreement with the donor.

Thank you, sir.

Chairman HAYDEN. There will be printed in the record the justification submitted in support of the 1968 budget estimate of $25,100,000 for "Salaries and Expenses" of the Smithsonian Institution. This is an increase of $2,577,000 over the amount of the appropriation for fiscal year 1967.

(The justification follows:)

SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES, SUMMARY STATEMENT

Appropriation Act, 1967	[1] $22,523,000
Budget estimate, 1968	25,100,000
Increase, 1968	$2,577,000

[1] Excluding $176,000 anticipated supplemental.

SALARIES AND EXPENSES, SUMMARY OF INCREASES, 1968

	Amount
1. U.S. National Museum—to support a program of training, publication, consultation, and study; to meet increasing demands on its exhibits, conservation, and registrar activities	$175,000
2. Museum of History and Technology—to plan and develop permanent and special exhibitions and educational activities based on the National Collections; and to step up planning for the commemoration of the Bicentennial of American Revolution	58,000
3. Museum of Natural History—to alleviate shortages in technical staffing support; to strengthen research programs in scientific areas of National importance; to improve access to research and collection data; to obtain adequate scientific equipment; and to increase support for short-term research opportunities	285,000
4. National Air and Space Museum—for undertaking responsibilities of the Act of July 19, 1966 (P.L. 89-509), updating exhibits to reflect space flight accomplishments, cataloging of collections, and acquiring significant objects for the planned museum building	70,000
5. National Armed Forces Museum Advisory Board—for research in the contributions of the Armed Forces in peace and war	10,000
6. Freer Gallery of Art—for increased support of its administration and maintenance of exhibits	11,000
7. National Collection of Fine Arts—for preparing its exhibition and other spaces in the Fine Arts and Portrait Galleries for public opening; and strengthening the International Art Program	218,000
8. National Portrait Gallery—for build-up of professional staff, acquisition of portraiture, and other minimal preparations prior to the opening of the Fine Arts and Portrait Galleries	180,000
9. Joseph H. Hirshhorn Museum and Sculpture Garden—to begin work of planning for the new Museum authorized by Public Law 89-788 approved November 7, 1966	57,000

SALARIES AND EXPENSES, SUMMARY OF INCREASES, 1968—continued

	Amount
10. Astrophysical Observatory—for additional instrumentation and computer time in furthering its 10-year budgetary plan, embracing the fields of radio and gamma-ray astronomy, meteorites, meteors and comets, theoretical astrophysics, optical observations, and planetary and lunar studies	$100,000
11. Smithsonian Tropical Research Institute—to alleviate shortages in technical and support staff in continuing its program of research and inter-American cooperation in environmental biology and other natural sciences	78,000
12. Radiation Biology Laboratory—to alleviate shortages in technical support in order to strengthen its pioneering research on the effects and controls of radiation on living organisms	80,000
13. Office of Ecology—for planning and developing programs of fundamental research on the interrelationships of living organisms, including man, with their total environment	42,000
14. Office of Oceanography and Limnology—to allow the Oceanographic Sorting Center to meet growing national and international requirements for biological and geological specimen identification services in support of research on the food and mineral resources of the sea	121,000
15. Buildings Management—for providing minimum acceptable levels of maintenance, operation and protection, including services for additional building space in the museums, galleries, and laboratories	530,000
16. Office of Education and Training—to extend programs of cooperative research and education through the use of the national collections and laboratories by scientists, students, and school groups	50,000
17. International Activities—to administer an accelerated special foreign currency program and increased cooperation with international efforts of other Government agencies; and to meet increased costs and volume for international exchange of publications	45,000
18. Administrative and Technical Support—for additional administrative assistance and specialized services to enable the program activities of the Smithsonian to perform productively and efficiently	467,000
Total increase, 1968	2,577,000

Absorption of Increased Pay Costs in 1967

In order to reduce inflationary pressures, Government-wide restrictions were placed on employment in the summer of 1966. The impact of the employment ceiling was to curtail the authorized strength of a number of units. In particular, the Buildings Management Department was reduced an authorized strength by 147 positions. As a result of these reductions, no supplemental appropriation is being sought in 1967 for the cost of salary increases granted the General Schedule employees under the "Federal Employees Salary and Fringe Benefits Act of 1966."

Supplemental appropriation of $176,000 is being sought for the cost in 1967 of authorized increased wages to wage board employees which were made effective on December 5, 1965 and on December 4, 1966. (Salaries and Expenses increases for 1968 are described in relation to the 1967 base amounts for each activity, not including the requested wage board supplemental.)

Since the 1967 base amounts for 1968 include absorption of increased pay costs for General Schedule employees, no portion of the increases are described as related to the effects in 1968 of wage and salary increases effected prior to that year.

Salaries and expenses, summary of the 1966 and 1967 appropriations and 1968 estimates

	1966 appropriation		1967 appropriation		1968 estimate		Analysis of increase	
	Positions	Amount	Positions	Amount	Positions	Amount	Positions	Amount
1. Museums of science and history (including research):								
U.S. National Museum	202	$2,243,000	208	$2,569,000	221	$2,744,000	13	$175,000
Museum of History and Technology	149	1,793,000	150	1,732,000	155	1,790,000	5	58,000
Museum of Natural History	236	3,002,000	252	3,476,000	272	3,761,000	20	285,000
National Air and Space Museum	34	385,000	37	438,000	45	508,000	8	70,000
National Armed Forces Museum Advisory Board	4	91,000	7	127,000	8	137,000	1	10,000
Total, museums of science and history	625	7,514,000	654	8,342,000	701	8,940,000	47	598,000
2. Art galleries:								
Freer Gallery of Art	5	32,000	5	32,000	7	43,000	2	11,000
National Collection of Fine Arts	30	398,000	45	739,000	57	957,000	12	218,000
National Portrait Gallery	15	258,000	19	610,000	27	790,000	8	180,000
Joseph H. Hirshhorn Museum and Sculpture Garden	0	0	0	0	3	57,000	3	57,000
Total, art galleries	50	688,000	69	1,381,000	94	1,847,000	25	466,000
3. Research bureaus (other than museums):								
Astrophysical Observatory	46	1,169,000	51	1,686,000	53	1,786,000	2	100,000
Tropical Research Institute	18	213,000	21	307,000	28	385,000	7	78,000
Radiation Biology Laboratory	24	336,000	25	338,000	33	418,000	8	80,000
Office of Ecology	5	97,000	5	118,000	9	160,000	4	42,000
Office of Oceanography and Limnology	18	218,000	18	254,000	35	375,000	17	121,000
Total, research bureaus	111	2,033,000	120	2,703,000	158	3,124,000	38	421,000
4. Buildings management:								
Museum of History and Technology	242	1,959,000	240	2,107,000	242	2,157,000	2	50,000
Museum of Natural History	275	2,503,000	264	2,584,000	266	2,642,000	2	58,000
Fine Arts and Portrait Galleries	0	0	10	180,000	91	496,000	81	316,000
Smithsonian Institution	50	378,000	47	371,000	48	401,000	1	30,000
Arts and Industries	77	561,000	72	557,000	72	595,000	0	38,000
All other	86	596,000	90	716,000	90	754,000	0	38,000
Rehabilitation of buildings	----------	92,000	----------	225,000	----------	225,000	----------	0
Total, buildings management	730	6,089,000	723	6,740,000	809	7,270,000	86	530,000
5. Other activities (including administrative and technical support):								
Education and Training	0	0	10	200,000	15	250,000	5	50,000
International activities	16	152,000	18	206,000	24	251,000	6	45,000
Administrative and technical support	165	2,445,000	198	2,951,000	244	3,418,000	46	467,000
Total, other activities	181	2,597,000	226	3,357,000	283	3,919,000	57	562,000
Grand total, salaries and expenses	1,697	18,921,000	1,792	22,523,000	2,045	25,100,000	253	2,577,000

1. UNITED STATES NATIONAL MUSEUM

1966 appropriation	$2,243,000
1967 appropriation	2,569,000
1968 estimate	2,744,000

The U.S. National Museum has the fundamental responsibility to advance knowledge in science and history, and to convey to the Nation and the world knowledge about the growth of science and the history and development of our civilization. It is comprised of the Museum of History and Technology and the Museum of Natural History, which are presented in separate justifications; and the centralized services which are presented under this heading, namely, the Office of the Director, the Office of Exhibits, the Conservation Analytical Laboratory, and the Office of the Registrar. These centralized services need an increase of $175,000, as follows:

(a) $80,000 for the Office of the Director,
(b) $60,000 for the Office of Exhibits,
(c) $25,000 for the Conservation Analytical Laboratory, and
(d) $10,000 for the Office of the Registrar.

Office of the Director

The Office of the Director provides guidance, direction, program planning and review of the U.S. National Museum's programs of exhibition, education and public information, education and training in museum techniques, advice and assistance to museums and community institutions, and museum research and scholarship.

An increase of $80,000 is needed to support an expanded program of training, publication, consultation, and study.

Need for increase

On an increasing scale national interest is growing in the preservation and study of natural and manmade objects as a basis of understanding our history, our civilization, and man's environment. The Congress in the National Museum Act of 1966 recognized museums as important educational and cultural assets of their communities. The testimony at hearings on this Act pointed up the need for more professional and technical personnel in museums in the United States and for up-to-date, authoritative manuals on museum practices, including exhibition, conservation, registration, administration, and safeguarding. The Act directs the Smithsonian Institution to engage its experience, laboratories, and collections in programs to benefit all museums.

Education and training of museum personnel.—The National Museum Act recognized the need for the Smithsonian to provide training for career museum personnel. Since the passage of the Act, scores of requests have been received from museums in all parts of the country for training of technicians and curators. Funds are needed to establish a program of grants so that the training of museum staff members will no longer be limited to the facilities of the Smithsonian but may be extended to other museums where specialized opportunities exist. The increase would allow for six trainee grants and associated expenses.

Cooperative publication of museum manuals.—The National Museum Act reaffirmed the Smithsonian's program of publications conducted in cooperation with other museums and their associations. Funds are requested to extend this program through matching grants to such museums or their associations to engage specialists to write manuals and to publish them. Shared publication of two manuals will be accomplished with the increase.

Support of regional museum advisory panels.—The Smithsonian Institution receives several hundred requests a year for administrative and technical advice on plans for museum buildings and programs designed to meet community, education, and cultural requirements. A direct and economical method to provide this needed service is to obtain the cooperation of museum professionals throughout the country, establish regional rosters of available and capable advisers, and support museums in engaging their services. Travel and contractual funds are requested for the Institution to advance this program, providing for 200 man-days of consultation on a matching fund basis.

Study of museum visitors' response to exhibits.—Millions of dollars are spent nationally on the preparation of museum exhibits. Very little is spent in understanding how the museum visitor responds. An exhibits research specialist will be added to the Office of the Director to further the study of how exhibits are actually experienced by the viewer so that design and communication guidelines can be developed to increase the value to the public of future investments in exhibits.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	9	$67,000	$5,000	$3,000			0	$95,000	$2,000	$23,000		$195,000
Increase requested	1	9,000	1,000	10,000			$10,000	50,000	0	0		80,000
1968 estimate	10	76,000	6,000	13,000			10,000	145,000	2,000	23,000		275,000

NOTES

Personnel compensation and benefits (1 position, $10,000).—1 exhibits research specialist (GS-11) to further study of how exhibits are actually experienced by the visitor.

Travel ($10,000).—For museum specialists throughout the United States to travel to regional panel meetings to discuss plans for museum buildings and programs.

Printing and reproduction ($10,000).—Smithsonian's share of publishing two manuals on museum practices.

Other services ($50,000).—6 grants at an average of $7,500 for education and training of personnel ($45,000); support of regional advisory panels-consultant services ($5,000).

Office of Exhibits

The Office of Exhibits designs, produces, installs, and modernizes permanent exhibits in the United States National Museum; prepares special temporary exhibits on important and timely subjects in art, history, and science; maintains exhibits in sound and attractive appearance; and assists and advises in exhibits work throughout the Smithsonian Institution.

An increase of $60,000 is required to employ seven exhibits workers for the preparation and maintenance of permanent exhibits; for production of special exhibits; and for continued requirements for explanatory labels for all exhibits.

Need for increase

The permanent exhibits of the Museum of History and Technology and of the Museum of Natural History suffer wear and abrasion caused by the close attention of millions of visitors each year. Visitor participation devices, projectors, and audio systems receive constant use. The Office of Exhibits must make continuous inspections, adjustments, revisions in the security of exhibits, repairs, painting, and other forms of preventive maintenance to forestall breakdowns and progressive deterioration; to avoid costly overhauls and rebuilding of exhibits; and to keep the exhibitions in a condition to provide each visitor with maximum pleasure and education.

In addition to maintaining its schedule of producing permanent exhibits, the Office of Exhibits prepares frequently changing educational, and informative special exhibits. Many of these possess a timely and important national interest such as the "Profile of Poverty," the "Alaska Centennial," and the "Bill of Rights Commemorative Exhibit." Through special exhibits, it is possible also to show significant objects from the Smithsonian's reserve collections and from the collections of other museums in the United States and other countries.

There are increasing demands for traveling exhibits on history, science, and art requested by schools, colleges, libraries, historical societies, museums, and community centers. Increased funding is requested to meet this need.

To meet the requirement that all explanatory labels reflect the most current available information and are maintained in good condition, additional funds are needed for printing and other reproduction.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	166	$1,264,000	$94,000	$7,000			$30,000	$146,000	$127,000	$366,000		$2,034,000
Increase requested	7	36,000	2,000	0			22,000	0	0	0		60,000
1968 estimate	173	1,300,000	96,000	7,000			52,000	146,000	127,000	366,000		2,094,000

NOTES

Personnel compensation and benefits (7 positions, ($38,000).—7 exhibits workers (GS-5 and GS-7) to maintain exhibits and prepare special exhibits.

Printing and reproduction ($22,000).—For explanatory labels for new and varied exhibits, both permanent and temporary.

Conservation Analytical Laboratory

The Conservation Analytical Laboratory performs research in the science and techniques of the conservation of museum and art gallery objects and conducts analysis, examination, treatment, restoration and preservation of the National Collections.

Analytical service is rendered by the laboratory to all Smithsonian bureaus in the specific areas in which it has the equipment and professional capability as well as in other areas in which analytical techniques might be beneficial. The Laboratory collects and disseminates information on conservation techniques and materials for use throughout the Smithsonian and in other museums.

An increase of $25,000 is needed to employ additional personnel to train members of the museum staff in the best methods of conservation treatment; to analyze and resolve problems of damage from lighting, heat, humidity and temperature fluctuation; and to control damaging organisms by fumigation and other methods.

Need for increase

Hundreds of significant and valuable objects in the large collection of the Smithsonian are in poor condition. Many of the new accessions each year also require repair, cleaning, conservation, and preservation treatment. Additional conservators are needed to prevent the progressive deterioration of the collections.

Techniques such as neutron activation analysis, metallographic examination, and X-ray fluorescence analysis will be used to identify the source of materials recovered from archeological excavations, to study metallurgical problems, and perform other studies in support of the curatorial staff. The Laboratory will develop plans for an information retrieval system which will centralize data on work performed in other laboratories. This system will assist the Laboratory's work and constitute a valuable National reference.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	9	$65,000	$5,000	$2,000	----------	----------	----------	$3,000	$6,000	$26,000	----------	$107,000
Increase requested	3	16,000	1,000	1,000	----------	----------	----------	7,000	0	0	----------	25,000
1968 estimate	12	81,000	6,000	3,000	----------	----------	----------	10,000	6,000	26,000	----------	132,000

NOTES

Personnel compensation and benefits (3 positions, $17,000).—2 conservators (GS-9) and 1 technician (GS-7) to train museum staff in methods of conservation; to analyze and resolve problems of damage from lighting, heat, etc.; and to develop fumigation control of damaging organisms.

Travel ($1,000).—Visits by staff of other laboratories to observe experimental procedures and techniques for application in Smithsonian's laboratory.

Other services ($7,000).—Contracts for special analyses which cannot be performed at Smithsonian.

Office of the Registrar

The Office of the Registrar records all accessions to the U.S. National Museum and provides mail, transportation, and other services which are essential to the productive operation of all bureaus of the Smithsonian.

An increase of $10,000 is required for adequate control of the expanding mail activities and for insurance requirements in connection with privately owned objects.

Need for increase

The volume of official mail has more than doubled during the past three years as a result of increased awareness of Smithsonian activities throughout the world. The two new positions requested would absorb the impact of the increased mail volume and would service the National Collection of Fine Arts and the National Portrait Gallery in their new quarters in the Fine Arts and Portrait Galleries.

The increasing demand of other museums, art galleries, and individuals for insurance coverage on items lent by private citizens and institutions for temporary exhibit, emphasizes the need for a central operating fund for payment of premiums.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	24	$135,000	$10,000	----------	$85,000	----------	----------	0	$1,000	$2,000	----------	$233,000
Increase requested	2	8,000	1,000	----------	0	----------	----------	$1,000	0	0	----------	10,000
1968 estimate	26	143,000	11,000	----------	85,000	----------	----------	1,000	1,000	2,000	----------	243,000

NOTES

Personnel compensation and benefits (2 positions, $9,000).—2 mail clerks (GS-2 and GS-4) to service the National Collection of Fine Arts and the National Portrait Gallery in their new quarters and assist with the increased volume of mail throughout the Institution.

Other services ($1,000).—Insurance coverage on items loaned to the Smithsonian for temporary exhibit.

Summary

	1966		1967		1968	
	Positions	Amount	Positions	Amount	Positions	Amount
Office of Director	5	$46,000	9	$195,000	10	$275,000
Office of Exhibits	168	1,947,000	166	2,034,000	173	2,094,000
Conservation Analytical Laboratory	8	76,000	9	107,000	12	132,000
Office of the Registrar	21	174,000	24	233,000	26	243,000
Total, U.S. National Museum	202	2,243,000	208	2,569,000	221	2,744,000

2. MUSEUM OF HISTORY AND TECHNOLOGY

1966 appropriation	$1,793,000
1967 appropriation	1,732,000
1968 estimate	1,790,000

The Museum of History and Technology, which is visited by more than five million persons each year, presents permanent and special exhibitions of the National Collections depicting our national heritage and culture. These collections cover such diverse fields as the physical sciences; mechanical and civil engineering; transportation; medical sciences; music; political, cultural, and armed forces history; underwater archeology; philately; and numismatics. Emphasis is placed upon the development of the United States. Thirty-two major exhibition halls will be opened to the public by fiscal year 1968. Eighteen additional halls remain to be planned and developed by research scholars who are experts in United States history. The balance of the collections are cataloged and stored as a priceless source of authentic reference materials for national and international use. Of increasing significance are special educational and cultural activities based on these collections.

An increase of $58,000 is requested, including $27,000 for additional research and supportive personnel and benefits; $6,000 for public events, including performances of music; and $25,000 for planning the Bicentennial of the American Revolution exhibitions.

Need for increase

Five additional positions are required to search out and acquire items of historical and technological significance; to document and publish information on the collections for scholarly and public education and interest; to plan and develop permanent and special exhibitions in subject areas for which we now have no professional staff; and to add new dimensions to the collections through their use in special public events. For instance, the Museum of History and Technology has pioneered in interpreting the history and techniques of music through performances on rare and valuable instruments in its collections. This music program has entertained and inspired many thousands of visitors and has been enthusiastically received by the general public. The attendant research accomplished for exhibits and publications has received encouraging recognition from scholars.

Activity must be stepped up in planning for the commemoration of the Bicentennial of the American Revolution in 1976, an event of major national and international importance. The museum is developing preliminary long-range plans for important exhibitions and other events celebrating this historic period in the Nation's history. During 1968, substantial research on this project must be accomplished in consultation and cooperation with those historians and other persons in museums, galleries, historical societies, and the National Park Service and other Government agencies involved in achieving a fully representative exhibit. The curatorial staff has already opened two exhibits, one on the Stamp Act and the other on the Bill of Rights, to pilot this long-range program. A third exhibition on the Townshend Act will be opened in the summer of 1967. To create the large-scale exhibits befitting the observance of the 200th anniversary of the American Revolution, much significant material must be acquired either as permanent accessions or as long-term loans. Additional travel is needed so that the curators may examine and acquire objects and collections in various parts of the United States, study sites and documents associated with the period, and develop effective cooperation with other organizations and collectors in order to realize an educational and inspirational series of exhibits, publications, and other speical activities.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	150	$1,244,000	$91,000	$36,000	----------	$7,000	----------	$140,000	$40,000	$174,000	----------	$1,732,000
Increase requested	5	25,000	2,000	2,000	----------	0	----------	14,000	0	15,000	----------	58,000
1968 estimate	155	1,269,000	93,000	38,000	----------	7,000	----------	154,000	40,000	189,000	----------	1,790,000

NOTES

Personnel compensation and benefits (5 positions, $27,000).—1 curator of medicine (GS-13), 1 curator of chemistry (GS-12), 1 curator of music (GS-11), 2 technicians (GS-7) for continuation of several programs, including music performances, and plans for the commemoration of the Bicentennial of the American Revolution.

Travel ($2,000).—For curators to travel to various parts of the United States to examine and acquire collections for exhibition in connection with the observance of the Bicentennial of the American Revolution.

Other services ($14,000).—To contract with musicians ($6,000) and for special studies related to the Bicentennial of the American Revolution ($8.000).

Equipment ($15,000).—Purchase of significant collections for exhibitions in connection with Bicentennial of American Revolution.

3. MUSEUM OF NATURAL HISTORY

1966 appropriation	$3,002,000
1967 appropriation	3,476,000
1968 estimate	3,761,000

The Museum of Natural History is an international center for the natural sciences, maintaining the largest reference collections of scientific material and specimens in the Nation, as well as a comprehensive scientific program of original research on man, plants, animals, rocks and minerals, and fossil organisms—their classification, distribution, and relationship to the environment. The reference collections and the resident scientists provide an important focal point for cooperative research and educational activities among Federal agencies, universities, and other scientific institutions. Its studies of living and fossil plants and animals provide critical data for problems of pollution, medicine, development of food sources, and earth sciences pursued by Federal agencies.

An increase of $285,000 is needed for the following purposes:

(*a*) $89,000 to provide adequate supportive assistance (research assistants, clerical personnel, and museum aids) to the scientific staff in order that these scarce professional resources may be effectively used in productive work and to assure better care for the National Collections;

(*b*) $41,000 to develop further high priority research programs in the study of fossil plants, to increase capability for cooperative study of the first lunar samples and other nonterrestrial bodies (with the National Aeronautics and Space Administration), and to encourage studies in the histology of sea animals;

(*c*) $35,000 to provide specialists in data processing to continue development and application of techniques for the more efficient handling of the growing masses of data accruing from biological studies in the United States, data for which the Museum of Natural History, as the National natural history repository, has an important responsibility;

(*d*) $10,000 to improve our program in education through increased training of students at all levels, especially in critical scientific areas in which an adequate number of professionals are not being trained otherwise;

(*e*) $35,000 to obtain adequate equipment and to replace obsolete scientific tools being employed in current research programs;

(*f*) $75,000 to increase a program of competitive research awards to Smithsonian scientists for short-term field research.

Need for increase

The professional research staff now expends large amounts of time on nonscientific tasks such as handling collections and specimen preparation. The addition of supportive personnel will enable researchers to be more scientifically productive and thereby increase the effectiveness of the scientific staff now employed. The increase requested will also provide for replacement of obsolete or worn equipment and, in selected research areas, for modernization of tools required for priority programs.

Two hundred sixty research publications were issued in fiscal year 1966 alone. Many of these have direct bearing on applied problems of rational utilization of our natural resources in the sea and on the land, as well as those concerned with biomedicine, pollution, and space exploration.

Great progress has been made in obtaining and recording scientific information about the collections, which increase at the rate of about one million specimens annually, through an active program of field study in many parts of the world and through exchange relationships with other scientific research institutions and with universities.

The programs of the Museum of Natural History are closely related to those of several of the mission-oriented Federal agencies, notably National Aeronautics and Space Administration, National Institutes of Health, and the Departments of Agriculture, Interior, and Defense. Scientists in the Museum's Entomology and Paleobiology departments work side by side in a complementary fashion with their counterparts in the Department of Agriculture and in the Geological Survey, each providing specialists in a closely coordinated program of cooperative research based on the National Collections. In Mineral Sciences the research of meteorite specialists on extraterrestrial materials is carried on cooperatively with NASA. In Vertebrate Zoology the research undertakings of mammalogists and icthyologists provide basic information useful to applied science projects in the Department of Defense and the Bureau of Commercial Fisheries, as well as contributing to the National Oceanographic Program. Agreements have been reached also with the National Institutes of Health for cooperative studies of biomedically important rodents and primates.

A major portion of the scientific effort of the specialists in Invertebrate Zoology, especially concerning marine forms, adds significantly to the National program to understand and utilize the resources of the seas around us. A cooperative program with NIH is underway on the occurrence of abnormal tissues among invertebrates. Identifications by the specialists in the Museum are often of critical importance to Federal plant and animal quarantine inspectors, and pest and disease control programs in the Department of Agriculture. The efforts of the Department of Interior and other Federal agencies concerned with pollution of the environment are also materially aided by the basic data presented in the research products of many of the scientific staff.

Through cooperative educational programs, the Museum is becoming increasingly interrelated with universities all over the country. The Museum of Natural History engages in basic support of research by scientists all over the world, based to a significant extent on specimens loaned for study from the National Collections. Duplicate specimens are exchanged with scientific institutions wherever they are located, especially in North America and Europe.

The increase for the Research Awards Program, together with the base amount of $400,000 appropriated for 1967, copes with the serious problem of taking advantage of unexpected opportunities to investigate short-lived biological and natural events occurring in the field. The Program employs review panels and the same standard of excellence used by the National Science Foundation in its consideration and previous support of such efforts. The Program also serves as a means whereby scientists of the Smithsonian may engage in collaborative field research projects in timely fashion with colleagues located in other institutions.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	252	$2,366,000	$173,000	$61,000	0	$10,000	----------	$594,000	$132,000	$140,000	----------	$3,476,000
Increase requested	20	134,000	8,000	11,000	$10,000	0	----------	94,000	13,000	15,000	----------	285,000
1968 estimate	272	2,500,000	181,000	72,000	10,000	10,000	----------	688,000	145,000	155,000	----------	3,761,000

NOTES

Personnel compensation and benefits (20 positions, $142,000).—1 chemist (GS-12), 1 paleobotanist (GS-12), 1 histologist (GS-11), 2 programer-analysts (GS-12), 4 clerk-typists (GS-5), 6 museum aids (GS-5), 4 museum technicians (GS-7), and 1 education assistant (GS-9), to develop research programs in the study of fossil plants, lunar samples, and histology of sea animals; provide scientists with supportive staff; continue development and application of techniques for more efficient handling of biological data; and improve the Museum of Natural History's program in education.

Travel ($11,000).—For scientists to conduct more field research, participate in significant national and international meetings, and strengthen professional ties with their colleagues throughout the world.

Transportation of things ($10,000).—Shipment of natural history specimens to be added to the national collections.

Other services ($94,000).—For the program of competitive research awards to Smithsonian scientists for short-term research and for special studies related to overall natural history programs.

Supplies and materials ($13,000).—Scientific supplies for stepped-up programs.

Equipment ($15,000).—Replacement of obsolete and worn equipment and provide necessary equipment for new staff.

4. NATIONAL AIR AND SPACE MUSEUM

1966 appropriation	$385,000
1967 appropriation	438,000
1968 estimate	508,000

The National Air and Space Museum is the Nation's exhibition and educational center for air and space flight, science, and history. The Museum collects, restores, and preserves the world's greatest collection of air and space craft, engines, rockets, instruments, personal memorabilia, and other historical objects. Scholars, writers, historians, engineers, and other interested persons work with the Museum's collections and extensive reference library. Within the limited existing exhibition facilities, selected air and space objects are meaningfully displayed for the education of millions of visitors each year.

An increase of $70,000 is required for the following purposes:

(*a*) $37,000 for exhibits specialists to renovate and update air and space exhibits;

(*b*) $9,000 for a technician to continue cataloging and reorganization of the air and space collections; and

(*c*) $24,000 for a curator and for travel and transportation costs to acquire historically and technically significant objects while available.

Need for increase

The Act of July 19, 1966, authorizes the construction of the National Air and Space Museum and directs the Smithsonian to record and exhibit the history of air and space flight and to provide educational facilities and programs for the public and the scholar in the underlying science and technology of aeronautics and astronautics. The legislation broadens the stated purpose of the Museum to include the history and science of *space flights*. Although no request for construction funds is made at this time, minimum increases are necessary in order to undertake the responsibilities contained in the recent authorizing Act.

The existing facilities of the National Air and Space Museum must continue to serve the public for at least five years until a new building can be provided. The current popular attraction of air and space exploration generates a lively personal interest on the part of the visitor in seeing objects associated with it. Existing exhibits must be redesigned and continuously updated, employing the latest exhibition and educational techniques of the Smithsonian, to satisfy this interest.

The Museum has many priceless aviation and space objects and memorabilia. As an indispensable resource for the new Museum, work must be advanced on the proper restoration, preservation, indexing, and storage, in exhibitable condition, of the present collection of models and memorabilia and those acquired by the Museum during the year. An additional technician is needed for this work.

In this rapidly developing field, the Museum must acquire material that is now available and will be invaluable to the public. To delay would result in deterioration and disappearance of historically and technologically important objects which are the central responsibility and reason for being of this Museum. Field research is essential to locate objects and to guarantee their quality. In addition, continual liaison with industrial firms and Government agencies is necessary. Increased curatorial staff and travel and transportation funds are required to accomplish the necessary acquisitions in 1968.

The National Air and Space Museum collaborates and cooperates with other museums. Close relationships are maintained with the Air Force Museum at Wright-Patterson Air Force Base, in Dayton, Ohio, and the Naval Aviation Museum, Pensacola, Florida. Within the past year the Museum has lent one of its Mercury capsules to the Science Museum in London and the Royal Scottish Museum in Edinburgh. Arrangements are being made also to lend a capsule to the U.S. Information Agency for the United States display in the Canadian Exposition of 1967.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	37	$340,000	$25,000	$4,000	0			$37,000	$14,000	$18,000		$438,000
Increase requested	8	55,000	4,000	10,000	$1,000			0	0	0		70,000
1968 estimate	45	395,000	29,000	14,000	1,000			37,000	14,000	18,000		508,000

NOTES

Personnel compensation and benefits (8 positions $59,000).—1 curator (GS-14), 6 exhibits specialists (GS-9 and GS-7), and 1 technician (GS-7) to search out significant collections; to renovate and update air and space collections; and to restore, preserve, index, and store aviation and space models and memorabilia.

Travel ($10,000).—For curatorial staff to accomplish necessary acquisitions.

Transportation of things ($1,000).—For shipment to the Smithsonian Institution of collections acquired by the Museum.

5. NATIONAL ARMED FORCES MUSEUM ADVISORY BOARD

1966 appropriation	$91,000
1967 appropriation	127,000
1968 estimate	137,000

The National Armed Forces Museum Advisory Board, as specified in Public Law 89–186, provides advice and assistance to the Board of Regents of the Smithsonian Institution on matters concerned with the establishment of a National Armed Forces Museum. The objective of the Advisory Board is to portray the valor and personal sacrifice of the men and women of the Armed Forces and their extensive peacetime contributions; to provide a study center for scholarly research into the meaning of war and the role of the Armed Forces in maintaining a just and lasting peace; and to collect and exhibit military objects of historical interest.

An increase of $10,000 is needed to employ a historian to conduct research into the contribution of the Armed Forces in war and peace.

Need for increase

The Board of Regents has approved recommendations of the Advisory Board that the Fort Foote-Smoot Bay Area of Prince Georges County, Maryland, be selected as the location of a National Armed Forces Museum Park. Development of plans to implement these recommendations is being coordinated with the National Capital Planning Commission, the Maryland National Capital Park and Planning Commission, the General Services Administration, the Department of the Interior, the Commission of Fine Arts, and interested private institutions.

Plans call for the acquisition and development, subject to future authorization and appropriations by the Congress, of suitable lands and buildings for the outdoor display of military and naval facilities characteristic of historic American military and naval operations, together with a study center and other enclosures necessary to carry out the objectives of the Act of August 30, 1961.

The proposed acquisition of land for a National Armed Forces Museum Park demands an acceleration in the research work required in planning such a Museum.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	7	$64,000	$5,000	$10,000				$35,000	$1,000	$12,000		$127,000
Increase requested	1	9,000	1,000	0				0	0	0		10,000
1968 estimate	8	73,000	6,000	10,000				35,000	1,000	12,000		137,000

NOTE.—*Personnel compensation and benefits (1 position, $10,000).*—1 historian (GS-11) to conduct research into the contribution of the Armed Forces in war and peace.

6. FREER GALLERY OF ART

1966 appropriation	$32,000
1967 appropriation	32,000
1968 estimate	43,000

The Freer Gallery of Art exhibits one of the most outstanding collections of Oriental art in the world. It furthers scholarship in the areas of Oriental Art history and promotes studies relative to the collections, thus contributing to a better understanding of the artistic achievements of Near and Far Eastern civilizations. The Gallery includes a library, photographic laboratory, conservation laboratory, and supporting shops.

An increase of $11,000 is requested for staff requirements in the conservation laboratory and the cabinet shop.

Need for increase

Research at the Freer has set international standards for studies in Oriental Art history. This reputation combined with a greatly increased interest in Oriental culture has imposed a greater program workload. The most critical needs are a secretary for the conservation laboratory, which is responsible for the technical analysis and preservation of objects; and a cabinetmaker, to make and repair exhibit furnishings and installations for the Gallery.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	5	$30,000	$2,000									$32,000
Increase requested	2	10,000	1,000									11,000
1968 estimate	7	40,000	3,000									43,000

NOTE.—*Personnel compensation and benefits (2 positions, $11,000).*—1 secretary for the conservation laboratory (GS-5), and 1 cabinetmaker for the cabinet shop (W-10).

7. NATIONAL COLLECTION OF FINE ARTS

1966 appropriation	$398,000
1967 appropriation	739,000
1968 estimate	957,000

The National Collection of Fine Arts, the oldest gallery of art directly related to the United States Government, exhibits American art in the Nation's Capital and other parts of the United States and abroad. The Gallery is directed by its founding Act to develop the appreciation of art, both past and present, to encourage contemporary creative effort, and to provide a safe repository for art belonging to the Government.

An increase of $218,000 is needed for the following purposes:

(*a*) $176,000 for necessary preparations to open to the public the National Collection of Fine Arts' major national art museum in the remodeled Old Patent Office building.

(*b*) $40,000 for increased support of the International Art Program which has been transferred to the Smithsonian from the United States Information Agency, and

(*c*) $2,000 to augment the present level of support for art lending activities and cooperation with other institutions.

Need for increase

The opening of the new Fine Arts and Portrait Galleries building to the public in April, 1968, requires additional funds at this time to prepare the galleries and collections for this significant event. Expanded exhibition areas will require furnishings and necessary settings for the public viewing of art objects. Storage areas must be provided with racks, screens, and bins to safeguard adequately public art treasures; work areas must be properly equipped for the photographing, conservation, and renovation of paintings and will require appropriate supplies and materials for the restoration of objects; and a minimal increase in staff will be needed to develop and perform the National Collection of Fine Arts' program of public service.

Prior to the move into the new Gallery and continuing after it, increased travel is required of the curatorial personnel to establish and strengthen professional ties with other museums, to pursue significant acquisitions, and to arrange for the loans of exhibit materials.

Included in the responsibilities of the National Collection of Fine Arts is the International Art Program which circulates 20–30 traveling exhibitions of work by United States' artists annually through diplomatic posts and galleries in all parts of the world. The Smithsonian assumed responsibility for this Program from the United States Information Agency in 1966 and professional staff and supporting services are required to achieve the build-up needed to continue this successful program beyond the planned expiration of USIA funding of the activity.

A minimal addition of funds will permit increased lending activity, such as loans of art to the White House and other Government departments, and assist in halting the potential dispersal of the most comprehensive research collection of art and design material in America currently held by the Cooper Union Museum.

The National Collection of Fine Arts differs from other Federal art museums in that it is primarily concerned with American art with an emphasis on living artists. Related art of the past in its collections provide a basis for understanding and appreciating the relation of the present to that past. Professional assistance is also provided other Government and nongovernment agencies as requested. utilizing, too, their facilities when possible.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	45	$355,000	$26,000	$13,000	----------	----------	----------	$152,000	$24,000	$169,000	----------	$739,000
Increase requested	12	93,000	5,000	4,000	----------	----------	----------	60,000	1,000	55,000	----------	218,000
1968 estimate	57	448,000	31,000	17,000	----------	----------	----------	212,000	25,000	224,000	----------	957,000

NOTES

Personnel compensation and benefits (12 pos. $98,000).—1 assistant director (GS-15), 2 curators (GS-13 and GS-11), 1 archivist (GS-12), 1 conservator (GS-11), 1 research assistant (GS-9), 1 library assistant (GS-5), 1 clerk-typist (GS-5), and 4 museum aids (GS-7 and GS-3), for preparation for opening to the public of the National Collection of Fine Arts Galleries in the remodeled Old Patent Office building; and for continuation of the USIA art program.

Travel ($4,000).—For curatorial staff to establish and strengthen professional ties with other galleries, to meet and encourage potential donors, and to arrange for the loans of exhibit material to the Gallery and to the International Art Program.

Other services ($60,000).—For collecting and preparing exhibits materials and planning and design of exhibits; conservation and renovation of paintings.

Supplies and materials ($1,000).—For restoration of objects.

Equipment ($55,000).—Racks, screens, and bins for storage areas; equipment for photographing, conservation, and renovation of paintings; furnishings for exhibition areas; and works of art.

8. NATIONAL PORTRAIT GALLERY

1966 appropriation	$258,000
1967 appropriation	610,000
1968 estimate	790,000

The National Portrait Gallery is charged with the unique mission of educating and inspiring the public through the exhibition of portraiture and statuary depicting men and women who have made significant contributions to the history, development, and culture of the United States. This program will be presented to the public with the opening in September 1968 of the Gallery in the remodeled Fine Arts and Portrait Galleries.

The primary objective of the Gallery in fiscal 1968 is to prepare for the opening of one of the world's major galleries of portraiture.

An increase of $180,000 is needed for build-up of professional staff, acquisition of portraiture, and other minimal preparations.

Need for increase

Professional staff increases are essential to carry out the complex program of acquisition, accessioning, documentation, exhibition design, and assembly of portraits and statuary. Furnishing and equipping of the public spaces and galleries, offices, laboratories, library, and storage facilities of the new quarters must be completed.

During the next several years the permanent collection, now numbering only some 300 likenesses, must be greatly expanded and temporary exhibitions relating to the American scene organized and put on display. The Gallery operates against the considerable hardship of building a great collection belatedly in a steadily rising market. Notable progress has been made but a growing acquisition effort is required. Significant increases in gifts may not be anticipated until the Gallery is open and established and has become favorably known for the distinction of its holdings and the manner in which they are exhibited. Therefore, the Gallery is in need of funds for purchase when desirable portraits are available for acquisition.

The renovation, conservation, and photographing of portraits and statuary must be accelerated so that adequate numbers of objects will be available for exhibition and study. Contracts with experts will be necessary for framing, exhibit panels, dioramas, pedestals, and cases for all exhibitions.

Professionals are needed to assemble historical data on the works of art, the historical figure, and the artist for informing the public and for use by scholars.

Funds are also requested to begin the collection of fine color photographs of distinguished personages such as the President, the Cabinet, Members of the Supreme Court, and all Members of both Houses of Congress.

The exhibition areas will require additional furnishings and specialized treatment to enhance the portraiture displayed. Offices and public lounges will require adequate furnishings. Storage areas must be provided with racks and bins. Specialized laboratory and study areas must be minimally equipped. The additional staff will require adequate supplies, materials, and equipment.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	19	$202,000	$14,000	$8,000	----------	----------	----------	$200,000	$14,000	$172,000	----------	$610,000
Increase requested	8	50,000	3,000	4,000	----------	----------	----------	28,000	20,000	75,000	----------	180,000
1968 estimate	27	252,000	17,000	12,000	----------	----------	----------	228,000	34,000	247,000	----------	790,000

NOTES

Personnel compensation and benefits (8 positions, $53,000).—2 historians (GS-11 and GS-13), 2 museum technicians (GS-7), 1 secretary (GS-7), 2 museum aids (GS-5), and 1 clerk-typist (GS-4) for the complex program of acquiring, accessioning, documenting, designing, and assembling portraits and statuary in preparation for the move to the Fine Arts and Portrait Galleries building.

Travel ($4,000).—For curatorial staff to establish and strengthen professional ties with other galleries, to meet and encourage donors, and to arrange for loans of exhibit material to the gallery.

Other services ($28,000).—Acceleration of renovation, conservation, and photographing of portraits and statuary; contracts with experts for framing, exhibit panels, dioramas, pedestals, and cases.

Supplies and materials ($20,000).—For conservation and restoration supplies.

Equipment ($75,000).—Furnishings for exhibition areas, offices, public lounges; storage areas; specialized laboratories, and study areas.

9. JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

1968 estimate	$57,000

The Joseph H. Hirshhorn Museum and Sculpture Garden will be the permanent home of the collection of art of Joseph H. Hirshhorn and the Joseph H. Hirshhorn Foundation, donated to the Smithsonian Institution for the benefit of the people of the United States. This Museum will be used for the exhibition, study, and storage of this unique collection of art.

An initial request of $57,000 is being sought to recruit a small staff to begin the work of planning this Museum.

Need for increase

Public Law 89-788, approved by the President on November 7, 1966, provides for the establishment of the Joseph H. Hirshhorn Museum and Sculpture Garden. Preliminary architectural planning will be initiated early in 1967 for a new museum building and scultpure garden to be located on the approved Mall site between Seventh and Ninth Streets, Independence Avenue and Madison Drive.

It is necessary now to employ a curator, technician, and a secretary to inventory and catalog the collection, now located in New York; plan for its shipment; establish criteria for arrangement and operation of the Museum and Garden; and to consult with and advise the architects and engineers throughout the planning stage.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	0	0	0	0		0		0	0	0		0
Increase requested	3	$30,000	$2,000	$7,000		$1,000		$5,00	$2,000	$10,000		$57,000
1968 estimate	3	30,000	2,000	7,000		1,000		5,000	2,000	10,000		57,000

NOTES

Personnel compensation and benefits (3 pos.—$32,000).—1 curator (GS-14), 1 museum technician (GS-11), and 1 secretary (GS-7), to inventory the collection of art being donated by Joseph H. Hirshhorn and the Joseph H. Hirshhorn Foundation.

Travel ($7,000).—To undertake studies and surveys related to the planning of the museum and sculpture garden.

Rent, communications, and utilities ($1,000).—To rent office copy equipment needed to inventory and catalog this collection.

Other services ($5,000).—For special studies in connection with the arrangement and operation of the museum and sculpture garden and for documentation of the collection.

Supplies and materials ($2,000).—Purchase of reference books and materials and office supplies for staff.

Equipment ($10,000).—Furniture and office equipment for new staff and for racks and shelving for storage of the collections.

10. SMITHSONIAN ASTROPHYSICAL OBSERVATORY

1966 appropriation	$1, 169, 000
1967 appropriation	1, 686, 000
1968 estimate	1, 786, 000

The Smithsonian Astrophysical Observatory carries out basic research in astrophysics, the science concerned with the origin and matter of the solar system and the universe. An increase of $100,000 is requested to continue its 10-year budgetary plan embracing the fields of radio and gamma-ray astronomy, meteorites, meteors and comets, theoretical astrophysics, optical observations, and planetary and lunar studies. These funds are required for the purchase of an electron probe microanalyzer, for additional computer time to permit studies in theoretical astrophysics, and for equipment to be used at the Arizona observational station.

Need for increase

To promote collaboration and mutual support, the Observatory maintains a constant exchange of information and people with other Government organizations, especially with the National Aeronautics and Space Administration (NASA), the Department of Defense (DOD), and the National Science Foundation (NSF). The Observatory participates actively with these groups in the planning and execution of national scientific programs, such as the United States participation in the International Quiet Sun Year and the 1966 solar eclipse expeditions to South America, both coordinated by NSF; and the United States geodetic satellite program, under NASA.

As a by-product of its primary effort in pure research, the Observatroy provides many services to other organizations. Its round-the-world network of astrophysical observing stations continually responds to special requests from NASA and DOD, providing information for which there is usually no other source. The U.S. Coast and Geodetic Survey, and American and foreign universities and observatories, also use the facilities of the stations and of the headquarters in Cambridge. A post-doctoral fellowship program administered by the National Academy of Sciences brings outside scholars to the Observatory, and each year a number of graduate and undergraduate students are awarded assistantships related to their studies. As a service to the International Association of Geodesy and to the International Astronomical Union, respectively, the Observatory operates the Central Bureau for Satellite Geodesy and the Bureau of Astronomical Telegrams. Both are international clearing-houses for scientific information.

The request for fiscal year 1968 is lower than the estimate in the 10-year plan because of budgetary limitations. It is designed to provide continuity to the basic research programs carried on during 1966 and 1967. The 10-year scientific program remains a valid guide for the future of the Observatory. It is comparable to the Observatory's record of achievements over the past 10-year period.

Radio astronomy has produced some of the most exciting results in modern science, including the recent discovery of the extremely strong radio sources called quasars, which indicate an unknown source of energy. The radio astronomy allotment will be reduced $50,000 in equipment, the major equipment having now been acquired. An additional radio astronomer will be employed, at $17,000 including benefits. Increased travel for observing and attendance of professional meetings will require $3,000. Other contractual services will require $3,000. Total net decrease: —$27,000.

Gamma-ray astronomy utilizes that part of the spectrum which includes light, X-rays, and radio waves, and may therefore permit observation of objects or effects heretofore invisible. The allotment will be reduced $20,000 for other contractual services and reduced $40,000 for equipment. An additional astronomer will be employed at $12,000. Additional travel to Arizona for installation and use of the large reflector acquired in 1967 will require an increase of $5,000. Total net decrease: —$43,000.

Meteorites and cosmic dust are analyzed to reveal the history and evolution of the solar system. Also, they vitally affect spaceflight. Lunar samples will provide a new challenge in this research. An electron probe microanalyzer, which is similar to an electron microscope, will be purchased at $70,000 for analysis of samples. Total increase: $70,000.

The Observatory is widely recognized in *theoretical astrophysics*, particularly where modern electronic computing has led to new techniques for studying stellar atmospheres and interiors. The computing allotment will be increased $30,000 to permit additional machine time for computations of extreme complexity.

Optical observing remains a bulwark of astronomy. In addition to its satellite tracking stations (which are supported by NASA grants), Smithsonian has a major astronomical observing site at Mt. Hopkins, Arizona, with excellent seeing conditions. Contractual services for limited site development will require an increase of $20,000. Technical accessories and equipment for the Arizona field observatory will require $40,000. Total increase: $60,000.

Flight experiments, both balloon and satellite borne, supplement ground-based observing when the shielding effect on the atmosphere must be avoided. No major changes in funding are contemplated in 1968.

Planetary and lunar studies are an inseparable part of space science. Smithsonian's worldwide data-gathering network, which is probably unique among basic research institutions, supports research in geophysics, lunar research, and exobiology. No major changes in funding are contemplated.

Meteors and comets are also important to an understanding of the solar system, and to the national space program as well. Additional transportation funds will be required to cover shipment of optical equipment to observing sites. Total increase: $10,000.

	Personnel compensation											
	Number of positions (permanent)	Amount	Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
1967 base	51	$700,000	$52,000	$29,000	$5,000	$82,000	$4,000	$264,000	$50,000	$500,000	------------	$1,686,000
Increase requested	2	27,000	2,000	8,000	10,000	0	0	33,000	0	20,000	------------	100,000
1968 estimate	53	727,000	54,000	37,000	15,000	82,000	4,000	297,000	50,000	520,000	------------	1,786,000

NOTES

Personnel compensation and benefits (2 positions, $29,000).—To employ 1 radio astronomer (GS-15) for radio astronomy and 1 astronomer (GS-13) for gamma-ray astronomy.

Travel ($8,000).—Increased travel for observing and attending professional meetings in connection with radio astronomy program ($3,000) and for travel to Arizona for installation and use of large reflector for gamma-ray astronomy ($5,000).

Transportation of things ($10,000).—For shipment of optical equipment to observing sites under the meteors and comets program.

Other services ($33,000).—Special studies for radio astronomy ($3,000); additional machine computations for Theoretical Astrophysics ($30,000); limited site development at Mt. Hopkins, Ariz. for optical observing ($20,000); for a total increase of $53,000; offset by decrease in gamma-ray program, —$20,000; net increase, $33,000.

Equipment ($20,000).—Electron probe microanalyzer for meteorites and cosmic dust ($70,000); technical accessories and equipment for Arizona field observatory ($40,000); for a total increase of $110,000; offset by decreases in programs of gamma-ray and cosmic dust, $90,000; net increase, $20,000.

Smithsonian Astrophysical Observatory, budget projection, fiscal years 1967–76 [1]

Project	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Total
Radio astronomy	$238, 000	$211, 000	$241, 000	$142, 000	$299, 000	$374, 000	$483, 000	$492, 000	$452, 000	$512, 000	$3, 444, 000
Gamma-ray astronomy	256, 000	213, 000	142, 000	164, 000	170, 000	176, 000	182, 000	186, 000	196, 000	203, 000	1, 888, 000
Meteorites and cosmic dust	209, 000	279, 000	285, 000	252, 000	293, 000	307, 000	333, 000	367, 000	396, 000	415, 000	3, 136, 000
Theoretical astrophysics	324, 000	354, 000	447, 000	479, 000	448, 000	479, 000	511, 000	544, 000	577, 000	611, 000	4, 774, 000
Optical observatory	141, 000	201, 000	31, 000	93, 000	456, 000	59, 000	122, 000	226, 000	880, 000	84, 000	2, 293, 000
Flight experiments	118, 000	118, 000	107, 000	169, 000	144, 000	177, 000	164, 000	160, 000	245, 000	225, 000	1, 627, 000
Planetary and lunar science [2]	90, 000	90, 000	213, 000	249, 000	279, 000	311, 000	326, 000	353, 000	370, 000	389, 000	2, 670, 000
Meteors and comets	88, 000	88, 000	96, 000	101, 000	115, 000	138, 000	145, 000	161, 000	169, 000	178, 000	1, 279, 000
General scientific and administration	222, 000	232, 000	377, 000	405, 000	442, 000	482, 000	512, 000	553, 000	575, 000	588, 000	4, 388, 000
Total	1, 686, 000	1, 786, 000	1, 939, 000	2, 054, 000	2, 646, 000	2, 503, 000	2, 778, 000	3, 042, 000	3, 860, 000	3, 205, 000	25, 499, 000
Scientific and administrative positions:											
Scientists [3]	40	42	59	63	66	70	70	73	76	76	
Technicians	4	4	15	19	22	22	24	25	26	26	
Administrative [4]	7	7	9	9	10	11	11	11	11	11	
Total	51	53	83	91	98	103	105	109	113	113	

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[1] Original 10-year projection of September 1965 with adjustments to 1967 actual and 1968 budget submitted to Congress

[2] Formerly geophysics, exobiology, and lunar research.

[3] Includes Ph. D.'s, engineers, and graduate summer students.

[4] Includes Drs. Whipple and Lundquist.

11. SMITHSONIAN TROPICAL RESEARCH INSTITUTE

1966 appropriation	$213,000
1967 appropriation	307,000
1968 estimate	385,000

The Smithsonian Tropical Research Institute (STRI), incorporating the Canal Zone Biological Area, represents the principal springboard for inter-American cooperation in environmental biology, oceanography, and the biological and natural sciences relating to the tropical Western Hemisphere. It provides scientists from the Smithsonian, universities, and other institutions in the United States with both the opportunity and the physical facilities and environmental resources necessary for their tropical research projects.

An increase of $78,000 is needed to add scientific and supporting staff in order to continue the STRI's on-going program in Tropical Biology at a critical juncture in the evolutiton of the program.

Need for increase

The proximity of the Atlantic and Pacific oceans and the enormously rich Central and South American plant and animal life make the STRI uniquely located for biological research and training. The STRI serves as an international center for tropical research and is receiving a rapidly increasing number of demands for service and research. If the STRI is to fulfill its role in tropical research, it must analyze as many aspects of the tropics as possible. Thus far its research program has been oriented toward vertebrates and certain problems of evolution and behavior. It is vitally important that this program be expanded to include other groups of organisms and other approaches to the life sciences (for example, quantitative ecology and biological climatology). A small increase in scientists and supporting staff will enable the STRI to undertake this important work and increase the efficiency and raise the productivity of the existing staff. This increase will also permit strengthening contacts and cooperative efforts with other Federal agencies.

The most important product of the STRI's research programs is basic knowledge about tropical environment. These research programs are providing fundamental information of direct application in health-oriented research programs, including those being conducted by the National Institutes of Health through the Gorgas Memorial Laboratory. The Navy's Bureau of Yards and Docks is utilizing basic information provided by the STRI about the resistance of tropical wood to marine boring and fouling organisms. A further example of the importance of the STRI's research activities is the reliance placed by the U.S. Army Tropical Test Center on basic information pertaining to identification and description of vegetational succession, which is critical to the Test Center's investigations.

Through a fellowship program with the Organization of American States, the STRI is providing training in tropical field biology to graduate students and teachers from Latin America. Also, members of the STRI marine biology staff are acting as consultants to the Central American Marine Training Program which is under the sponsorship of UNESCO.

Most recently the prime contractor for the Atlantic-Pacific Inter Oceanic Sea Level Canal Commission and the U.S. Army Corps of Engineers have called upon the STRI for fundamental data to assist in the feasibility study for the planned canal.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	21	$209,000	$13,000	$8,000	$2,000	$10,000		$21,000	$13,000	$31,000		$307,000
Increase requested	7	62,000	4,000	8,000	3,000	0		0	1,000	0		78,000
1968 estimate	28	271,000	17,000	16,000	5,000	10,000		21,000	14,000	31,000		385,000

NOTES

Personnel compensation and benefits (7 positions, $66,000).—3 biologists (NM-12), 1 administrative officer (GS-14), 1 technician (NM-4), 1 secretary (GS-4), and 1 laborer (M5) to expand the program to include research in marine and terrestial invertebrates, quantitative ecology, and biological climatology.

Travel ($8,000).—For transportation of new scientists and their families to the Canal Zone; official travel of new staff; more trips by present staff because of stepped-up research; and for administrative travel between Canal Zone and Washington headquarters.

Transportation of things ($3,000).—For shipment of household goods of new scientists.

Supplies and materials ($1,000).—Scientific supplies for new scientists.

12. RADIATION BIOLOGY LABORATORY

1966 appropriation	$336,000
1967 appropriation	338,000
1968 estimate	418,000

The Radiation Biology Laboratory conducts pioneering research on the effects and controls of radiation on the functions of living organisms. This broad spectrum of investigation includes studies on the transmittal of solar energy into metabolic response of living organisms; biophysics and physiology of regulatory photo-responses; relationships of energy cycling in natural biological systems to human populations; measurement of solar radiation; calibration of primary solar radiation standards; and carbon dating.

An increase of $80,000 is needed to alleviate deficiencies in professional, technical, and subprofessional support and to ease the shortage of critical equipment and supplies. The increase will serve the following purposes:

(*a*) $44,000 for necessary scientific and technical support (physicist, biologist, and technicians to continue to provide leadership in measuring the spectral quality of sunlight and its influence on organisms, to strengthen environmental biology studies on the effects of variations in light quality, quantity, and duration on plant growth; and for the maintenance of solar radiation instrumentation calibration standards for worldwide use.

(*b*) $24,000 to provide subprofessional assistance and computer services for extracting, recording, and computing scientific data resulting from research projects, thereby releasing the scientific staff for more productive work; and

(*c*) $12,000 to obtain necessary supplies and to replace inadequate or obsolete scientific equipment.

Need for increase

Demands for solar radiation information by biologists, ecologists, plant physiologists, and other specialists in the United States and from around the world are increasing at an enormous rate. Many significant problems in biology cannot be solved until such data have been acquired. For example: Can the production of food in the ocean and on land be altered by controlling solar radiation? Is there a correlation between solar radiation and patterns of animal behavior? Similarly, the correlations between these solar radiation data and laboratory-controlled experiments to verify the significance of spectral changes on plant growth under natural field conditions are urgently needed. Several new responses have been observed during the preliminary development of the Laboratory's present facilities and greatly improved and modified solar radiation measuring instruments have been designed and constructed for these programs. Due to the inherent difficulties and long-term nature of these programs, no other known laboratory in the world is presently attempting to make a combined attack upon these problems.

At present, computation of scientific data, drafting, editing, bibliographic searches, and typing of manuscripts are handled largely by the scientists. Research productivity of the scientific staff can be increased significantly by employing available computer techniques and by the addition of editorial and clerical staff to perform these routine tasks.

Much of the instrumentation used by the Laboratory represents the product and effort of the scientific staff during the early experimentation stage of a research project. Many of these pieces of equipment are outmoded. Replacement and upgrading of these essential tools are required.

The Laboratory's research and calibration activities are of underlying importance in insuring the success of environmental and ecological research studies sponsored by many agencies, universities, and other laboratories throughout the United States and abroad. As the responsible center for solar radiation calibration standards, the Laboratory must be able to maintain, improve, and adjust those instruments it receives from throughout the country and world.

Carbon dating techniques have been extended recently to activities such as dating of soils and water table recharging, and requests for service from other agencies and universities are outstripping the present capabilities of the Laboratory.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	25	$237,000	$18,000	$4,000				$13,000	$24,000	$42,000		$338,000
Increase requested	8	53,000	4,000	1,000				10,000	6,000	6,000		80,000
1968 estimate	33	290,000	22,000	5,000				23,000	30,000	48,000		418,000

NOTES

Personnel compensation and benefits (8 positions, $57,000).—1 biologist (GS-12), 1 physicist (GS-11), 1 editorial assistant (GS-9), 4 laboratory technicians (GS-4, 2 GS-7, and GS-9), and 1 clerk-stenographer (GS-5) to alleviate deficiencies in professional, technical, and subprofessional support.

Travel ($1,000)—To permit each senior staff scientist to attend 1 major scientific meeting in the United States annually.

Other services ($10,000).—To provide computer services in handling rapidly and accurately huge volumes of data from environmental control and solar radiation experiments.

Supplies ($6,000).—To offset rapid rise in costs of isotopes and other supplies for experiments.

Equipment ($6,000).—To meet rising costs of scientific equipment and to replace inadequate or obsolete equipment.

13. OFFICE OF ECOLOGY

1966 appropriation	$97,000
1967 appropriation	118,000
1968 estimate	160,000

The Smithsonian Office of Ecology plans and oversees a program of fundamental research on the interrelationships of living organisms, including man, with their total environment. This program emphasizes the effects of rapidly changing environments on natural resources and on human societies. Its work brings into concerted action efforts under way in the Smithsonian's research bureaus with those of other public and private agencies, and with activities such as the International Biological Program.

An increase of $42,000 is needed for additional staff to meet minimal needs for the development of national and international projects.

Need for increase

The improvement of man's environment depends largely on the manner and level at which human societies can harmonize with their environment. Success in adjusting human populations to the resources that support them rests primarily on developing new tools of understanding. The momentum of population increase and the side effects of modern technology present mankind with ever-increasing problems of pollution of air, water, and soil. The need is critical to seek a deeper understanding of man's total impact on his environment including the consequences to future generations; to establish baselines for measuring further impacts; and to provide the foundations for a program of research and education to help assure the continued existence of favorable environmental balances for civilization. For these goals the Smithsonian Program in Ecology helps to integrate action between the physical and life sciences on one hand, and the behavioral sciences (economics, psychology, ethology, and anthropology) and humanities on the other.

The Smithsonian Office of Ecology operates the Chesapeake Bay Center for Field Biology, a 700-acre preserve owned by the Smithsonian and, in cooperation with the University of Maryland and Johns Hopkins University, devoted to ecological research and conservation education. A survey of the flora is nearly completed, providing the groundwork for a study of principles of vegetation change, the basis for the management of vegetation for forestry, wildlife production, beautification of highways and open spaces, and right-of-way maintenance. Research on the social behavior and dynamics of bird and mammal populations have been initiated at the Bay Center. Planning is under way for studies of estuarian pollution. The increase will allow immediate progress in using present natural conditions for developing principles of long-range vegetation change—a requirement for sound conservation practices as well as for fundamental understanding of environmental modification.

The Smithsonian is a participant on the United States National Committee of the International Biological Program (IBP) and is assisting in the development of a world network of nature reserves and a program of world conservation of natural resources. A professional ecologist with broad education in general ecology and human environmental relationships will be added, along with minimal administrative support for the Office, to further Smithsonian contributions to the IBP and the management of Smithsonian ecology programs in Latin America, Ceylon and Korea.

Additional accomplishments of the Smithsonian Program in Ecology, since its inception in July 1965, include:

Aiding development of plans for a conference on "Rational Use of the World's Biosphere" for which the Smithsonian is to be host in 1968;

A long-range program of university education and research in the biological sciences is being developed in Korea, using the study area immediately south of the demilitarized zone, where vegetation and animal life have been rigidly protected for 14 years, as a base line for understanding the impact of man on his natural resources;

Excess foreign currencies are used in Ceylon for combined studies of wildlife and vegetation to provide a foundation for natural resources management. Four scientists will be assisted by Ceylonese students;

Plans for a world program in tropical biology with a network of selected sites for comparative studies, and for the development of a network of research areas within the United States to establish long-term research programs;

Plans for summer institutes for university teachers to upgrade university education in ecology;

The conducting of conferences on "The Avifauna of Northern Latin America" and "Panama Conference on Tropical Biology"; and

Establishment of a consortium between the Johns Hopkins University, the University of Maryland, and Smithsonian Institution for research and education in ecology.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	5	$63,000	$5,000	$5,000				$35,000	$5,000	$5,000		$118,000
Increase requested	4	37,000	3,000	0				0	1,000	1,000		42,000
1968 estimate	9	100,000	8,000	5,000				35,000	6,000	6,000		160,000

NOTES

Personnel compensation and benefits (4 positions, $40,000).—1 biologist (GS-14), 1 administrative assistant (GS-11), 1 assistant curator (GS-9), and 1 secretary (GS-5) to meet present obligations for developing national and international projects of ecological research.

Supplies and materials ($1,000).—To purchase supplies and materials for research.

Equipment ($1,000).—Equipment for new staff.

14. OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

1966 appropriation	$218,000
1967 appropriation	254,000
1968 estimate	375,000

The Office of Oceanography and Limnology operates the Smithsonian Oceanographic Sorting Center which provides essential identification services for the biological and geological specimens collected by oceanographic expeditions and surveys of Federal agencies and private institutions. It directs the contributions of the Smithsonian's marine sciences toward the accomplishing of national goals in oceanography and is a focal point for the development of biological oceanography. The Office furthers limnological studies on prediction and assessment of biological changes, especially in the major U.S. inland bodies of water.

An increase of $121,000 is required in order that the Sorting Center may develop a staff adequate to meet the greatly increasing demands for service necessitated by the growing national programs for understanding and utilizing the food and mineral resources of the seas.

Need for increase

Demands for service are increasing and volumes of specimens are being amassed that require sorting and identification so that planned surveys and expeditions can avoid duplication and concentrate on filling critical gaps. An increased technical staff is necessary to cope with these increasing volumes. Additional student technicians will be trained at the Sorting Center to supplement scarce professional personnel in the Smithsonian and other marine facilities. A plankton specialist and supporting technicians will be added to assist in the high priority need of understanding the distribution of fish larvae as they contribute to food production in the sea. An increase in the requests for assisting in national and international efforts in biological oceanography requires the addition of a biological oceanographer as Deputy Head of the Office, with appropriate administrative assistance.

The Sorting Center services the National Science Foundation, the Bureau of Commercial Fisheries, the National Oceanographic Office, Intergovernmental Oceanographic Commission, the scientists of the Smithsonian, and many private institutions and universities in the processing of marine collections. As an operating agent of the U.S. Government, the Sorting Center provides essential services to the processing of international collections of the Intergovernmental Oceanographic Commission. Collections of the International Indian Ocean Expedition, the International Cooperative Investigations of the Tropical Atlantic, the Guinean Trawling Survey, the Cooperative Studies of the KUROSHIO, and the proposed Cooperative Studies in the Mediterranean require identification work by the Sorting Center to achieve their purposes. The Sorting Center's information is sought for its contributions to the obtaining of food and mineral resources from the sea; national defense interest in shark occurrences, biological fouling, bioluminescent organisms, and in sound attenuating organisms; biomedical research on occurrences of cancerous organisms, utilization of unique experimental animal and plant life, and determining antibiotic properties; water quality studies on the elimination of species from polluted areas; and for similar contributions to basic research on the organisms of the marine environment.

Recently the results of the Sorting Center's efforts caused a major rescheduling of research vessels of the Bureau of Commercial Fisheries into areas proven to have larvae of commercial species of fishes. The cataloging of numbers of marine specimens will make continued contributions to future research planning.

Processing of the collections by this central laboratory represents a service to more than 250 scientists throughout the United States. Before the Sorting Center was established four years ago, each of the scientists had to establish his own sorting capability. Thus the Smithsonian Sorting Center represents a net saving in operating costs within a planned oceanography program. Nearly 100 technicians have participated in the training program at the Sorting Center and many have carried their taxonomic skills into other Government and private laboratories.

The Smithsonian further contributes to national oceanographic planning by participation in review and coordinating groups, by offering information on national oceanic research programs through the services of the Science Information Exchange, and by providing information and assistance on collection efforts and commitments of marine biology specialists worldwide.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	18	$159,000	$11,000	$4,000		$3,000		$25,000	$29,000	$23,000		$254,000
Increase requested	17	110,000	7,000	4,000		0		0	0	0		121,000
1968 estimate	35	269,000	18,000	8,000		3,000		25,000	29,000	23,000		375,000

NOTES

Personnel compensation and benefits (18 positions, $117,000).—1 oceanographer (GS-14), 1 training supervisor (GS-13), 1 biologist (GS-12), 1 administrative assistant (GS-11), 1 secretary (GS-7), and 12 technicians (GS-4 to GS-7) to meet increasing demands for service necessitated by growing national programs for understanding and utilizing the food and mineral resources of the seas.

Travel ($4,000).—To transport people and pay per diem costs to make or supervise collections, to provide field support services to other collectors, to cordinate the identifications and descriptions of species, to arrange for the use of local resources where the collecting will occur, and to transport individuals to save needed collections not otherwise preserved by those on the spot because of their special interests.

15. BUILDINGS MANAGEMENT DEPARTMENT

1966 appropriation	$6,089,000
1967 appropriation	6,740,000
1968 estimate	7,270,000

The Buildings Management Department protects, maintains, and operates eight major Smithsonian buildings, including the original Smithsonian building, the Museum of Natural History, the Museum of History and Technology, the Arts and Industries building, the Freer Gallery of Art, the National Air and Space building, the Fine Arts and Portrait Galleries, and the Gallery of American Arts, Crafts, and Design. It performs all or a combination of these functions for some seven other research, collection and service facilities, for example, the Chesapeake Bay Center for Field Biology, the Belmont Conference Center, the Oceanographic Sorting Center, and the Silver Hill facility for restoration and storage of air and space craft.

The Department provides utilities, transportation, and communications services; plans and supervises construction projects; performs alterations, repairs, and improvements; furnishes guard, custodial, fire protection, safety, and security services; participates in the installation of new or renovated exhibition halls; repairs and refinishes museum objects and furnishings; and provides supporting services for the research, scientific, cultural, and public education programs.

An increase of 86 positions and $530,000 is required to approach acceptable levels of performance in the maintenance, operation, and protection of the existing facilities of the Smithsonian Institution, and to provide minimum protection, security, safety, and maintenance services for new building spaces, exhibition halls, laboratories, and public-use areas.

Need for increase

In order to reduce inflationary pressures, Government-wide restrictions were placed on employment in the summer of 1966. The impact of the employment ceiling was to curtail the authorized strength of the Buildings Management Department by 147 positions. These positions were equivalent to partial year's cost of $400,000. Our capability for service has been reduced below acceptable limits in light of the specialized use of our museum, gallery, and laboratory resources. These facilities are unique in respect to receiving over 13 million visitors, researchers, and students annually and being the repository of extremely valuable National Collections in art, history and science. As a result of this curtailment in employment, no supplemental appropriation is being sought in 1967 for the cost of salary increases granted the general schedule employees under the "Federal Employees Salary and Fringe Benefits Act of 1966." The cost of this raise is estimated at $462,000.

This Department must increase its basic capabilities in direct proportion to the acquisition by the Smithsonian of authorized new or renovated building spaces and exhibition halls; new approved educational, research, and cultural programs; and increased, continuing use of all buildings, grounds, and facilities by the visiting public, students, and scholars. Services must be provided not only during the regular hours when the buildings are open but also for special activities in the evenings and on weekends and holidays as well as during the spring and summer when the museum and gallery exhibitions are open until 10:00 p.m.

The Fine Arts and Portrait Galleries building is scheduled for public opening in April 1968. To meet this commitment, the Department must operate, maintain, and protect the building during fiscal year 1968, while final renovation work is being completed and exhibition halls, research laboratories and equipment, library facilities, offices, and heating, air conditioning, and humidity control systems are being installed and activated.

The opening of four new major exhibition halls in the Museum of History and Technology and the plan for an experimental "Store Front Museum" in one of the culturally-deprived neighborhoods in Washington require additional funds and personnel to service these new activities.

Additional guards are needed to man new posts or patrol new areas as they are open to the public. The irreplaceable National Collections must be given added protection to prevent loss or damage through theft or vandalism. The incidence of such acts in other museums and galleries has been publicized throughout the world. There have been several recent incidents in Washington museums and galleries. Every effort must now be expended to protect the specimens and objects which constitute the material evidence of America's history and accomplishments in the arts, history, and science.

Funds are needed to furnish required utilities and to procure commensurately larger quantities of maintenance, operation, and cleaning materials, supplies, and equipment replacements for the additional space being operated.

Periodic review of our buildings management operations assures that work methods are effective and training is fully utilized to improve the effectiveness of internal and public services at a minimum cost.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	723	$4,289,000	$313,000	$4,000		$995,000		$771,000	$268,000	$100,000		$6,740,000
Increase requested	86	229,000	14,000	0		77,000		73,000	72,000	65,000		530,000
1968 estimate	809	4,518,000	327,000	4,000		1,072,000		844,000	340,000	165,000		7,270,000

NOTES

Personnel compensation and benefits (86 positions, $243,000).—33 guards (GS-3 to GS-9), 9 operating engineers (W-7 and W-10), 5 electricians (W-5 and W-10), 2 instrument makers (GS-11), 1 communications' specialist (GS-11), 1 buildings manager (GS-11), 2 foremen (W-8), 5 elevator operators (W-1), 28 laborers (W-1 to W-3) to provide maximum acceptable levels of maintenance, operation, and protection.

Rent, communication, and utilities ($77,000).—For Fine Arts and Portrait Galleries Building ($60,000) and for increased usage in other Smithsonian Institution buildings ($17,000).

Other services ($73,000).—Installation of security, fire, and smoke detection systems; additional cost of security and protective services for additional areas; inspection and maintenance of additional elevators; and repairs to heavy equipment, machinery, and motor vehicles.

Supplies and materials ($72,000).—Supplies for cleaning additional restrooms and work shops; uniforms for new staff, and supplies for care and upkeep of areas surrounding the buildings.

Equipment ($65,000).—Cleaning, safety, mechanical, and gardening equipment for additional public exhibition areas, offices, laboratories, and shops; and 1 additional "carry-all" truck and replacement of 3 trucks.

16. OFFICE OF EDUCATION AND TRAINING

1966 appropriation	0
1967 appropriation	$200,000
1968 estimate	250,000

The programs of the Office of Education and Training fall into two broad categories reflecting the major activities of the Institution. The first category includes those programs directly related to Smithsonian research in science, history, and the arts. The research-related programs consist primarily of visiting research appointments for post-doctoral scholars and scientists, graduate students, and short-term consultants. The second category includes those programs directly related to the exhibit and public education functions of our museums. Particular attention will be given to programs designed for the educationally and culturally deprived. An example of these is the experimental "Store Front Museum" proposed for opening in the Spring of 1968 in a poor neighborhood in Washington, D.C. In all cases, the programs of the Office are designed to support and strengthen continuing and fundamental Smithsonian activities and, at the same time, to make the results of these activities more widely available to the appropriate groups.

While maintaining research-related activities at the present level, an increase of $50,000 is needed to fulfill more adequately the Institution's obligations in education for the general public, and so that schools and children can make maximum use of the museum's educational potential.

Need for increase

By employing a small staff of individuals who are experts in the museums' subject fields and are trained in the techniques of teaching, we can ensure more effective educational use of the exhibits. Programs under the direction of the museums' instructional staff will include—

Workshops and seminars for classroom teachers in the use of the museums;

Preparation of educational materials based on the museums' collections for use in the schools;

Preparation of bibliographies and information leaflets to provide replies to the thousands of inquiries received annually about the museum exhibits;

Research on the educational effectiveness of museum exhibits and formulation of special exhibit programs;

Development of tour programs and special informational programs to aid the millions of persons who visit the museums.

The general Smithsonian charter for "the increase and diffusion of knowledge among men" applies fully to the work of the Office of Education and Training. In its research-related activities, the Office makes visiting research appointments at the post-doctoral, pre-doctoral, and consultant level to support original research based on the unique resources of the Institution. Evidence of the need met by these programs is to be found in numbers of applications already received for the current fiscal year—150 applications after preliminary screening. It is in the diffusion of knowledge through programs of education for the general public, however, that the need for an increasing program effort seems greatest. Both for the Washington, D.C. area and for the Nation as a whole, the Institution's collections can serve as invaluable supplements for the educational curriculum. The expanded programs proposed by this Office will explore means of making optimum use of the Institution's potential for education.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	10	$93,000	$7,000	$2,000			$2,000	$94,000	$1,000	$1,000		$200,000
Increase requested	5	25,000	2,000	2,000			0	21,000	0	0		50,000
1968 estimate	15	118,000	9,000	4,000			2,000	115,000	1,000	1,000		250,000

NOTES

Personnel compensation and benefits (*5 positions, $27,000.*—1 education specialist (GS-9), 2 education technicians (GS-7) and 2 secretaries (GS-7 and GS-4), to fulfill the Institution's obligations in education of the general public and to enable schools, teachers and children to make maximum use of the museums' educational potential.

Travel (*$2,000*).—To arrange for educational programs with schools, universities, and other institutions.

Other services (*$21,000*).—Special studies and workshops to insure that museum resources are used in the most effective manner for educational programs.

17. INTERNATIONAL ACTIVITIES

1966 appropriation	$152,000
1967 appropriation	206,000
1968 estimate	251,000

The International Activities program focuses on the Smithsonian's traditional commitments to basic research and international exchange of information in the sciences and the humanities. The Office of International Activities serves as a catalyst for international research and developmental efforts by American institutions in archeology, systematic and environmental biology, and museum sciences through the Special Foreign Curreny Program which the Office administers. In addition, the Office determines the international projects which will best advance the Smithsonian's and thus the Government's interests; advises the State Department and private organizations and individuals on international exchange of persons in fields of Smithsonian concern; and assists the Institution's scientific and curatorial staff in establishing research projects and exhibits programs which require substantial international cooperation.

The International Exchange Service is the official instrument for exchange of Government documents and private institutions' scientific and literary publications with foreign governments and institutions. Today the Service forwards over one million pounds of publications annually to governmental and private organizations overseas and, in turn, receives publications from foreign countries for distribution to scientific and educational organizations in the United States. The Service is receiving numerous worthwhile additional requests for assistance in transmitting publications abroad. Examples include: reading materials for the Peace Corps Volunteers and textbooks for use in their school programs; law, medical, and dental journals are also being sought by ministers of justice and by universities in the developing countries.

An increase of $45,000 is needed for additional staff and related expenses of these programs.

Need for increase

The Office of Director, International Activities, requires funds for additional staff and related expenses to administer the accelerated Special Foreign Currency Program, requiring considerable Smithsonian staff assistance to both American and foreign institutions; and to conduct cooperative programs with the State Department, the Department of the Interior, the Pan American Union, and the Peace Corps. Also the International Exchange Service needs an additional freight clerk to handle an increased volume of shipping, more funds to meet rising transportation costs, and a small increase for packing and shipping supplies.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total *
	Number of positions (permanent)	Amount										
1967 base	6	$64,000	$5,000	$6,000				$15,000		$1,000		$91,000
Increase requested	5	25,000	2,000	2,000				0		1,000		30,000
1968 estimate	11	89,000	7,000	8,000				15,000		2,000		121,000

NOTES

*Excludes International Exchange Service.

Personnel compensation and benefits (5 positions $27,000).—2 administrative assistants (GS-9), 1 secretary (GS-7), and 2 typists (GS-4) for administration of accelerated Special Foreign Currency Program and to conduct cooperative programs with the State Department, the Department of the Interior, the Pan-American Union, and the Peace Corps.

Travel ($2,000).—For internationally renowned scientists who are members of the advisory council to review research proposals in the natural sciences.

Equipment ($1,000).—Office equipment of new staff.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total[1]
	Number of positions (permanent)	Amount										
1967 base	12	$63,000	$4,000	0	$43,000				$4,000	$1,000		$115,000
Increase requested	1	4,000			10,000				1,000	0		15,000
1968 estimate	13	67,000	4,000		53,000				5,000	1,000		130,000

NOTES

[1] International Exchange Service.

Personnel compensation and benefits (1 position, $4,000).—1 freight clerk (GS-3) to handle increased volume of shipping.

Transportation of things ($10,000).—To cover rising transportation costs.

Supplies and materials ($1,000).—For packing and shipping supplies.

18. ADMINISTRATIVE AND TECHNICAL SUPPORT

1966 appropriation	$2, 445, 000
1967 appropriation	2, 951, 000
1968 estimate	3, 418, 000

The administrative and technical offices and units of the Smithsonian provide the executive direction, administrative assistance, and specialized services that enable the program activities of the Smithsonian to work productively and efficiently toward identified objectives. Administrative services are provided by: the Office of the Secretary and the Divisions of Management Support, Fiscal, Museum Service, Personnel, Public Information, and Supply. Technical services are provided by Information Systems, the Library, Photographic Services, and the Press.

The increase is requested in order to meet the minimal requirements of the Institution's present "Salaries and Expenses" programs.

The increase is required in order to overcome deficiencies in the administrative service units which have been evidenced by increasing need for overtime, protracted procurement time, and backlogs in service areas despite continuing efforts to obtain efficiencies in operations. The increase is also required to provide administrative and technical support commensurate with the increased activity of the Institution.

The administrative and technical service units are requesting a total increase of 46 positions and $467,000 for 1968, as summarized below and justified on the following pages:

Summary of increases requested for 1968

	1967 appropriation		Administrative		Technical		1968 estimate	
	Positions	Amount	Positions	Amount	Positions	Amount	Positions	Amount
Office of the Secretary	23	$332, 000	8	$50, 000			31	$382, 000
Management support	26	303, 000	8	52, 000			34	355, 000
Fiscal	21	320, 000	5	40, 000			26	360, 000
Museum service	9	95, 000	1	10, 000			10	105, 000
Personnel	16	227, 000	2	30, 000			18	257, 000
Public information	7	85, 000	2	25, 000			9	110, 000
Supply	17	257, 000	3	18, 000			20	275, 000
Information systems	3	55, 000			5	$80, 000	8	135, 000
Library	40	510, 000			7	75, 000	47	585, 000
Photographic services	18	198, 000			2	17, 000	20	215, 000
Press	18	569, 000			3	70, 000	21	639, 000
Total	198	2, 951, 000	29	225, 000	17	242, 000	244	3, 418, 000

Office of the Secretary

1966 appropriation	$324, 000
1967 appropriation	332, 000
1968 estimate	382, 000

The Office of the Secretary provides executive direction, program planning, and review of all activities of the Smithsonian Institution. This Office includes the Secretary, three Assistant Secretaries, and their respective staffs of assistants.

The increase requested, $50,000, is required for technical and administrative services to assist the Secretary in the executive direction of the expanded programs of the Institution, to strengthen the Smithsonian's Equal Employment Opportunity Program, and to assist the Secretary in his duties as a member ex officio of the American Revolution Bicentennial Commission.

Need for increase

The Equal Employment Opportunity Program, established by Executive Order 11246, requires the Smithsonian to conduct a positive action program which will continue to provide true equality in all Smithsonian employment practices. The program includes regular evaluations of the effectiveness of the total effort throughout the Institution, implementation of changes designed to eliminate any discriminatory practices, investigation of complaints of alleged discrimination, coordination of agency efforts to assure adequate housing for employees who are members of minority groups, and maintenance of a system to provide confidential, current, and continuing statistical employment information by race and national origin which will help to assure that the objectives of Executive Order 11246 are met. The services of a responsible administrator to carry out this program for the Secretary are required.

The Act of July 4, 1966 established the American Revolution Bicentennial Commission to coordinate nation-wide activities in commemoration of this historic event. The Secretary of the Smithsonian Institution is a member ex officio. Plans are under way by interested organizations to develop appropriate programs of celebration. The Smithsonian administers the leading United States museum and gallery complex and is the repository of many fine examples of memorabilia of this important era. In recognition of this, the Smithsonian has been called upon to advise and cooperate with this Commission. Studies must now be made of the resources and opportunities of the National Museum and other museums and galleries to assist the Commission in achieving a coordinated program involving museums, galleries, national institutions, and community organizations. One planning and coordinating assistant is now required to provide continuing study and coordinated action on this program.

The Institution has been a leader in the advancement of basic science for the last 120 years. In order to continue this leadership, new trends in science must be investigated and the development of appropriate new programs explored. The long-range objectives of the Institution need to be thoroughly explored and selective programs drafted to reach approved goals.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	23	$267,000	$20,000	$12,000				$13,000	$6,000	$14,000		$332,000
Increase requested	8	46,000	3,000	1,000				0	0	0		50,000
1968 estimate	31	313,000	23,000	13,000				13,000	6,000	14,000		382,000

NOTES

Personnel compensation and benefits (8 positions, $49,000).—1 Equal Employment Opportunity Officer (GS-15), 1 planning and coordinating assistant, American Revolution Bicentennial Commission (GS-15), 2 special assistants (GS-15), 1 secretary (GS-8), and 3 secretaries (GS-5) for increased workload related to providing executive direction, policy guidance, program planning, review and evaluation of the various bureaus and programs.

Travel ($1,000).—To enable the staff to travel to various Smithsonian installations and to attend executive seminars.

MANAGEMENT SUPPORT

1966 appropriation	$237, 000
1967 appropriation	303, 000
1968 estimate	355, 000

Management Support provides specialized advice and assistance in support of the Secretary and Assistant Secretaries in the administrative requirements of the Smithsonian's programs. Included are Archives, Internal Audit, General Counsel, Organization and Methods, Programming and Budget, Secretary's Files, Travel Office, and Duplicating Services. (These functions previously were budgeted under the Office of the Secretary.)

An increase amounting to $52,000 is requested for management support.

Need for increase

Additional funds are required to augment the staffs of certain of these units to meet the increased workload resulting from expansion of the programs of the Institution.

An increase in travel funds would make possible essential trips related to the administration of the Institution's varied activities. Certain travel for other administrative units (e.g., Fiscal, Personnel) also is financed by Management Support funds.

The Archives requires funds to rent a microfilm machine and employ an operator. It is essential that a program be initiated for microfilming the Institution's large collection of historically and scientifically valuable and irreplaceable records Many of these papers dating from the early 19th Century are deteriorating.

An additional program analyst is needed for the Office of Programming and Budget which is responsible for the development and application of planning, programming, and budget principles and techniques to the needs of the Institution. This additional employee will strengthen this Office's capability to perform systematic and thorough analyses of program requirements.

The Organization and Methods Division, which is responsible for developing, coordinating, and maintaining programs for the continuing application of sound business administration and management improvement techniques, requires a clerk-typist.

The General Counsel's office requires an additional attorney to handle an increased volume of complex legal matters.

The Travel Office, established to expedite and provide specialized services to travelers in the several bureaus and to eliminate duplication of effort in making arrangements, requires a travel clerk and funds to rent a teletype ticketing machine.

The Duplicating Unit requires a multilith operator to perform duplicating, collating, and addressograph services; and also funds for repair of machines.

It is necessary to employ 2 typists as part of a pool from which the various units may obtain emergency typing assistance.

	Personnel compensation		Personnel benefits	Trave	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	26	$243,000	$19,000	$3,000		$2,000	$19,000	$7,000	$4,000	$6,000		$303,000
Increase requested	8	39,000	3,000	6,000		2,000	0	1,000	1,000	0		52,000
1968 estimate	34	282,000	22,000	9,000		4,000	19,000	8,000	5,000	6,000		355,000

NOTES

Personnel compensation and benefits (8 positions, $42,000).—1 attorney (GS-14), 1 program analyst (GS-9), 1 travel clerk (GS-7), 3 typists (GS-4), 1 microfilm operator (GS-4) and 1 multilith operator (GS-3) to meet increased workload.

Travel ($6,000).—For essential trips related to administration of Institution's varied activities.

Rent, communications, and utilities ($2,000).—Rental of a machine to microfilm historically and scientifically valuable and irreplaceable records and a teletype ticketing machine for the travel office.

Other services ($1,000).—To pay for services related to upkeep of duplicating machines.

Supplies and materials ($1,000).—For the duplicating functions.

Fiscal Division

1966 appropriation	$253, 000
1967 appropriation	320, 000
1968 estimate	360, 000

The Fiscal Division is responsible for the administration and accounting of funds of the Smithsonian Institution. This includes payroll, accounting, auditing, reporting, and financial counseling.

An increase of $40,000 is requested for 5 new clerical positions, to reimburse the Employees' Compensation Funds, and to finance the additional cost of postage indicia mail.

Need for increase

Acceleration of the various activities of the Smithsonian and initiation of new activities, resulting in higher levels of appropriations, have a direct bearing on the workload of the Fiscal Division. To cope with the extended volume of payroll, accounting, auditing, reporting, and counseling work, additional fiscal clerks are needed.

An additional $10,000 is needed to reimburse the Employees' Compensation Fund as invoiced by the Department of Labor for payments made by the Fund to employees for job-related injuries in fiscal year 1966.

Costs of postage indicia mail are constantly rising as a result of the increased activities of the Smithsonian Institution and the greater influx of letters from the general public, students, scholars, and educators; and from research, museum, cultural, historical, educational, community, and similar organizations seeking information, advice, and assistance. An increase of $10,000 to cover these costs is requested.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	21	$177,000	$13,000	----------	----------	$120,000	$3,000	----------	$2,000	$4,000	$1,000	$320,000
Increase requested	5	18,000	12,000	----------	----------	10,000	0	----------	0	0	0	40,000
1968 estimated	26	195,000	25,000	----------	----------	130,000	3,000	----------	2,000	4,000	1,000	360,000

NOTES

Personnel compensation and benefits (5 positions, $30,000).—1 ledger clerk (GS-7), 1 travel clerk (GS-6), 1 time, leave and payroll clerk (GS-5), and 2 voucher clerks (GS-5), to cope with the increased volume of payroll, accounting and auditing; and to reimburse the Department of Labor for payments made to Smithsonian employees through the Employees' Compensation Fund.

Rent, communications, and utilities ($10,000).—Postage indicia for the growing programs.

Museum Service

1966 appropriation	$49, 000
1967 appropriation	95, 000
1968 estimate	105, 000

The Museum Service is responsible for planning and developing special activities and events for the education and entertainment of the visiting public and others. These events are designed to enrich museum and gallery visits, to supplement traditional exhibitions, to enliven the Mall with colorful and dramatic performances, and to stimulate the public's cultural interests.

An increase of $10,000 is requested to enable the Museum Service to expand its activities.

Need for increase

The Museum Service is originating new and coordinating existing performing arts programs such as Sound and Light Production, "Music Making—American Style" (a folk music program), a puppet theater, expanded concert programs, and a Youth Orchestra Festival.

An assistant is needed to help the Director of the Museum Service plan and produce these and other programs which will give added interest to museum visiting for the public.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	9	$69,000	$5,000					$8,000	$7,000	$6,000		$95,000
Increase requested	1	9,000	1,000					0	0	0		10,000
1968 estimate	10	78,000	6,000					8,000	7,000	6,000		105,000

NOTE.—*Personnel compensation and benefits (1 position, $10,000).*—Museum specialist (GS-11) to assist in the planning and production of special activities and events.

Personnel Division

1966 appropriation	$217,000
1967 appropriation	227,000
1968 estimate	257,000

The Personnel Division supports the Smithsonian scientific, educational, exhibition, and management programs by providing specialized services in employment including position classification, employee relations, employee training, and salary and wage administration. The Division also administers the Health Services Unit.

An increase of $30,000 is requested for fiscal year 1968.

Need for increase

Two technicians are needed to assist with the extra workload resulting from expanded Smithsonian programs. Additional travel funds are needed in connection with the employee training and development programs. Funds are requested for the Smithsonian Institution's share of the operation of Interagency Boards of Expert Examiners under the Civil Service Commission.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	16	$180,000	$13,000	$8,000				$23,000	$2,000	$1,000		$227,000
Increase requested	2	12,000	1,000	1,000				16,000	0	0		30,000
1968 estimate	18	192,000	14,000	9,000				39,000	2,000	1,000		257,000

NOTES

Personnel compensation and benefits (2 positions, $13,000).—2 personnel clerks (GS-7) to provide personnel technicians to assist with the extra workload resulting from expanded Smithsonian programs.

Travel ($1,000).—For employee training and development.

Other services ($16,000).—To finance the Smithsonian's share of the operation of Interagency Board of Expert Examiners under the Civil Service Commission.

Office of Public Information

1966 appropriation	$47,000
1967 appropriation	85,000
1968 estimate	110,000

The Office of Public Information promotes public understanding of the Smithsonian's science, history, and art programs; responds to public inquiries concerning the work of the Institution; assists representatives of the mass communications media in their work with the scholars, scientists, and administrators of the Institution; broadens the impact of the Institution's educational resources through radio and TV programs; and improves communications within and without the Institution.

An increase of $25,000 is required to employ a Director for the Office of Public Information and a Chief of Film and Broadcasting.

Need for increase

The Smithsonian continues to make significant contributions to the National effort to improve the educational and cultural aspects of American life. Our accomplishments to date have been received with marked success by the public. Among projects undertaken is *The Free Film Theatre*, whose diversity of topics included patriotism, meteorites, underwater exploring, history of civil rights, and psychology. This theatre program has proved to be very popular with our museum visitors. During 1966, the *Dial-A-Satellite* service provided 90,000 callers with the precise time and exact location of satellite passages visible to the naked eye. Since the *Dial-A-Museum* service was initiated on November 1, 1966, over 5,200 callers have been informed of the subject and times of new showings or special demonstrations in our buildings. Through our public information program, the National Broadcasting Company became interested in the real potential of our scientific, cultural, and historical resources for the education and pleasure of its audience. As a result, a number of half-hour shows were developed and the first was televised on October 10, 1966. This nation wide program, being viewed by an estimated 4 million people, is continuing.

To assure that the great resources of the Smithsonian are used to maximum effectiveness by American citizens and organizations throughout the country, the Smithsonian has a responsibility to continue projects such as described above and to evolve new programs responsive to the cultural, educational, and scientific needs and desires of all levels of our society. A small but talented staff of experts is necessary to develop and carry out programs to meet these objectives.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	7	$62,000	$4,000	$1,000		$1,000	$4,000	$4,000	$3,000	$6,000		$85,000
Increase requested	2	23,000	2,000	0		0	0	0	0	(		25,000
1968 estimate	9	85,000	6,000	1,000		1,000	4,000	4,000	3,000	6,000		110,000

NOTE.—*Personnel compensation and benefits (2 positions, $25,000).*—Director (GS-15) and Chief of Film and Broadcasting (GS-14) to strengthen the Smithsonian's capabilities in keeping the public informed about the programs and activities of the Institution.

Supply Division

1966 appropriation	$249,000
1967 appropriation	257,000
1968 estimate	275,000

The Supply Division is responsible for the procurement and utilization of supplies, materials, contractual services, and equipment. The Division stocks common supply items for the program and administrative offices and maintains an inventory of equipment for the entire Institution.

An increase of $18,000 is needed for additional procurement specialists and for supplies to meet the requirements of approved new or expanded programs.

Need for increase

The research, exhibit, and educational programs of the Smithsonian have steadily increased in scope and complexity. The Supply Division requires a commensurate increase in order to keep abreast of the demands placed on it for procuring specialized technical equipment and materials. The Supply Division is currently studying the application of semi-automated processing techniques to the preparation of purchase orders, the recording of goods received, and concurrent establishment of property control. Successful application of these techniques will enable the purchasing agents to spend more time on the important aspects of procurement, developing procurement specifications, and obtaining the most advantageous prices.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	17	$133,000	$9,000			$13,000		$13,000	$76,000	$13,000		$257,000
Increase requested	3	14,000	1,000			0		0	3,000	0		18,000
1968 estimate	20	147,000	10,000			13,000		13,000	79,000	13,000		275,000

NOTES

Personnel compensation and benefits (3 positions, $15,000).—3 procurement specialists (GS-4 and GS-5) to meet the requirements of new or expanded programs.

Supplies and materials ($3,000).—For additional stock items for new programs.

Information Systems Division

1966 appropriation	$29, 000
1967 appropritaion	55, 000
1968 estimate	135, 000

The Information Systems Division provides systems for utilizing automatic data processing equipment in the storage, computation, and retrieval of information essential to the successful accomplishment of the scientific and educational programs and the management activities of the Smithsonian.

An increase of $80,000 is necessary to strengthen our capability of applying the processing speed, capacity, and versatility of computers to the work of the Institution.

Need for increase

As the national repository for specimens of natural history, the Smithsonian is faced with increased demands for information to meet research, educational, and applied science requirements across the country and around the world. Manual methods for searching through identification and environmental data relating to over 60,000,000 plant and animal specimens have become inadequate because of the great volume of specimens and because questions cut across subject matter, time periods, and geographic areas. The development of imaginative, computer-supported information storage and retrieval systems will enable the Smithsonian to respond with the speed, accuracy, and completeness that the public needs from the National Museum.

Urbanization, air, and water pollution are dramatically changing the composition and relationships of plant and animal life. Many species are now endangered. New sources of food supplies must be found to meet exploding world populations. The simulation of ecological conditions and the study of terrestrial and ocean life are greatly enhanced by the application of computer science.

Sound administrative and financial management requires that the Smithsonian continue to explore and apply computer techniques to its fiscal, supply, library, and other activities where studies indicate that such applications improve performance and lower unit costs of work.

To provide computer services in the Smithsonian, a program director and technical specialists must be added to the nucleus of systems designers and programmers established in the Information Systems Division.

To minimize computer processing costs, the Smithsonian is exploring every possible source of cost reduction. For example, less expensive second and third shift computer time is being used and will be used whenever available at Government and private installations.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	3	$31,000	$2,000	$3,000		$12,000		0	$5,000	$2,000		$55,000
Increase requested	5	59,000	4,000	0		0		$17,000	0	0		80,000
1968 estimate	8	90,000	6,000	3,000		12,000		17,000	5,000	2,000		135,000

NOTES

Personnel compensation and benefits (5 positions, $63,000).—1 director (GS-15), 2 systems analysts (GS-13 and GS-14), and 2 programers (GS-7 and GS-13) to provide computer services for the scientific, educational, and management activities of the Smithsonian Institution.

Other services ($17,000).—Additional computer time to provide on a more timely basis information demanded by research, educational, and applied science requirements across the country and the world.

Library

1966 appropriation	$363,000
1967 appropriation	510,000
1968 estimate	585,000

The Smithsonian Library performs an indispensable role in providing library and related informational services to the research, exhibit, and educational programs of the Smithsonian. Through its collection—one of the oldest and most carefully selected natural science and historical library collections in existence—its acquisition program, and reference services, the Library contributes to the quality of research, conserves research staff time by expediting acquisitions and reference services, and measurably heightens the creativity and productivity of the scientists and the scholars at the Smithsonian.

An increase of $75,000 is needed for the following purposes:

(*a*) $42,000 for 7 positions and photocopying services to meet an increasing reference services workload; and

(*b*) $33,000 for the purchase of publications for new and expanding programs of the Smithsonian.

Need for increase

The number of reference and information queries showed an increase of over 60 percent in the last two years. Significant increases occurred also in the number of patrons coming personally to the Library for assistance, in interlibrary borrowings, and in clerical support required for the reference and circulation functions. Previous studies by Library staff, special committees, and outside consultants support the conclusion that the Library still is unable to keep pace with cataloging, reference, circulation, and translating requirements. No new projects, such as recataloging, can be undertaken in 1968; but with the increases in workload, additional staff will be required to maintain an acceptable level of services to the Smithsonian's bureaus and offices.

Journal literature and technical volumes are of prime importance to the curatorial and research staff of the Smithsonian. Strengthening of existing programs, such as those in oceanography, radiation biology, and art, and the development of new programs in ecology, tropical biology, and American studies makes it necessary to add to the collections of the Library. The requested increase in funds will meet the costs of acquiring back issues of journals not previously included in subscriptions, as well as providing new publications.

Maintaining the Library's collection leadership in certain areas of history and science benefits more than the Smithsonian. Because of the uniqueness of the collection, the Library is called upon to serve the Library of Congress, other national libraries, educational institutions, the scholarly community at large, and the general public. In addition, daily requests are received and processed from scientists of other Federal agencies, such as the Department of Agriculture, the National Institutes of Health, Geological Survey, and the Fish and Wildlife Service.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	40	$320,000	$23,000	$4,000		$15,000	$25,000	$2,000	$33,000	$88,000		$510,000
Increase requested	7	38,000	3,000	0		0	0	1,000	13,000	20,000		75,000
1968 estimate	47	358,000	26,000	4,000		15,000	25,000	3,000	46,000	108,000		585,000

NOTES

Personnel compensation and benefits (7 positions, $41,000).—2 librarians (GS-7), 4 library assistants (GS-4 and GS-5), and 1 clerk-typist (GS-5) to meet an increasing reference services workload.

Other services ($1,000).—Photocopying services for reference activities.

Supplies and materials ($13,000).—For back issues of journals for the curatorial and research staff.

Equipment ($20,000).—For purchase of books for new and expanding programs.

Photographic Services Division

1966 appropriation	$159,000
1967 appropriation	198,000
1968 estimate	215,000

This Division provides professional photography to aid the fields of exhibition, documentation, research, publication, conservation, restoration, preservation, and training; and the public service and educational programs of the Smithsonian Institution.

An increase of $17,000 is requested to permit this Division to fill requests on a more timely basis; to reduce current backlogs of copying and printing historically important prints and negatives which should be processed on a current and scheduled basis to forestall their loss through deterioration; and to obtain contractual commercial services for photographic work which it is not economical to perform in house.

Need for increase

The diversity of objects photographed, the varied applications of these visual materials, and the high standards of quality demanded by the users of these services make the photographic responsibilities of this Division unparalleled. Subjects range from minute natural history specimens to huge space missiles; from delicate fabrics to live animals; from priceless gems to rock cores; and from copies of rare prints to contemporary photographs of national and international personages. These uses cover fields which demand scientifically and technically accurate reproductions in scale, density, color, shadings, highlights, and backgrounds. Timely, pleasing, and appropriate pictures of special events and programs are needed as they occur.

The photographers work directly with scientists in all disciplines; historians; technologists; exhibits specialists; conservators; and museum, gallery, and laboratory administrators to achieve desired results and to assure that services are promptly and fully responsive to professional requirements.

The demands for photography are scrutinized to reduce both volume and cost. Backlogs of requests have developed, however, and this increase will make it possible to provide an essential service with less delay.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	18	$135,000	$10,000					$20,000	$25,000	$8,000		$198,000
Increase requested	2	11,000	1,000					5,000	0	0		17,000
1968 estimate	20	146,000	11,000					25,000	25,000	8,000		215,000

NOTES

Personnel compensation and benefits (2 positions, $12,000).—1 photographer (GS-7) and 1 clerk-typist (GS-4) to reduce backlogs, to fill requests on a more timely basis, and to forestall loss of historically important prints and negatives through deterioration.

Other services ($5,000).—Commerical services for photographic work which is not economical to perform in house.

Smithsonian Press

1966 appropriation	$518, 000
1967 appropriation	569, 000
1968 estimate	639, 000

The Smithsonian Press (formerly the Editorial and Publications Division) is an integral part of the Smithsonian Institution's efforts to extend the limits of man's knowledge. The Press, in direct support of the Smithsonian's research, exhibit, and educational programs and of special benefit to scholars and the public, is responsible for approving, editing, designing, arranging the printing, and distributing the research and popular publications of the Smithsonian.

An increase of $70,000 is needed for the following purposes:

(*a*) $25,000 for two editors and a production assistant to eliminate a backlog and to remain abreast of the increasing number of scholarly manuscripts; and

(*b*) $45,000 for increases in printing costs.

Need for increase

In the past, reports of scientific research have lain dormant for periods up to a year owing to insufficient editorial staff and printing funds. Research is futile if not reported for the benefit of others. This intolerable situation has arisen, despite increases in Federal allotments, because of several factors which have combined to negate those increases. The number of scholars and scientists on the Smithsonian staff has increased in the past five years. Additional research programs and projects have been initiated. The per capita production of manuscripts from this staff has gone up markedly. The expansion of exhibit halls and addition or expansion of public service, cultural, and educational programs and activities have encouraged the demand for printed guides, information leaflets, catalogs, and popular publications for the visiting public. The additional output, combined with an increase in the cost of Government Printing Office services, has made this increase necessary.

Recognizing the problems of increasing workload and printing costs, the Smithsonian Press is taking steps to economize and improve efficiency wherever possible. Editorial, production, purchasing, and distributing practices are being critically examined. Such economies as setting straight copy in linotype instead of monotype and using typewriter composition for offset reproduction of tabular and mathematical material are being considered. Such techniques will help to hold down costs and speed up publication schedules.

	Personnel compensation		Personnel benefits	Travel	Transportation of things	Rent, communications, and utilities	Printing	Other services	Supplies	Equipment	Insurance claims and indemnities	Total
	Number of positions (permanent)	Amount										
1967 base	18	$164,000	$11,000	$3,000		$3,000	$383,000	$1,000	$2,000	$2,000		$569,000
Increase requested	3	23,000	2,000	0		0	44,000	1,000	0	0		70,000
1968 estimate	21	187,000	13,000	3,000		3,000	427,000	2,000	2,000	2,000		639,000

NOTES

Personnel compensation and benefits (3 positions, $25,000).—2 editors (GS-9 and GS-11) and 1 production assistant (GS-7) to eliminate a backlog and to remain abreast of the increasing number of scholarly manuscripts.

Printing and reproduction ($44,000).—Increased printing costs.

Other services ($1,000).—For indexing services.

GRANTS FOR MUSEUM TRAINING ACROSS THE COUNTRY

Chairman **Hayden**. I note on page B–9 of your justification that you are asking funds to establish a program of grants at locations other than the Smithsonian Institution for training museum staff members. Where will such training be carried on and how much are you asking?

Dr. **Ripley**. We are asking at the present time, sir, $45,000, for six interns in this program. This is under the National Museum Act, which was passed last year. A number of museums would be selected as training sites. Our present thought is that we might be able to afford three science programs; that is, intern traineeships at three prominent science museums across the country: one on the east coast, probably; one in the Middle West; and one somewhere in the West. We are initiating conversations with the directors of some of the outstanding museums to give young people an opportunity to work as an intern in a museum, and learn the museum techniques. At the same time, they may be required to attend some local university and take a strong science course program, so that they will be able to prepare themselves for work in science museums.

We feel that it is a vital part of our mission to allow the Smithsonian to cooperate with science museums in training and to assist in replicating scientists who are willing to work in museum careers. The universities tend not to stimulate work in museums, and as a result we have been pinched for available manpower.

Chairman **Hayden**. Also, you are asking funds for matching grants to museums to employ specialists to write manuals and publish them. Do the matching funds have to equal the granted funds?

Dr. **Ripley**. The contributions from other museums will equally match these; yes, sir.

Chairman **Hayden**. Did you have such a program as this in fiscal year 1967 and, if so, how much was devoted to it?

Dr. **Ripley**. This is a new program, sir, under the National Museum Act.

NEW EXHIBITS

Chairman **Hayden**. For the Office of Exhibits, you are requesting an additional $60,000 over the $2,034,000 provided for you last year. This increase will be used to employ seven exhibit workers. How many exhibits workers do you have on your roll now?

Dr. **Ripley**. I would like to ask Mr. Bradley, Assistant Secretary, to answer the exhibits question.

Mr. **Bradley**. Mr. Chairman, we have 149 exhibits technicians on the roll today, out of a total of 166 positions in this unit.

Chairman **Hayden**. What permanent exhibits, if any, do you plan to prepare in fiscal year 1968?

Dr. **Ripley**. We plan to prepare four halls, sir, in the Museum of History and Technology, which as I mentioned earlier has been so successful. One we are working on now, I think will be quite exciting. I know that Mr. Humphrey, the Vice President, is very much interested in it, and that is the Photography Hall. The Vice President feels that in the area of photography, the Smithsonian can perform a signal service in attempting to develop a series of exhibits and some delineation of the history and evolution of photography into the art form that it is now.

Another hall will have to do with Textiles. The third hall will be an Electricity Hall, and the history of science in electricity; and the fourth will strengthen our halls showing the history of the Armed Forces.

ALASKAN CENTENNIAL EXHIBIT

Chairman HAYDEN. Last year the conferees directed that you utilize $50,000 of funds to prepare an Alaskan centenary exhibit. Has this been done?

Dr. RIPLEY. Yes, sir. We prepared an exhibit on the Alaskan centennial. I am happy to say that Senator Bartlett has seen it. It was shown down in our Museum of Natural History. It is a very handsome exhibit and is now being circulated in Alaska, prior to moving to Fairbanks for the centennial celebrations this year.

OFFICE OF REGISTRAR PERSONNEL

Chairman HAYDEN. You indicate a need for an additional two positions at a cost of $9,000 in the coming fiscal year in the Office of Registrar. Would you please explain your need for this personnel?

Dr. RIPLEY. Would you answer that, please?

Mr. BRADLEY. Mr. Chairman, this arises from the need for a mail clerk, who will be a messenger in connection with the new Fine Arts and Portrait Galleries at Eighth and F Streets, which is removed from the Mall; and also the need for a mail clerk on the Mall in order to handle the steadily increasing volume of mail in our five buildings there.

MUSEUM OF HISTORY AND TECHNOLOGY

CURATORS OF CHEMISTRY, MEDICINE, AND MUSIC

Chairman HAYDEN. For the Museum of History and Technology you ask five new positions. Why will the 150 positions now available to you not be sufficient?

Dr. RIPLEY. Sir, this is part of our development program in the new museum. Three of these curators would be in areas of our collections where we do not now possess expertise. One would be in chemistry, one in medicine, and one in music.

The history of medicine is an extraordinarily interesting area, in which we have been unable, so far, to find a suitable candidate for, in three years of searching. I think, now, we may have one; and we would like very much to have this authorization for a new position in this area. Two technicians are needed in addition.

MUSEUM OF NATURAL HISTORY

EXPANDING EDUCATIONAL SERVICES

Chairman HAYDEN. With respect to the Museum of Natural History, I note your request for $10,000 to improve your educational program through increased training of students. What are you doing in this field now and what additional do you propose?

Dr. RIPLEY. This is an increase which is new, sir. We have no earmarked funds for this in fiscal year 1967. It is due to the need to meet the expanding educational activities in the museum. The most widely used educational service in the museum is the continuing function of consultant at large, in which we provide assistance to academic research programs at various levels, from students right up to postdoctorals, both in the United States and abroad. This is an activity which is becoming greatly increased, every year. We finally reached the breaking point, as far as we are concerned. We simply need help to be able to meet this demand.

Literally thousands of requests come each year on very specific topics, and we lack the staff capability at present to be able to answer many of them in time. We need to provide students and scholars with the various tools, such as access to particular collections, to plan their programs or conduct research, often on the premises. We fill thousands of requests each year, and we have finally gotten to the point where something has just got to give.

GRANTS FOR INDIVIDUAL RESEARCH PROJECTS

Chairman HAYDEN. Tell the committee about your competitive research awards to Smithsonian scientists. You are asking an additional $75,000 for fiscal year 1968. Just what is this program?

Dr. RIPLEY. Each year, sir, we fund worthy, short-term research projects. It is a serious problem in the Smithsonian that our own scientists, who are organized to engage in field-oriented fundamental research, often lack the opportunity to take advantage of various unexpected possibilities to go out in the field or on short-lived biological trips. The support of field research projects often can't be anticipated in the normal course of science budget planning. As a result, we set up a research awards program with the approval of the Congress 2 years ago, to give us expeditious exploitation of these unanticipated research opportunities while continuing to maintain the long-term, basic long-term research projects. Through this central, essentially supplementary support, we can assist research and various kinds of science.

It is an important means for us, too, whereby scientists in the Smithsonian can engage in collaborative field projects in a timely way with colleagues in other institutions and universities. We employ a review panel of eminent scientists and the same standard of excellence, we believe, as used by the National Science Foundation in awarding these grants. The grants are mostly quite small. In the last year we had 66 of these small grants.

Chairman HAYDEN. Well, what is the size of the individual award made?

Dr. RIPLEY. Generally in the area of less than $15,000.

NATIONAL AIR AND SPACE MUSEUM

PERSONNEL REQUEST

Chairman **Hayden**. For the National Air and Space Museum you propose an additional eight positions and an increase of $70,000. Does this request have any direct relationship to the construction of the new National Air and Space Museum which was authorized last year, but for which you are not yet requesting construction funds?

Dr. **Ripley**. May I ask Mr. Bradley to answer this one, please?

Mr. **Bradley**. Not directly, Mr. Chairman, although the request is related to the very same act. The act authorizing the construction of the Air Museum also directed the Smithsonian to record the history of air and space flight and, more importantly, to provide educational facilities and programs for the public and for students in the underlying science and technology. The positions that we are requesting relate to the necessary preparation of catalogs, organizing air and space collections and materials, preparing exhibits, and to update the existing exhibits that we have, where we entertained 1½ million visitors last year. We need funds also for other necessary expenses, particularly to acquire historically and technologically important aircraft and spacecraft while they are still available around the country.

PERSONNEL FOR ARMED FORCES MUSEUM ADVISORY BOARD

Chairman **Hayden**. How many historians are now employed for the National Armed Forces Museum Advisory Board? I note that you are requesting one additional historian for the coming fiscal year.

Dr. **Ripley**. We have three, sir, who are presently employed as professionals in this activity. But we actually need, I would say, a strong caliber military historian in order to work with us in making studies and reports on the characteristics of the Armed Forces in war and peace. The present three professionals have been concerned with the planning of the Armed Forces Museum, negotiations with National and State of Maryland Planning Commissions, acquisition of military objects for ultimate display, and studies of the characteristics of the Armed Forces in war and peace as directed by the act. But we feel that this is a good moment to pause, when there is relatively little prospect at the moment of developing physical facilities, to have an ad hoc review, a symposium perhaps, on the purposes of such a museum; to have a chance to get together with historians around the country, and we would like to have this organized by our distinguished military historian.

MILITARY PARK NEAR FORT FOOTE, MD.

Chairman **Hayden**. Last fall the newspapers carried an item with respect to a military park planned on the Maryland shore of the Potomac River, apparently to be located between the Woodrow Wilson Bridge and Fort Foote. Would you please comment on this news item, indicating the status of such a proposal, the estimated cost of it, and whether or not specific substantive legislation is required?

Dr. **Ripley**. Sir, we believe that legislation is needed to authorize the Smithsonian to acquire a suitable tract of land in the vicinity of

Fort Foote, which is just south of the Woodrow Wilson Bridge. We selected this location because of the suitability of the terrain, the fact that it is near the District of Columbia as specified under the act in fiscal year 1961, and because it is adjacent to navigable waters where, in fact, historical ships can be displayed. We feel that the National Park Service has a very good point in recommending that we collaborate with them. They have some 85 acres which they would like to give us for these purposes.

FREER GALLERY OF ART

Personnel Request

Chairman Hayden. You are again asking for a secretary for the conservation laboratory in the Freer Gallery of Art, as well as a cabinetmaker for that activity. Would you please explain the need for these two positions?

Dr. Ripley. Sir, we need a secretary for the conservation laboratory, which is responsible for the technical analysis and preservation of objects, and the cabinetmaker to repair and maintain exhibit furnishings and installations for the gallery, many of which are particularly precious and delicate, and which need a very skilled workman, indeed. We have at the present time a tremendous backlog of work which is being deferred because we don't have these people. Insufficient funds were appropriated in 1967 to allow their hire.

INTERNATIONAL ART PROGRAM

Chairman Hayden. How much are you now provided for the international art program which you have taken over from the U.S. Information Agency; and why do you believe that $40,000 more is necessary for this program in the coming fiscal year?

Dr. Ripley. The international art program was given to us at their request by the U.S. Information Agency, with a small budget. Last year, during fiscal year 1967, there was about $130,000 available. We feel that $40,000 more is needed to allow us to prepare and tour through Europe a major exhibition, which would have great strength and which would reflect the vitality of American art today. This tour has been strongly recommended by the Department of State, the U.S. Information Agency and, through their cultural attachés, six European countries.

This is the second step in what we feel is an appropriate and necessary gradual buildup to provide the basis for services comparable to those of the fine arts program formerly conducted by the U.S. Information Agency. The present funding allows us approximately 12 small shows each year, related to the U.S. missions abroad, in USIA libraries and townhalls of communities in Asia, Africa, and South America.

NATIONAL COLLECTION OF FINE ARTS AND NATIONAL PORTRAIT GALLERY

Chairman HAYDEN. Please explain the approximately 30 percent increase in funds for the National Collection of Fine Arts which you are asking.

Dr. RIPLEY. This request relates to the fact that in April 1968, we hope to open the two new galleries in the old Patent Office Building. We have spent about $7 million over a period of 5 or 6 years in order to make this building appropriate and suitable for these two great galleries. We feel that we can't open them properly without this increase in staff and personnel.

Chairman HAYDEN. I assume that the similar increase requested for the National Portrait Gallery is caused by the same set of circumstances. Do you have any further comment?

Dr. RIPLEY. That is true, sir.

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

Chairman HAYDEN. With respect to the new item entitled Joseph H. Hirshhorn Museum and Sculpture Garden, for which at a later place in your budget request you are asking planning funds for the construction of the museum, why is it necessary now to employ curators, technicians, and secretaries?

Dr. RIPLEY. Sir, we believe that we are justified in asking for this, because the Hirshhorn Museum is now officially a bureau of the Smithsonian. It therefore seems appropriate that in fiscal year 1968 we start with a nucleus staff of three people in order to prepare for assuming the responsibility for the collection and its display and protection.

Preliminary architectural studies are already underway, and the contract drawings and specifications, we hope, will proceed throughout the year 1968. In fact, I am hoping that if the architect, Mr. Bunshaft, has an appropriate design, we can actually submit a preliminary design to the Fine Arts Commission in May of this year. This is contingent on whether the design is appropriate, and is approved within our own thinking. But we are trying to make as rapid a start on this as possible, in order to meet the commitments of the agreement with the donor.

Chairman HAYDEN. Was not the art collection inventoried prior to your appearance before legislative committees in connection with legislation authorizing the construction of the museum?

Dr. RIPLEY. Yes, the collection was inventoried, and a copy of the inventory accompanied the legislation. But continually, now, Mr. Hirshhorn is adding and buying new objects of art. Yesterday, an extraordinarily interesting sculpture arrived from the west coast and is now being uncrated for placing on one of our terraces as a kind of earnest of things to come. This is a sculpture by Stern, which Mr. Hirshhorn has just bought on the west coast, which will be able to be shown out of doors. He has also just given us a Rickey, which we are going to place on the steps of the National History Building. Gradually, we will be placing outdoor sculpture around, as an advance indication of the Hirshhorn building's arrival—advance notice—like circus posters scattered around the town.

Senator BARTLETT. May I ask a question right there?

Dr. RIPLEY. Yes, sir.

OUTDOOR SCULPTURE PROTECTION

Senator BARTLETT. Are you concerned about possible defacement?

Dr. RIPLEY. Not particularly, at this point. I can say that I am not particularly concerned, because of the success, for example, that the city of Philadelphia has had with its outdoor contemporary art show, which has been going now for several months. No traces of vandalism have occurred. One steel cable snapped on one end of a suspended sculpture in one of the public areas in Philadelphia, and for all I know, this is only because a bolt broke. The statuary and other sculpture which is out on the grass, easily accessible, within reach of people's hands, isn't being scribbled on or being defaced at all. I toured the city of Philadelphia with the city planning group, 2 weeks ago, and was much impressed. In the same way, in Paris, in the Louvre Garden, there are no cases of vandalism that I have heard of. So I am fairly optimistic, Senator. Of course many of these will be on plinths or bases which will be relatively high, so it would be a little bit hard to reach them. We hope they will be in areas in general near the buildings, where people circulate.

Chairman HAYDEN. I note that part of your request is for racks and shelving for storage of the collections. Do I assume that the collections will actually be brought in to this area prior to construction of the building?

Dr. RIPLEY. Yes, sir. These will gradually be coming in. As I mentioned, a large sculpture arrived yesterday and was being uncrated yesterday. Small pieces are following, from a particular purchase in California. In the past year, I might say, Mr. Hirshhorn has purchased over $900,000 of additional objects, not in the inventory. He hasn't stopped collecting.

ASTROPHYSICAL OBSERVATORY STATION IN ARIZONA

Chairman HAYDEN. What is the status of the Observational Station planned for Mount Hopkins by the Smithsonian Astrophysical Observatory?

Dr. RIPLEY. Mr. Bradley, would you answer that?

Mr. BRADLEY. Mr. Chairman, we are getting underway. We have a permit for the occupation of the mountaintop in the Coronado National Forest near Tucson, Ariz. We would like to emphasize that this would be a sort of small, "workingman's" type of optical observatory. It will not be a large mountaintop astronomical observatory in the classic sense. We will run this one with the same economy as the 12 optical satellite tracking stations that we operate around the world. Minimal overnight quarters will have to be installed, because we are out of town about 40 miles, and we plan with money that you have furnished us this year, to acquire a gamma ray mirror for the interception of gamma ray impulses. We are undertaking to improve the site with an access road and we hope to get into operation next year.

Chairman HAYDEN. Well, what is the total estimated cost of this installation?

Mr. BRADLEY. The total estimated cost for site preparation is $220,000.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Chairman HAYDEN. With regard to the Smithsonian Tropical Research Institute, I note that you show your 1967 appropriation base as $307,000. However, last year's budget estimate was $277,000 for fiscal year 1967. How do you account for the additional $30,000?

Dr. RIPLEY. I would like to ask Assistant Secretary Galler to speak to this, if I may, Mr. Chairman.

Dr. GALLER. Mr. Chairman, the need to direct the additional $30,000 for 1967 to the Tropical Research Institute (STRI) is actually due to several conditions which were not originally anticipated, but which were of sufficient critical importance to require immediate attention. The lapse rate for the STRI had originally been estimated to be at a higher rate than was considered practicable when the estimates were reconsidered as the basis for the fiscal year 1967. To correct this situation, and to fund the increased pay for this bureau, $5,000 was reallocated during fiscal year 1967.

PERSONNEL REQUEST

In addition to that, the Smithsonian Tropical Research Institute staff has been receiving a marked increase in requests for advice, research services, and support from both public and private organizations and agencies, scientists and visitors from a number of places, both in the Canal Zone and in the Republic of Panama. For example, scientific investigators and student visitors for the fiscal year 1966 increased over a hundred percent over the prior year. The unprecedented increase in requests for scientific information and assistance had exhausted the ability of the STRI to respond in a rapid, timely fashion. Therefore, to maintain its vital services to the users of STRI's resources in the tropics, funds had to be reallocated for the employment of part-time technicians, and support staff for the STRI professional staff.

Also, authorization for part-time employment and the necessary funds were granted during fiscal year 1967 to meet the critical needs resulting from the unanticipated success that was experienced in activating two new, very small, marine biological laboratories associated with the Smithsonian Tropical Research Institute. One of these laboratories is located at Fort Amador, on the Pacific coast, and the other on Galeta Island on the Atlantic coast, using land and buildings that had been formerly owned by the U.S. Navy. Outside grants provided the principal sources of funding in setting up these laboratories. By 1967, considerable progress had been made at the Pacific installation, so that it was considered fully operational considerably in advance of the time schedule that we had anticipated. This laboratory was immediately put to use, and the type of research conducted necessitates a 24-hour attendance to insure that nothing goes wrong with the aquarium equipment or the other facilities that we need to keep study animals alive. The interruption of this equipment for a very short period of time might actually destroy months of scientific research.

Funds were diverted, therefore, to permit the employment of part-time staff, and to meet the necessary utility, communications, and related expenses essential to continued operation of the laboratory.

RESEARCH AND SERVICES

Chairman HAYDEN. For the fiscal year 1968 you are requesting an additional $78,000, most of which is for employment of seven additional personnel. Would you indicate to the committee specifically what you plan to do in addition to the work which you now carry on?

Dr. RIPLEY. Yes, sir, Mr. Chairman. The Smithsonian Tropical Research Institute needs an increase of $78,000 to meet the rapidly increasing number of demands for research and services, and to expand its research to cover important aspects of the tropics that are now not under study. Beginning in November 1966, the Interoceanic Canal Commission and its principal contractors, Atomic Energy Commission and the Battelle Memorial Institute, have been requiring increased assistance and expanded scientific support services from the Smithsonian Tropical Research Institute to implement the feasibility study for the proposed sea level canal, as ordered by the President of the United States.

MARINE PLANTS AND ANIMAL SURVEY

The addition of a biologist, who will be a specialist in the marine sciences, will enable the Smithsonian Tropical Research Institute to initiate a survey of both the distribution and the kinds of marine plants and animals that are presently at both sides of the Isthmus of Panama, and within a wide radius of the present site of the Panama Canal. This survey will provide fundamental base line information to assess any changes that may occur in both the commercially important or sports-fishery-important organisms that might be attributable either to nuclear explosions that are being considered as a basis for excavating the new canal, or resulting from a free exchange of waters that would occur if and when the new sea level canal comes into existence.

BIOLOGISTS EDUCATION AND TRAINING

In addition, the Smithsonian Tropical Research Institute has received a substantial increase in requests from such organizations as the Organization of Tropical Studies, as well as from universities in the United States and elsewhere in the Americas, to aid in the education and training of undergraduate biologists from the United States and throughout the Americas.

PLANT AND ANIMAL BEHAVIORAL STUDY

For example, as we have noted, scientific investigators and student visitors in the fiscal year 1966 increased more than a hundred percent over fiscal year 1965. At the same time, the resident staff of the Smithsonian Tropical Research Institute is being requested to provide additional advice and research services to a number of public and private agencies located both in the Canal Zone and in the Republic of Panama. These increases will necessitate the employment of a botanist, who will aid in carrying out surveys of the plants in the area, and an animal behaviorist to fill the basic gaps in our knowledge of the tropical environment, and to provide the scientific information and assistance that are being required by the other agencies.

ADMINISTRATION

A direct consequence of the rapidly increasing need for advice and scientific information as well as specimens from the Smithsonian Tropical Research Institute has been a consequent increase in administrative responsibilities. This has resulted in a disproportionate increase in the amount of time that the few resident scientists at the Smithsonian Tropical Research Institute must devote to administration and a consequent decrease in the amount of time available for fundamental research.

The addition of an administrative officer and a technician and a secretary will help alleviate this increasingly serious situation.

FIELD AND LABORATORY RESEARCH

And finally, one laborer is required to assist in the conduct of the field and laboratory research.

RADIATION BIOLOGY LABORATORY

COMPUTER SERVICES

Chairman HAYDEN. A part of the increase asked for the Radiation Biology Laboratory is $10,000 to provide computer services. How much did you expend for this purpose for the Radiation Biology Laboratory in fiscal year 1967?

Dr. RIPLEY. Sir, we expect to spend $6,000 this year. We rent a small computer at the moment, which is largely for administrative data processing, and as time is available, the Radiation Biology Laboratory has been using time on the machine. But a growing segment of the Laboratory's research requires a larger capacity machine, and for this we will have to obtain the computer services under contract.

Chairman HAYDEN. Does any other Federal agency provide solar radiation information as does the Radiation Biology Laboratory?

Dr. RIPLEY. No, sir; this Laboratory's research—measurement of spectral quality of solar radiation every day of the year, and its maintenance of calibration standards for worldwide use—is unique.

OFFICE OF ECOLOGY

Chairman HAYDEN. How long has the Office of Ecology been established in the Smithsonian Institution?

Dr. RIPLEY. The science of ecology goes back to the beginnings of the Smithsonian. It is only that we have recently formulated the Office of Ecology as an evocation of what we have been doing since our earlier times.

Chairman HAYDEN. Would you please explain why an increase in the personnel and activities of this Office is desirable in fiscal year 1968?

Dr. RIPLEY. We request an increase in the area of ecology of five positions, and $42,000. We now have five positions and $118,000, which has been previously budgeted under the Museum of Natural History.

I believe that we have a pressing need for continuing to develop the interrelationships between the people who are working in this office and the rest of the museum, and our laboratories. We operate, as you know, the Chesapeake Bay Center for Field Biology, at which studies are to be undertaken jointly with Johns Hopkins University and the University of Maryland. We are planning to make the fullest possible use of the Center. This is the finest natural laboratory available for any agency or university near Washington. We hope that the National Institutes of Health and other agencies will gradually develop an interest in this area. In order to prosecute the work and the running of this Center, for the benefit of our own scientists and outside scientists, we feel we need this small addition.

ECOLOGY STUDIES IN CEYLON USING EXCESS FOREIGN CURRENCY

Chairman HAYDEN. On page B–55 of your justifications you indicate that excess foreign currencies are to be used in Ceylon. I assume that this foreign currency is provided with the funds appropriated under the "Museum programs and related research activity."

Dr. RIPLEY. Yes, sir; all four of them will be salaried from the Smithsonian Institution, using a combination of private grant funds we anticipate from the World Wildlife Fund and excess foreign currencies.

This project is on-going now. Two of the scientists are in the field in Ceylon. We have had word from the Ambassador in Ceylon that he is very pleased that the project is finally off the ground, and I think it is going to be quite a distinguished project by the time it is finished.

Chairman HAYDEN. Off the record.

(Discussion off the record.)

OFFICE OF OCEANOGRAPHY AND LIMNOLOGY

PERSONNEL REQUEST

Senator BARTLETT (presiding). For the Office of Oceanography and Limnology you are asking an increase of $121,000 for the sorting center. How many sorters do you employ now and how many more will be provided if the full amount of your budget estimate is allowed?

Dr. RIPLEY. Senator, we have 10 sorters on the staff now. The total staff of the sorting center is 18, and we hope that if the 1968 request is approved, we will undertake a training program in order to build the staff to 35, including 21 sorters. I may say that staff increase is directly in response to the tremendous volume of work which we receive from all over the world and from Government supported oceanographic expeditions. The request has been scaled down in response to budgetary stringency, while attempting to service the President's Commission on Marine Sciences' request.

Senator BARTLETT. Off the record.

(Discussion off the record.)

COORDINATION WITH GOVERNMENT PROGRAMS

Senator BARTLETT. Mr. Ripley, in regard to the Institution's work on oceanography, how closely is it coordinated with the many similar activities being taken by many departments of Government?

Dr. Ripley. Sir, I sit as an observer on the President's Council on Marine Sciences. Dr. Galler and Dr. Wallen, who is the head of our oceanographic program, are closely associated with me, and I believe that we are very closely coordinated with other programs. In fact, the Smithsonian is one of the benchmarks of this entire business. Small as we are, and relatively small as our budget is for these marine sciences, it is absolutely basic to the success of the entire program.

Senator Bartlett. Have you discovered any duplication of effort on the part of the Federal Government in this activity?

Duplication of Efforts

Dr. Ripley. I have not discovered any duplication of efforts in the areas in which I am concerned, because, in fact, we are the only ones that are doing it. It is as simple as that.

OCEANOGRAPHY STUDY EXPANSION

Senator Bartlett. All of us who are interested in this subject, and I have a very deep interest, were pleased to note that the President in a special message to Congress just a few days ago called for a greater national effort in this entire field of oceanography. I heartily applauded that, because I think that we need to do more, and need to do it soon, and need to do it in a more massive way than we have embarked upon as yet.

Dr. Ripley. You will note that in the President's message and in the reports providing the fundamental basic material that went into the President's message, as well as in the reports of the President's Science Advisory Committee and others, the Smithsonian has been urged to expand its efforts in this area, in a way which we cannot afford to do. Our total budget is so relatively small that we could not make these great leaps forward which other groups would like us to make.

Senator Bartlett. Well, if this great leap forward were to be attempted, if you had sufficient money to seek to do this, are there enough competent people available?

Dr. Ripley. Part of the increase that we would have to get would be for a training program to make these people available. And I do believe, sir, that this would greatly speed up the process of getting such people.

Senator Bartlett. There just are not enough now?

Dr. Ripley. There are not enough now. We have had to establish our own professional resources from all over the world, from 28 countries, of some approximately 200 specialists, to help us identify the organisms in the sea.

BUILDINGS, OPERATION AND MAINTENANCE

Senator Bartlett. For your buildings management department, you are proposing an increase of $530,000 over the $6,740,000 available to you this year. Would you please discuss in detail the need for this increase?

Dr. Ripley. Mr. Bradley?

Mr. BRADLEY. Mr. Chairman, the need is directly related to the operation, protection, and maintenance of additional building floor area. The Smithsonian is somewhat unique from the rest of the Government in that we operate our own buildings. Such services normally are provided by the General Services Administration to other organizations. However, in our budget now before you about 30 percent of the total request is for the operation of buildings.

The Smithsonian now has in operation something over 3 million square feet—it is 3,185,000 square feet of floor area, in 11 separate buildings. We have to offer for the record, tabulations showing the floor area by building, the part devoted to exhibition for public use, the part for scientific laboratories, and so forth. We also have here, if you are interested Mr. Chairman, an historical record of the addition of the various areas in buildings of the Smithsonian, running to the total of over 3 million square feet.

We also have an evaluation that we asked to be made of our budget for one of the largest buildings, the Museum of History and Technology. In some detail, we went over that budget with the Public Buildings Service in order to appraise the adequacy and the reasonableness of this request.

I am glad to report to you that we found agreement with these people who do operate buildings, although they were not familiar with museum buildings and the special problem of 5 million people coming in and out. The appraisers were highly knowledgeable on building operations and represented the nearest thing we could get, we felt, to a reasonably knowledgeable appraisal of what we were proposing to submit to you. I can report that it worked out very well, and we are in reasonable agreement.

Senator BARTLETT. Those tables will be accepted, by the way. Thank you sir.

(The tables follow:)

SMITHSONIAN INSTITUTION BUILDINGS[1]

Buildings Management Department

Name of building	Gross square feet	Net square feet	Exhibit area	Science or laboratory area	Storage area
1. Museum of History and Technology	753,667	518,818	301,405	10,000	70,000
2. Museum of Natural History	1,220,581	896,034	220,027	[2] 150,000	[2] 300,000
3. Smithsonian Institution Building	150,388	87,273	11,000	20,000	....
4. Arts and Industries Building	162,897	143,488	103,195	....	....
5. Fine Arts and Portrait Galleries	374,125	225,530	[4] 48,202 [5] 49,960	....	12,000
6. Smithsonian Gallery of American Arts, Crafts, and Design	38,000	(3)	(3)	....	3,000
7. All other (Air and Space, Freer, 24th St., Oceanographic Sorting Center, Silver Hill, Lamont St., and 2 temporary sheds)	485,210	472,398	46,146	42,000	255,000
Total	3,184,868	2,343,541	779,935	222,000	640,000

[1] Excludes National Gallery of Art.
[2] Approximate.
[3] Not available.
[4] National Portrait Gallery.
[5] National Collection of Fine Arts.

Buildings Management Department, fiscal year 1968

	Positions	Man-years
BUILDING		
Museum of History and Technology	242	230
Museum of Natural History	266	253
Fine Arts and Portrait Galleries	91	45
Smithsonian Institution	48	46
Art sand Industries	72	68
All other	90	86
Total	809	728
ACTIVITY		
Guards	282	254
Mechanics	206	185
Laborers	286	257
Supervisory-clerical	35	32
Total	809	728

Summary of construction appropriations and increases in gross floor areas

Fiscal year	Construction appropriation	Gross floor area added (square feet)	Total floor area (square feet)
1956	$2, 288, 000	----------	1, 425, 665
1957	33, 712, 000	----------	1, 425, 665
1958	800, 000	----------	1, 425, 665
1959	----------	----------	1, 425, 665
1960	----------	----------	1, 425, 665
1961	13, 500, 000	43, 705	1, 469, 370
1962	4, 836, 000	753, 667	2, 223, 037
1963	1, 275, 000	----------	2, 223, 037
1964	7, 251, 000	259, 903	2, 482, 940
1965	3, 889, 000	259, 903	2, 742, 843
1966	3, 787, 000	29, 900	2, 772, 743
1967	3, 889, 000	374, 125	3, 146, 868
Subtotal	75, 227, 000	1, 721, 203	3, 146, 868
1968	2, 641, 000	38, 000	3, 184, 868
1969	33, 171, 000	30, 000	3, 214, 868
1970	49, 315, 000	365, 000	3, 579, 868
1971	18, 060, 000	----------	3, 579, 868
1972	7, 100, 000	1, 231, 833	4, 811, 701
Subtotal	110, 287, 000	1, 664, 833	----------
Total	185, 514, 000	3, 386, 036	4, 811, 701

NOTE.—1968 thru 1972 are estimates. 1,721,203 square feet or 55 percent of all Smithsonian building space was opened from 1961 to 1967.

LEVELS OF MAINTENANCE, OPERATION, AND PROTECTION

Senator BARTLETT. In the table preceding page B–61 of your justifications, it is stated that the additional personnel are needed "to provide maximum acceptable levels of maintenance, operation, and protection," and on page B–62, in discussing the 86 additional positions asked for, the statement is made that they are "required to approach acceptable levels of performance in the maintenance, operation, and protection * * *"

What level will be achieved if the full amount of this increase is allowed?

Mr. BRADLEY. Mr. Chairman, the level of acceptability is our objective. This simply means that the buildings will be well maintained structurally, will be clean, well guarded, that the collections will be under surveillance, and that the large crowds will be kept orderly.

BUILDINGS OPENINGS

The net result of this budget is that the total amount of money that we will spend per square foot is $2.27 square foot. I submit that the level of maintenance is directly related to the requirements that we have. We are open 364 days a year, every day but Christmas, and many of our buildings are open at night during the five warm months of the year. We have a guarding requirement which requires almost five men, technically 4.85 men, in order to put a guard on a single post for around-the-clock guarding for the whole year. This is because these people work five shifts per week with time-off for vacation and sick leave. We have to be open 21 shifts in the course of a week. This, of course, runs up the cost of operating these buildings. What we are trying to do here is to present clean, welcome, fresh buildings with good exhibits to the millions of visitors that we have each year.

GUARD SALARY AND RECRUITMENT

Senator Bartlett. What is the starting salary for a guard?

Mr. Bradley. A guard comes in, Mr. Chairman, at just over $4,000 a year—GS-3, $4,269 a year.

Senator Bartlett. Do you have trouble recruiting?

Mr. Bradley. We surely do, sir.

Senator Bartlett. I should think so, at that figure.

OFFICE OF EDUCATION AND TRAINING

1967 Appropriation and 1968 Budget Request

Your justifications indicate that the programs of the Office of Education and Training fall into two broad categories. Would you indicate the nature of these categories and provide information as to the funding in fiscal year 1967, and the increase requested in fiscal year 1968 for each of these programs?

Dr. Ripley. Thank you, Mr. Chairman.

The first category includes graduate level, postdoctoral, and short-term consultants in research. We are requesting no increase in 1968 for this category. This stands at $168,000 in 1967, and we intend to continue it at this level in 1968. The second category, museum services for public education, is of great concern to us. This effort stood at $32,000 in 1967, but we must increase this in a major way if we are to accommodate the greatly increasing volume and demand of requests from the public and from the schools.

Increased Visitations to Museums

Under the Education Act, use of museums is being increased all over the country by schools and school classes. We have no comparable way of meeting this increased use, because we cannot go to the Office of Education and ask for equivalent funds. We have to come directly to the Congress, and ask for some service funds which will allow us to meet the needs of the schools who are now asking for the first time for these services. This is essentially the reason for our request.

EXPERIMENTAL MUSEUM

Senator BARTLETT. Apparently one of the activities planned for next year is an experimental Store Front Museum. Would you please tell the committee just what this will be, and indicate when it is to be established and how much you expect it to cost?

Dr. RIPLEY. We expect to finance this essentially through private funds. We have received a grant of $25,000 from the Carnegie Corp. toward this activity. This is an experimental concept which I feel we have the local conditions, and the local know-how to attempt to undertake.

The purpose of this would be to rent a space, perhaps a store, in some rather run-down neighborhood in part of Washington, where the people have little likelihood of ever coming to our museums, and to attempt to develop in this sample museum a combination of exhibits which would excite and interest their curiosity, and which would allow them to have some personal involvement.

One of my great interests in being associated with museums is the problem of the arousal of interest in people in anything at all. Few of us understand, perhaps, how it was that we did begin as individuals to be interested in things, or concerned with them, and I feel that we should do more experimenting with understanding in museums. They have rather open, nondidactic methods of displaying interesting objects and talking about them. They are not imposing their will on the potential pupil the way a teacher is. There are no tests, no weekly quizzes, no comeback. It is just a thing that is there, and if the person is interested, he becomes interested of his own volition.

This is to me the most secure method of becoming interested in anything at all, by your own volition. I feel that the fact that museums exist, and the fact that we are working in them, gives us an unparalleled opportunity to test some of these suppositions and attempt to find out why people are interested.

I would like to work in an area where there are people who are deprived of coming to museums for a variety of reasons. One reason is that many of these people don't move out of their particular neighborhoods for long periods of their life. We should bring the museum to them, in the same way that a bookmobile, for example, brings books to a neighborhood.

Senator BARTLETT. How much do you think this will cost?

Dr. RIPLEY. As I say, we expect that it won't cost more than about $30,000, and we have already received a grant of $25,000.

Senator BARTLETT. You have received the $25,000?

Dr. RIPLEY. Yes.

INTERNATIONAL ACTIVITIES

1967 APPROPRIATION AND 1968 BUDGET REQUEST

Senator BARTLETT. For international activities, you propose an appropriation in fiscal year 1968 of $251,000, $45,000 more than the amount available to you during the current fiscal year. Of this increase, $15,000 is for the International Exchange Service. Would you explain what this is and furnish some examples of your activities?

PERSONNEL REQUEST

Dr. RIPLEY. Sir, this is for an additional freight clerk to handle the increased volume of shipping; $10,000 additionally to cover rising transportation costs; and $1,000 for packing and shipping supplies.

The Smithsonian traditionally, since the early years of its history, has been responsible for forwarding publications to governmental and private organizations overseas, including reading materials now for the Peace Corps volunteers, textbooks for use in their school programs, law, medical, and dental journals requested by Ministers of Justice and universities in the developing countries.

In return, we receive publications from foreign countries for distribution to scientific and educational organizations in the United States.

Many universities as well as Government agencies use these services, and it is one of our fundamental responsibilities and has been so for over a hundred years.

ACCELERATED SPECIAL FOREIGN CURRENCY PROGRAM

Senator BARTLETT. The remaining $30,000 of your proposed increase is for an accelerated special foreign currency program and for conduct of cooperative programs with other Federal agencies. Would you please explain the requirement for such an increase?

Dr. RIPLEY. May I introduce the Director of our Office of International Activities, Mr. Chairman? Perhaps you would like to answer that, Mr. Warner.

Mr. WARNER. Mr. Senator, we have requested an increase of two administrative assistants, one secretary, and one clerk-typist, mainly to manage successfully the foreign currency program at the scope that we requested for fiscal year 1968. We ourselves, within the Office of International Activities, do all the front running, as it were, for the universities and museums receiving grants under the program. We tell them what kind of expenses are allowable under the program and we frequently help them in finding appropriate host country institutions with whom they will work overseas. In some of these excess currency countries, the host governments demand a full exchange of diplomatic notes and a program agreement before any Smithsonian-supported project can get into the field.

It is a complex administrative responsibility, and we feel that we would need the increased positions in order to successfully manage a foreign currency program of the level we have requested.

Senator BARTLETT. Thank you.

EQUAL EMPLOYMENT OPPORTUNITY PROGRAM STAFF

How many personnel are there on your staff, Mr. Ripley, now dealing with the equal employment opportunity program; and what is the need for another equal employment opportunity officer?

Dr. RIPLEY. Mr. Bradley, would you care to answer that?

Mr. BRADLEY. Mr. Chairman, at present the Assistant General Counsel serves as our equal employment officer in his spare time, of which he has practically none, and we back him up with the man who is in charge of the International Exchange Service, who happens to have had experience in this field also. Because of the evident interest in the equal employment opportunity program, and because the two gentlemen who are serving are being increasingly diverted from their principal responsibilities, we would like very much, if we could, to put on a man and have him in charge of an affirmative equal opportunity program.

Senator BARTLETT. He would be full time?

Mr. BRADLEY. Yes, sir.

Senator BARTLETT. And how many secretaries would he have?

Mr. BRADLEY. We haven't provided a secretary for him. We would have to double up for a while.

PLANNING FOR AMERICAN REVOLUTION BICENTENNIAL CELEBRATION

Senator BARTLETT. How many people do you now have working on the American Revolution Bicentennial celebration?

Dr. RIPLEY. Mr. Chairman, we have no full-time people working on the American Revolution Bicentennial, but it has become quite obvious in the past year that the Smithsonian will be heavily involved in this celebration.

Not only does the Federal Council on the Arts and Humanities, on which I sit, call for preparing plans for the observance of the bicentennial or similar great national holidays, which are observances which I assume are equivalent to this, but also there is a special American Revolution Bicentennial Commission.

I sometimes think that, to paraphrase the National Park Service, the Smithsonian is going to have to embark on a "Mission 76." We have at the present time a number of curators, six of them, and a number of exhibits people, four of them, who have been putting in time, during the past year, on the exhibition in connection with the Stamp Act, and on the Bill of Rights. A third exhibition is opening in the summer of 1967 on the Townsend Act.

We are requesting $25,000 under the Museum of History and Technology to develop plans to commemorate this period. We hope that our curators will be able to study particular locations in which to survey historic collections, and to arrange for loans, and to evaluate collections.

Also, we hope to take on various historians, some of them perhaps members now, in various capacities, of the Bicentennial Commission, to assist us in research effort which will culminate in publications and plans for exhibits.

I feel it is not too early, at this time, to begin preparing for what is obviously going to be a major effort for the Smithsonian, a few years hence, and we are continually being requested already by letters from Members of Congress for information on plans that we are making and laying for these observances.

Senator BARTLETT. If you do eventually feel the necessity to follow the lead of the National Park Service, I am sure the Smithsonian will emerge with words that are more imaginative, descriptive, and glorious than the National Park Service adopted.

MANAGEMENT SUPPORT

In connection with your management support budget, what particular activities make additional travel essential?

Mr. Ripley. We request additional travel funds, sir, to make official trips to permit us to maintain close review and management of our installations outside the District. These are principally Cambridge, Mass., where the Astrophysical Observatory is located; its station, in Arizona; the River Basin Survey, Lincoln, Nebr.; and Barro Colorado Island in the Canal Zone. Some travel will increase in regard to New York City and Connecticut, where the Hirshhorn collection is presently located. This will gradually have to be moved down in segments. We are in touch, under our Collection of Fine Arts, with the Cooper Union Museum and numerous other museums throughout the country.

Our satellite tracking locations are located in eight foreign countries, and our foreign currency programs are also presently worldwide.

We have to have appropriate travel, where directed by me, and which is essential for these administrative functions.

We have requested in 1968 a total of 29 administrative employees, and for the increased management support staff that provides services throughout the Institution we have asked for an increase of $6,000 for travel funds.

Also, certain service activities have travel budgeted under this central source, including our Fiscal Division, Supply Division, Photographic Services, and the Museum Services. We are asking that the "no-increase" policy on 1967 be removed in 1968, and that we have an increase commensurate with the increase in the number of employees who are required to travel. It is actually up now 30 percent compared to before.

Senator Bartlett. If this——

Dr. Ripley. Compared to fiscal year 1966.

Senator Bartlett. Yes. If this additional money you have requested is allowed, what will be the total travel budget for the next fiscal year?

Dr. Ripley. Sir, I know that the average cost of travel per employee at Smithsonian is below the costs of similar agencies of the Government.

Mr. Bradley, perhaps, can give me the total figure.

Mr. Bradley. Mr. Chairman, the total for the Institution will be $322,000, if this increase is granted.

Senator Bartlett. Off the record.

(Discussion off the record.)

OFFICE OF THE GENERAL COUNSEL

Personnel Request

Senator Bartlett. What has increased the complexity, or the volume of legal matters which makes an additional attorney necessary?

Dr. Ripley. Perhaps Mr. Bradley would like to speak to that.

Mr. Bradley. Mr. Chairman, I think that the best answer, the quickest answer is indicated on a chart here where it shows that the Smithsonian Institution through the generosity of this committee and the Congress has had a steady increase. These dollars, of course, are converted into programs, and those in turn get us into legal situations. We have had——

Senator Bartlett. I thought you were going to say "difficulty."

Mr. Bradley. Difficulty. Then, too, our present complement of two attorneys, really, is not a large staff. The two attorneys that we have are concerned not only with matters of governmental function, but also with the gifts and bequests, wills, property acquisitions, and disposals, grants, and our foreign activities. In respect to foreign activities, the proper procedures to place out this $2 million that we have this year, and possibly $6 million that we may have next year, require legal activity. This requested position is related to the known workload in this office, and I can confidently say to you, sir, that they are somewhat overworked.

Senator Bartlett. How many do you seek to add?

Mr. Bradley. One, sir.

Senator Bartlett. At what salary?

Mr. Bradley. He should be about a grade 14, that is about at a salary of the same number of dollars, about $15,000.

INTERAGENCY BOARD OF EXPERT EXAMINERS

Senator Bartlett. How much did the Smithsonian Institution contribute for operation of the Interagency Board of Expert Examiners under the Civil Service Commission in 1967?

Dr. Ripley. Mr. Bradley, would you have the detailed answer to that?

Mr. Bradley. We are contributing $16,800 as our share of operating this program in fiscal year 1967, and the same amount is planned in 1968.

Senator Bartlett. You are not asking for $16,000 boost in fiscal year 1968, then?

Mr. Bradley. We are asking for the increase in fiscal year 1968. We are doing what is called "absorbing" in 1967.

Senator Bartlett. And you want to end that practice?

Mr. Bradley. We would like to, sir.

OFFICE OF PUBLIC INFORMATION

Personnel Requests

Senator Bartlett. Are the Director for the office of Public Information and a Chief of Film and Broadcasting new positions?

Dr. Ripley. Yes, sir.

Senator BARTLETT. I note that you are requesting $25,000 to meet the costs of these positions and the personnel benefits attached to them.

Dr. RIPLEY. Yes, sir; these are the only positions in this area that we are requesting this year. We feel that the Office of Public Information is far more than perhaps what it might appear to be, or is in some Government agencies, on the surface. This is related to the problem that I mentioned earlier—the question of understanding interests. We want the Office of Public Information head to be someone who will survey our total problem of relating and communicating our programs to people, to the public.

As you know, we have many millions of visitors every year, Senator, and I am concerned that we are not testing and sampling and working with these people adequately to attempt to find out what brings them to the Smithsonian, and what kind of concerns they particularly have and answers that they are receiving.

Senator BARTLETT. You now have an Office of Public Information?

Dr. RIPLEY. Yes, we have a small office which essentially consists of an outgrowth of our past Editorial and Publications Division.

Senator BARTLETT. But no one heads it up, with the title?

Dr. RIPLEY. Mr. Berg, title?

Mr. BRADLEY. Sir, we have had a director. He just left, the first of the month, but we now have an acting director, of course.

Dr. RIPLEY. For public information.

Mr. BRADLEY. Yes, Director of Public Information.

DIAL-A-MUSEUM SERVICE

Senator BARTLETT. What is the Dial-A-Museum service, and what is its expected annual cost?

Dr. RIPLEY. The average cost of the Dial-A-Museum service is estimated to be $300 a year. By dialing this particular number, 737-8811, it is possible to get the latest information, revised daily, on what is being shown in the museums, where it is being shown, and how long it will be on display. This recorded report is prepared each day. It has been working since November 1966, and it averages about a hundred calls daily.

DIAL-A-SATELLITE PROGRAM

We also have a Dial-A-Satellite program, which costs us $672 a year, and by dialing 737-8855 you can get the precise time and the exact locations of satellite passages which are visible to the naked eye, and other astronomical data.

This averages about 500 calls a day. It is an up-to-date report, which is prepared daily by the Astrophysical Observatory. It has been amazingly popular.

Senator BARTLETT. Today, there will be 101 calls on the first, and 501 on the second.

Dr. RIPLEY. Thank you, Senator.

PHOTOGRAPHIC SERVICES DIVISION

Senator BARTLETT. Does your Photographic Services Division provide photographic services for any but the Smithsonian Institution? If so, are the outside agencies charged for this work?

Dr. Ripley. Sir, essentially our work is internal, and concerned with activities of the Smithsonian. However, services are occasionally rendered to other activities, and to persons and agencies outside the Smithsonian.

This is primarily for work undertaken through grants and contracts from other Federal agencies, so in that sense, it is Smithsonian-oriented and Smithsonian-directed. In these instances, the costs of the supplies, materials, labor, and outside photographic work are borne under the grants and the research contracts.

Very rarely, because of the uniqueness of some item found in the Smithsonian, we get requests for a photograph from an organization outside the Institution. As a regular policy of our agency, some photographs are provided free of charge to such agencies or persons in return for specimens, rare articles, or other materials given to the Institution. In some cases, a photograph of an item donated or transferred may be the sole request of the donor. If they give us a rare object, they may say they would like a photograph of it, and we will perform this free for them.

Where any such costs are significant, and are incurred in connection with furnishing photographic services and materials to an outside agency, and we have little obligation, we will make a charge for such services rendered.

In general, we do get requests from the public and these are subject to a modest charge which we put on a cost recovery basis.

MUSEUM PROGRAMS AND RELATED RESEARCH

Senator Bartlett. For fiscal year 1968, there is a request for an appropriation of $6,100,000 for museum programs and related research to be met through the special foreign currency program. This is an increase of $3,784,000 over the amount appropriated last year.

The justification for this estimate will be placed in the record.

(The justification follows:)

Museum Programs and Related Research (Special Foreign Currency Program)

1966 appropriation	$1,300,000
1967 appropriation	2,316,000
1968 estimate	6,100,000

An appropriation of $6,100,000 in foreign currencies, as determined by the Treasury Department to be excess to the needs of the United States, is requested for a grant program for 1968.

There follows an analysis of 1966, 1967 and 1968 programs.

	1966 actual	1967 actual	1968 estimate
Archeological excavation and research	$1,300,000	$1,300,000	$1,768,000
Systematic and environmental biology		1,016,000	3,553,000
Museum programs			500,000
Astrophysics			130,000
International exchange of scientific publications			17,000
Program development and administration			132,000
Total	1,300,000	2,316,000	6,100,000

ARCHEOLOGICAL EXCAVATION AND RESEARCH

$1,768,000 is requested for the third year of the Smithsonian's program of grants to American universities, museums or other institutions of higher learning interested in conducting archeological excavation or research in the excess foreign currency countries.

Within this amount, approximately $939,000 will be required for on-going research or expeditions which in the Institution's view fully merit continuing support. Among some of these projects are:

> The Lawrence Radiation Laboratory of the University of California project for X-raying Egyptian pyramids to discover unknown interior chambers. This project, which is jointly funded by the Smithsonian and the Atomic Energy Commission, is not only of great archeological interest in itself, but has also developed new technologies for archeological exploration everywhere.
>
> The University of Missouri-Corning Museum of Glass excavations of ancient Phoenician glass factories along the Israeli coast. Some of the sites have been of such interest that the Government of Israel has converted them into small on-the-spot museums.
>
> The American Academy of Benares, a research center administered by the University of Pennsylvania, which began operations in September of 1965 in a historic palace generously provided by the Hindu University of Benares. The guiding purpose of this new institution is quite clear. The archeology and art history of India are so rich that often the most difficult question is where to begin. The Academy seeks to answer this question by conducting long-range surveys which will document, record and photograph ancient temples and archeological sites throughout India, as a prerequisite to the determination of intelligent research priorities.

Within the total of $1,768,000 for archeological excavation or research, $504,390 is requested for the accommodation of new archeological project proposals and $324,456 for projects in other of the anthropological sciences, especially for ethnographic studies of contemporary peoples which can contribute to our knowledge of man's past. In many cases, these studies must be made on an urgent basis, because there are now many tribes or groups of people around the world whose identity is fast disappearing through acculturation. The Smithsonian considers this last to be one of the Institution's most important responsibilities. In the nineteenth century the Institution early gained a strong reputation for its timely surveys of American Indian tribes in our expanding West; the Smithsonian was then and is still today the prime source of knowledge concerning our Amerindian communities. But now this anthropological "frontier" has moved beyond our West to the developing continents of Africa, Latin America, and Asia, where there are many tribes whose history and culture must be known now, before the opportunity is irretrievably lost.

A listing of on-going projects and new or sample project proposals is found below.

SYSTEMATIC AND ENVIRONMENTAL BIOLOGY

$3,553,000 is requested for support of systematic or environmental biology projects, nearly all of which will contribute to the objectives of the International Biological Program. This amount, which forms the largest part of the Institution's foreign currency request, may be subdivided as follows:

(*1*) *Direct Support of the International Biological Program, $60,000*

During the past year, the Smithsonian has emerged as a prime contributor to the United States' plans for the International Biological Program (IBP), which is a massive international scientific effort aimed at taking a biological inventory of the earth's natural environments, both marine and terrestrial, in order to determine their productivity for the human populations that must someday inhabit or sensibly exploit them.

Responding to requests of the National Science Foundation, the National Academy of Sciences and the United States National Committee for the IBP, on which the Institution is prominently represented, the Smithsonian employed a small but significant portion of its fiscal year 1967 special foreign currency appropriation to support IBP conferences and preliminary surveys in various of the excess currency countries. Since the plans of the U.S. National Committee and of the International Secretariat for the IBP are now much more advanced, the Institution would like to continue to make a direct contribution to the IBP through the advantageous medium of excess currencies.

Since much of the research in systematic or environmental biology which the Smithsonian itself and other American institutions wish to conduct in the excess countries will contribute to the goals of the IBP or bear specific IBP endorsement, the sum of $60,000 is requested for symposia or planning conferences which the United States National Committee for the IBP wishes to hold in the excess countries.

(2) *IBP-Related Research in Systematic and Environmental Biology, $2,992,100*

The sum of $2,992,100 would be used for research projects in systematic and environmental biology contributing to the program objectives of the IBP, approximately two-thirds of which will be carried out by the Institution's own scientific staff, with the remainder reserved for grants to other American institutions.

Approximately 23 percent of this amount is needed to continue multi-year projects initiated in Fiscal Year 1967. Some noteworthy examples include:

> An oceanographic sorting facility established with the cooperation of the Tunisian Institute of Oceanography and Fisheries at Salambo, Tunisia, which the American Embassy in Tunis characterized as one of the most worthwhile new uses of Tunisian currencies proposed during Fiscal Year 1967. This sorting facility has advanced the Smithsonian Oceanographic Sorting Center's general task of identification of marine organisms and serves also as the collection and identification center for special projects in the marine biology of the Mediterranean.
>
> A multi-national research project concerning biological interchange of marine organisms between the Mediterranean and Red Seas, Smithsonian-administered, utilizes the above facility and involves collaborating institutions in Israel, Egypt and Yugoslavia. This project is of inherent basic scientific interest because of the problems caused by migration of species between the two seas, which are as yet imperfectly understood; it also has applied significance in explaining changes in commercially valuable species in the Eastern Mediterranean and as a model or prototype investigation for the biological interchange that will occur with the construction of a sea-level canal across the Isthmus of Central America.
>
> A Johns Hopkins University study of the small mammals of Bengal, India, an investigation that combines basic and applied research through the identification of rodents, as well as their ecto- and endo-parasites, which can seriously affect public health in India.

The increase in this part of the program will be required for such new projects as the establishment of another oceanographic sorting facility in India or Ceylon, coral reef research in India, and a stepped-up program of individual grants to Smithsonian scientists for enlarging the National Collections in entomology, botany and zoology, which will assist the biological inventories planned by the IBP.

(3) *Smithsonian Contribution to the National Science Foundation's Translation Program, $500,900*

In addition, part of the requested increase would be used to accelerate the translation of vital foreign reference works in systematic biology, through the National Science Foundation's (NSF) translation program. Under the existing system, the Smithsonian annually receives an average of 3,000 pages of translation of foreign scientific works without charge, as its quota in NSF's interagency service program. However, at this rate of support, the Institution simply cannot receive in time the necessary foreign monographs which will permit it to make much needed comparative studies of materials in its own growing collections. For example, the Museum of Natural History's Department of Botany and the American botanical community in general urgently need a translated edition of the recently completed 30 volume *Flora of the USSR*, but will not receive it under the present allocation rate until sometime after 1990. This one reference set is indispensable to the plans now under way to write a long overdue revised *Flora of North America*. There are many other similarly urgent needs for translation of foreign taxonomic literature; all of them must be met at a faster pace because the IBP's "global biological inventory" cannot be completed without such basic reference works.

It is therefore proposed that the Smithsonian transfer $500,900 of its foreign currency appropriation to the National Science Foundation, to permit the Foundation to respond more adequately to the Institution's translation needs. Similar foreign currency transfers for accelerated translation have already been made by the Departments of Commerce; Interior; Labor; and Health, Education and Welfare.

MUSEUM PROGRAMS

$500,000 is requested to support and expand cooperative programs of the United States National Museum with other museums and their professional organizations in the United States and abroad. The Institution seeks to carry out a major part of its international museum programs with excess foreign currencies, rather than dollars. The funds requested would be used to provide training courses and conferences for museum professionals in five of the excess currency countries, for advisory services of American museum professionals as requested by foreign museums, and for the production of model science-teaching exhibits in India, Egypt, and Israel under a plan submitted by the UNESCO-affiliated International Council of Museums (ICOM).

ASTROPHYSICS

$130,000 is requested to permit the Smithsonian Astrophysical Observatory (SAO) to establish a satellite geodesy observing station in Poland; to provide for international travel of staff members of the SAO's existing tracking station in Naini Tal, India, to conduct gamma-ray balloon experiments in India; and for theoretical studies in celestial mechanics in Egypt.

Preliminary negotiations with appropriate institutions in Poland have already indicated a high degree of host country receptivity and cooperation for the establishment of geodetic stations. The station would employ local crews, with perhaps one resident Smithsonian scientist or periodic visits by a supervising Smithsonian scientist. They would be under the administration and scientific supervision of the SAO's Central Bureau for Geodesy, a responsibility recently given the Astrophysical Observatory by the International Association of Geodesy in recognition of the SAO's clearing-house function in the assemblage of international geodetic data. Such supervision would automatically connect the stations to an international network, for the benefit of the host countries, the SAO's own research programs and the international scientific community.

A relatively small part of the amount requested, not in excess of $10,000, would be required to meet the international travel of permanently assigned Indian personnel of the SAO's existing tracking station in India. For some years the cooperating agency in India, which is the Uttar Pradesh State Observatory, has requested more advanced training in observational astronomy for the Indian technicians it has assigned to the station through visits to SAO facilities in this country. It will be very much to the future benefit of the Naini Tal station to meet this modest request.

The Smithsonian has pioneered the study of gamma-rays with spark chambers flown from high altitude balloons. Such studies are among the first ever made of this neglected portion of the electro-magnetic spectrum. They reveal phenomena, in effect, of a new color and at distances never before visible. Initial studies which have been gratifyingly successful, should contribute to our understanding of the origin of the universe through detection of anti-matter, the origin of cosmic rays and the density of cosmic radiation. Initiation of collaboration with the Tata Institute of Fundamental Research in Bombay, India, advantageously funded with excess foreign currencies, would combine the talents of two of the principal contributors to this field of study. The Tata Institute is pre-eminent among Asian research institutions and is located close to the magnetic equator where high altitude balloon studies are assured the best results.

With a contribution of about $20,000 it is proposed to support studies in Egypt in celestial mechanics and artificial satellite theory employing computer techniques. The Smithsonian has made basic contributions to the theory of artificial satellites around the earth. These studies would extend collaboration with Egyptian scientists already begun at the Astrophysical Observatory in Cambridge.

INTERNATIONAL EXCHANGE OF SCIENTIFIC PUBLICATIONS

$17,000 is requested to permit the International Exchange Service (IES) to effect economies in its dollar expenditures for the shipment of publications to various of the excess currency countries and to assist the India Exchange Bureau in achieving more rapid and efficient distribution of IES publications throughout India.

Investigations have revealed that in many cases the American or other flag lines which IES employs for shipment of publications will accept payment in foreign currencies. In the Smithsonian's view, therefore, the President's memorandum of May 21, 1966, to heads of executive departments and agencies urging maximum possible use of excess currencies for transportation, may logically be extended to freight costs. Although the sum requested is small, it will allow the IES to make significant dollar savings.

APPORTIONMENT OF FOREIGN CURRENCIES

Outlined below are the various projects and project proposals which make up the total $6,100,000 excess foreign currency Fiscal Year 1968 request, divided according to the different program areas described in the narrative justification immediately preceding. Continuing or on-going projects are so identified. New projects are in effect sample or illustrative projects based on firm indications of interest both within and without the Smithsonian. They represent the Institution's selection of possible projects which appear most promising for successful development and implementation during Fiscal Year 1968. It should be noted, however, that actual implementation of these projects will be contingent upon three factors: review by the Smithsonian's outside advisory councils, review by the Department of State for foreign policy implications, and appropriate cooperative arrangements with host country institutions or governmental authorities.

Museum programs and related research (special foreign currency program)

I. ARCHEOLOGICAL EXCAVATION AND RESEARCH

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
A. Ongoing projects:			
1. American Institute of Indian Studies (a nonprofit organization of 24 American colleges and universities).	For continued support of the American Academy of Benares, a research center for South Asian archeology and art history.	1968 [1] 1967 1966	141,645 130,778 76,850
2. American Research Center in Egypt (a nonprofit study center supported by 10 American universities).	To continue support of the center's research and excavation program in the archeology of Egypt, which includes Pharaonic, Hellenistic, Roman, and early Christian sites.	1968 [1] 1967 1966	170,000 177,137 259,200
3. Jerusalem School of Archeology of the Hebrew Union College.	To continue the survey and exploration of some 400 archeological sites in the Negev and to conduct seminars in biblical archeology for American graduate students in archeology.	1968 [1] 1967 1966	200,000 165,750 150,000
4. Peabody Museum of Yale University.	To continue the paleontology and stratigraphy studies of the Paleocene, Eocene, and Obligocene deposits of Egypt, which have resulted in important discoveries relating to human evolution.	1968 [1] 1967 1966	16,362 31,396 19,310
5. University of Missouri, Corning Museum of Glass.	To continue excavations of Phoenician glass factories in Israel.	1968 [1] 1967 1966	30,000 ------------ 30,200
6. University of Colorado	To study prehistoric archeological and paleontologic remains in Tunisia.	1968 [1] 1967 1966	50,000 62,000 ------------
7. Southern Methodist University	To study prehistory of the area around Sibaiya, Egypt.	1968 [1] 1967 1966	30,000 39,800 5,205
8. University Museum, University of Pennsylvania.	To study remaining stones of the Temple of Akhnaten at Luxor, Egypt.	1968 [1] 1967 1966	78,300 65,070 ------------
9. Museum of Anthropology, University of Michigan.	To develop a program for research and training in prehistoric archeology through field excavations on Mount Carmel in Israel.	1968 [1] 1967 1966	58,091 50,000 ------------

See footnote at end of table.

Museum programs and related research (special foreign currency program)—Con.

I. ARCHEOLOGICAL EXCAVATION AND RESEARCH—Continued

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
A. Ongoing projects—Continued			
10. American Museum of Natural History, University of Washington, Seattle.	To study and excavate prehistoric and early historic sites in East and West Pakistan.	1968 [1] 1967 1966	66,717 52,367 ----------
11. Carnegie Museum	To continue the excavation of a Philistine city at Ashdod, Israel.	1968 [1] 1967 1966	52,105 47,180 50,000
12. Lawrence Radiation Laboratory, University of California, Berkeley.	To continue testing the utilization of cosmic rays to "X-ray" the Egyptian pyramids in search of presently unknown chambers.	1968 [1] 1967 1966	25,000 21,680 23,320
13. Museum of Anthropology, University of Michigan.	To continue excavations of early Neolithic sites near Cracow, Poland, with the goal of providing the 1st detailed description of early Neolithic cultures in Poland.	1968 [1] 1967 1966	20,934 20,934 ----------
Subtotal, fiscal year 1968, estimate.			939,154
B. New project proposals:			
1. University Museum, University of Pennsylvania.	To survey pre-Buddhist archeological sites in Ceylon for future excavations and comparative studies with prehistoric burial complexes in southern India.		4,390
2. University of Chicago	Anthropological investigations of the Vaisnava tradition in India.		64,456
3. University of California, Los Angeles.	To continue radiocarbon dating of archeological samples in India.		25,000
4. Smithsonian Office of Anthropology.	To study rapidly disappearing crafts at the village level in India, Pakistan, Burma, and Ceylon.		100,000
5. University of Michigan	To conduct research in ancient numismatics in the eastern Mediterranean (Israel).		20,000
6. American Institute of Indian Studies, American Academy of Benares.	To survey and excavate monuments and remains of the Pratihara period, especially at Bhinmal in Rajasthan.		150,000
	To survey and document bronze sculpture of northern India.		30,000
7. Museum of Natural History, Smithsonian Institution.	To survey and document the art history of Tibet on the basis of objects currently being brought to India and Nepal by Tibetan refugees.		50,000
8. Boston University	To survey, identify and test archeological sites in the northern Savannah region of Guinea.		20,000
9. Drew University and McCormick Theological Seminary.	To complete research in Israel on late Hellenistic and early Roman pottery.		40,000
10. Smithsonian Office of Anthropology.	To extend a project, begun in Iran, which will survey and document ancient urban technologies in India, Pakistan, and Ceylon.		160,000
11. Peabody Museum of Yale University.	To excavate the Oligocene and Miocene deposits of the Siwalik Hills of northern India to enlarge knowledge of man's primate ancestry.		50,000
12. Peabody Museum of Yale University.	To conduct excavations related to item above in the Oligocene-Miocene deposits of the Pondaung region of Burma.		50,000
13. University Museum, University of Pennsylvania.	To survey and excavate early neolithic sites in Yugoslavia, believed to contain important evidence on the origin and early production of food crops.		65,000
Subtotal			828,846
Total, archeological excavation and research.			1,768,000

See footnote at end of table.

Museum programs and related research (special foreign currency program)—Con.

II. SYSTEMATIC AND ENVIRONMENTAL BIOLOGY

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
(1) DIRECT SUPPORT TO THE INTERNATIONAL BIOLOGICAL PROGRAM			
1. National Academy of Sciences-U.S. National Committee for the IBP.	A conference in Israel sponsored by the Human Adaptability and Environmental Physiology Sections of the U.S. National Committee for the IBP, to discuss the adaptability of man, plants, and animals to the changing environment, especially as regards the effects of pollutants and temperature pressures.	--------	35,000
2. National Academy of Sciences-National Research Council.	A conference in Tunisia to develop the 1st regional conservation program of the Terrestrial Conservation Section of the IBP utilizing the Mediterranean area as a prototype for future conservation programs.	--------	25,000
Subtotal		--------	60,000
(2) IBP-RELATED RESEARCH IN SYSTEMATIC AND ENVIRONMENTAL BIOLOGY			
A. Ongoing projects:			
1. Smithsonian Institution, Museum of Natural History, Department of Vertebrate Zoology.	To complete research and partially support publication of a handbook of Indian birds.	1968[1] 1967 1966	5,000 3,334 ------------
2. Smithsonian Institution, Radiation Biology Laboratory.	To continue support of a radiation biology laboratory in Israel, especially for the development of additional recording systems for transfer to other latitudes for comparative solar radiation analyses.	1968[1] 1967 1966	218,900 109,462 ------------
3. Smithsonian Institution, Museum of Natural History, Department of Entomology.	To support behavioral investigations of insects in Egypt, particularly wasps, and to obtain examples of insects and plants of Egypt for the botanical and entomological exhibits in the Museum of Natural History.	1968[1] 1967 1966	5,100 5,100 ------------
4. Smithsonian Institution, Museum of Natural History, Department of Invertebrate Zoology.	To study the ecology and physiology of benthic marine organisms in the Adriatic Sea, utilizing newly developed equipment to measure and permanently record physical factors in the marine littoral zone, in collaboration with marine biological research institutions in Rovinj, Split, and Dubrovnik, Yugoslavia.	1968[1] 1967 1966	18,200 24,858 ------------
5. Smithsonian Institution, Office of Ecology.	To study the Ceylonese elephant through an analysis of seasonal and daily movements and the behavioral patterns-ecological requirements for maintaining breeding populations in preserved areas.	1968[1] 1967 1966	25,800 24,000 ------------
6. Smithsonian Institution, Museum of Natural History, Department of Vertebrate Zoology.	To continue and enlarge investigations in Egypt concerning the ecology of Palearctic birds migrating through northeastern Africa, including cooperative research on serology with the Rockefeller Virus Laboratory and ectoparasites with Naval Medical Research Unit III in Egypt.	1968[1] 1967 1966	50,000 40,235 ------------
7. Smithsonian Institution, Office of Oceanography.	To accelerate the processing of marine organisms from the Mediterranean through a recently established sorting facility in Tunis, in cooperation with the Tunisian Institute of Oceanography.	1968[1] 1967	135,000 150,000
8. Do.	To study marine organisms of the Red Sea and eastern Mediterranean in order to determine what biological interchange of species has occurred through the Suez Canal.	1968[1] 1967 1966	127,600 127,000 ------------

See footnote at end of table.

Museum programs and related research (special foreign currency program)—Con.

II. SYSTEMATIC AND ENVIRONMENTAL BIOLOGY—Continued

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
A. Ongoing projects—Continued			
9. Smithsonian Institution, Office of Ecology.	To study the flora of Ceylon, with emphasis on the vegetation of elephant habitats.	1968 [1] 1967 1966	59,400 36,500 ----------
10. University of Michigan	To support taxonomic studies of Indian mollusks, through caryotype analysis and the cytogenetics of closely related species, which will contribute to medical, public health, and veterinary programs in India.	1968 [1] 1967 1966	16,300 16,307 ----------
11. Johns Hopkins University	To study the ecology and behavior of small mammals of Bengal, India.	1968 [1] 1967 1966	41,000 41,000 ----------
Subtotal, fiscal year 1968 estimate.			702,300
B. New project proposals:			
1. Johns Hopkins University	To study the population ecology of rhesus monkeys in northern India.		9,200
2. University of Georgia	To study the interaction of human and small rodent populations in a variety of temperate zone environments, in conjunction with the Ecological Institute of Poland.		128,400
3. University of Georgia	To study the flow of energy through small rodent populations in different habitats, in conjunction with the Ecological Institute of Poland.		187,900
4. University of Michigan	To study the importance of bilharzlasis snail hosts in new environments created by the Aswan High Dam in Egypt.		75,000
5. University of Michigan	To make before and after studies of the plankton communities of the Nile River delta area of the Mediterranean, which may be radically altered through changes in salinity and circulation caused by the construction of the Aswan Dam.		482,100
6. Smithsonian Institution, Museum of Natural History, Department of Paleobiology.	To make preliminary explorations of underwater formations containing fossil echinoids off the Tunisian coast.		3,500
7. Smithsonian Institution, Department of Botany.	To study the flora of Hassan district, Mysore, India.		53,700
8. Smithsonian Institution, Office of Ecology, Office of Oceanography.	To help establish a natural reserve on one of the Laccadive Islands of India, for continuous biological studies of coral reef environments of the Indian Ocean.		500,000
9. Smithsonian Institution, Office of Oceanography.	To develop oceanographic sorting facilities in India or Ceylon.		250,000
10. Smithsonian Institution, Museum of Natural History, National Zoological Park.	To provide grants to Smithsonian scientists for increasing the national entomological, botanical, and zoological collections, by expeditions to India, Ceylon, Egypt, Pakistan, the Congo, Burma, Tunisia, and Guinea.		600,000
Subtotal			2,289,800

See footnote at end of table.

Museum programs and related research (special foreign currency program)—Con.

II. SYSTEMATIC AND ENVIRONMENTAL BIOLOGY—Continued

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
(3) SMITHSONIAN CONTRIBUTION TO THE NATIONAL SCIENCE FOUNDATION'S TRANSLATION PROGRAM			
Library, Smithsonian Institution, Museum of Natural History.	To accelerate the translation and publication of reference works and monographs in Russian, which represent outstanding requests made by the Smithsonian staff since 1960, 20,000 pages, at $23.50 per page (cost includes both translation and publication).		470, 400
Do	For the translation and publication of selected Western European and Oriental language scientific journals or other serial publications, 1,300 pages, at $23.50 each.		30, 500
Subtotal			500, 900
Total, systematic and environmental biology.			3, 553, 000

III. MUSEUM PROGRAMS

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
1. Smithsonian Institution, U.S. National Museum.	To carry out the International Council of Museums' recommendation to establish exhibit laboratories, initially in Israel, India, and Egypt for the construction of scientific and other educational exhibits for circulation among the developing nations, as examples of the potential of museum education.		110, 000
2. Smithsonian Institution, U.S. National Museum.	To hold international and national seminars or planning conferences in Israel, India, Egypt, and Tunisia, for the purposes of developing national programs in museum education (4 conferences with from 15-20 museum specialists; average cost of each conference $22,500).		90, 000
3. Smithsonian Institution, U.S. National Museum.	To provide advisory or consultant services by American museum specialists, requested by Israel, Pakistan, Egypt, and Tunisia, for the planning of specific science or youth museums and for feasibility studies prior to the construction of these museums.		125, 000
4. Smithsonian Institution, U.S. National Museum-American Association of Museums (AAM).	To provide grants to establish training courses for curators and museum professionals in 10 selected museums in 5 of the excess currency countries. The grants will be administered by the AAM; they will support the travel and per diem of Americans and travel country instructors.		155, 000
5. Smithsonian Institution, U.S. National Museum-American Association of Museums.	To provide for international travel of foreign museum specialists who will receive on-the-job training in American museums.		20, 000
Total, museum programs			500, 000

Museum programs and related research (special foreign currency program)—Con.

IV. ASTROPHYSICS

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
1. Smithsonian Astrophysical Observatory	To establish in Poland an astrophysical observing station to carry out projects in satellite geodesy, orbit determination and the publication of articles on artifical satellites.	--------	50,000
2. Smithsonian Astrophysical Observatory	To defray costs of advanced training in observational astronomy at Smithsonian Astrophysical Observatory facilities in this country for permanently assigned Indian personnel at the Uttar Pradesh State Observatory, Naini Tal, India.	--------	10,000
3. Smithsonian Astrophysical Observatory	To conduct gamma ray balloon experiments on the magnetic equator in cooperation with the Tata Institute of Fundamental Research at Colaba, Bombay, India.	--------	50,000
4. Smithsonian Astrophysical Observatory	To conduct theoretical studies in celestial mechanics in Egypt.	--------	20,000
Total, astrophysics		--------	130,000

V. INTERNATIONAL EXCHANGE OF SCIENTIFIC PUBLICATIONS

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
Smithsonian Institution, International Exchange Service (IES).	To support costs of ocean freight of IES publications to Burma, Congo (Kinshasa), India, Israel, Pakistan, Poland, Egypt, and Yugoslavia.	--------	5,000
Do	To expedite the transmittal of IES publications throughout India by providing clerical services to the India Exchange Bureau.	--------	12,000
Total, international exchange of scientific publications.		--------	17,000

VI. PROGRAM DEVELOPMENT AND ADMINISTRATION

Recipient	Project	Fiscal year	Grant expressed in U.S. dollars
1. Smithsonian Institution, Office of International Activities.	To defray costs of program development primarily travel and per diem for program staff, its scientific advisors or outside experts, to negotiate cooperative research agreements, introduce the program in new countries, and inspect on-going projects.	--------	122,000
2. Smithsonian Institution, Office of International Activities.	To defray costs of audit of multiyear projects on-site in the excess currency countries.	--------	10,000
Total, program administration		--------	132,000
Grand total		--------	6,100,000

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[1] Estimate.

ESTIMATED DISTRIBUTION OF EXCESS FOREIGN CURRENCY FUND BY COUNTRY

Senator BARTLETT. Would you please place, in the record, information to indicate the American dollar equivalent to be spent in various countries under the provisions of this program?

Mr. RIPLEY. Yes, sir.

(The table follows:)

Fiscal year	Total	Country										
		India	Egypt	Israel	Pakistan	Tunisia	Poland	Guinea	Burma	Yugoslavia	Ceylon	Congo
1968	$6,100,000	$1,714,200	$1,221,800	$1,091,900	$302,900	$376,600	$633,100	$95,000	$130,600	$83,800	$374,500	$75,600
1967	2,316,000	554,850	303,700	497,350	30,100	375,000	150,000	70,000	50,000	100,000	165,000	20,000
1966	1,300,000	93,900	704,100	446,500	17,000	----------	----------	----------	----------	2,000	36,500	----------

UNEXPENDED APPROPRIATION BALANCES

Senator Bartlett. This appropriation is available until expended. How much money is now available, including all unexpended balances of any prior year appropriations?

Mr. Ripley. Mr. Warner, would you like to speak to that, please?

Mr. Warner. Of the combined fiscal years 1966 and 1967 appropriations, there is at the moment remaining the dollar equivalent of $1,293,000. All the rest has been awarded in grants, Mr. Senator, and I might explain that of this balance, we now have at hand proposals in various states of readiness that will be considered this May by the advisory councils which we use before awarding these grants. These total over a million dollars. Consequently, we believe we have every prospect of granting the balance for good projects before the end of fiscal year 1967.

Senator Bartlett. Thank you.

SPECIAL FOREIGN CURRENCY PROGRAM FUNDS

Are any other funds, American dollars or foreign currencies, available to the Smithsonian Institution for work similar to that which will be accomplished under the special foreign currency program? If so, will you please indicate in the record the amounts, the purposes for which it will be used and the source of the funds?

Dr. Ripley. Yes, sir. The "Salaries and Expenses" appropriation is technically available for this work but is not planned to be used for this purpose; $11,000 is expected to be granted for the study of wildlife and vegetation in Ceylon by the World Wildlife Fund in the fiscal year 1967.

INTERNATIONAL BIOLOGICAL PROGRAM

Senator Bartlett. How much have you spent or will you expend during the current fiscal year in direct support of the international biological program?

Dr. Ripley. Well, during the fiscal year 1967, we have obligated a total of $713,847. Of this, $688,077 are for international biological program research projects. The expenses in connection with these of an administrative nature and for conferences, in the form of grants to the U.S. National Committee for the International Biological Program, were $25,770.

In fiscal year 1968, we estimate that the IBP, as we call it, program projects, should amount to $2,992,100, and the administrative expenses attendant on those would be in the neighborhood of $60,000.

"FLORA OF THE U.S.S.R."—TRANSLATION AND PUBLICATION

Senator Bartlett. How much do you estimate it will cost to acquire a translated edition of the complete 30-volume "Flora of the U.S.S.R."?

Dr. Ripley. Only a small part of the "Flora of the U.S.S.R." has been translated. The total cost is estimated at $528,000, and to complete what has not yet been translated will cost about $430,000. It comes out at a unit cost per page of $24, which includes the translation and the publication. At this price, we would receive a thousand copies.

Senator Bartlett. Have the Russians done a good job on this?

Dr. Ripley. Yes, the flora and fauna volumes of the Russian academies are first rate. They are very good. We have no comparable publications in this country.

Senator Bartlett. We do not?

Dr. Ripley. No, Senator.

Senator Bartlett. They are ahead of us in fishing, they are catching up with us on merchant marine, and now they have surpassed us in this.

"FLORA OF THE UNITED STATES"—PUBLICATION

Dr. Ripley. I may say that one of the projects which the Smithsonian would like to do very much is an up-to-date "Flora of the United States," which would, I am sure, if it were done, be superior to the one that is available in Russia. It would not be equivalent, because the flora is rather different, but it would be a very good job.

Senator Bartlett. At a wild, speculative estimate, how much would such an undertaking cost?

Dr. Ripley. I should think it would cost us in the neighborhood of a million dollars.

Senator Bartlett. Oh, is that all?

Dr. Galler. If I may say so, it has been estimated between a million dollars and a million and a half dollars.

Senator Bartlett. I had though it would be much more.

INTERNATIONAL EXCHANGE OF SCIENTIFIC PUBLICATIONS

Is the item which you entitled "International exchange of scientific publications," and for which you ask $17,000 this year, a new one?

Dr. Ripley. No, sir, this is not a new item. It is the first time we have asked for help through the excess foreign currencies to assist our International Exchange Service in the tasks of exchange of publications. We have discovered that American and other flag vessels will in some cases accept payment in foreign currencies for such shipments. This makes for dollar savings, and, of course, is in harmony with the Executive instructions to utilize foreign currencies where available to the maximum extent.

ARCHEOLOGY

Senator Bartlett. Are those projects listed beginning at page C–12 under the heading "Ongoing projects" all of those on which you plan to expend funds in fiscal year 1968 and which were being carried on in fiscal year 1967?

Mr. Ripley. Mr. Warner, would you care to speak to that?

Mr. Warner. Mr. Senator, that is correct for archeology, with one exception. On page C–13, there is a grant which we listed last year in our fiscal year 1967 justification, which will not be implemented during this current fiscal year. That is a grant to the University of Washington in Seattle for an excavation in Pakistan. We were not able to implement that, mainly because all kinds of projects like this for research in the field were delayed during the Indian-Pakistan war.

However, the principal investigator, Prof. Walter Fairservice, is in Pakistan now, seeking the necessary archeological excavation permits, and we think it might get off in fiscal year 1968, although it did not in fiscal year 1967, as we had hoped it would.

BIOLOGICAL RESEARCH

For biological research, the projects underway or planned for 1967 and to be continued in 1968 are set-forth on pages C–16 to C–18 in the justifications.

Senator BARTLETT. I see.

DENDUR TEMPLE

The committee has not yet acted on your request to reprogram foreign currency funds to bring the Dendur Temple to the United States. Should this occur, what will be done with the temple after it arrives?

Dr. RIPLEY. Mr. Chairman, aside from myself, I think that Mr. Warner now really is far more the expert on this matter, and I would like him to speak to it.

Mr. WARNER. Mr. Senator, it is our understanding that if—and I should place a capital "I" on the "if"—if Washington is favored with the temple, and there is a Presidential committee of five experts which is reviewing all known applications from the many municipalities or museums across the Nation interested in the temple—if Washington is favored, it is my understanding that the Department of the Interior would seek in the next fiscal year to fund the costs of reconstruction and the annual maintenance of the temple. This financing would be in part from Federal appropriations and in part from private funds, since considerable interest has already been expressed in the Washington community by individuals and by institutions in helping with the costs of reconstruction.

Senator BARTLETT. Off the record.

(Off the record.)

NATIONAL ZOOLOGICAL PARK

Senator BARTLET. I will place in the record the estimate which you make of a need of $485,000 for the capital improvement program at the National Zoological Park in fiscal year 1968.

(The justification follows:)

CONSTRUCTION AND IMPROVEMENTS

1966 appropriation	$1,539,000
1967 appropriation	1,589,000
1968 estimate	485,000

An appropriation of $485,000 is requested to continue the program of capital improvement at the National Zoological Park.

In 1968 these funds will provide for:

Site planning in the center area of the Zoo; detailed plans for bears, aquatic mammals, goats and sheep; plans for one additional hard-surface parking area and landscaping; and the construction of a waterfowl area.

The 12-year program is designed to improve the Zoological Park for its millions of visitors by modernizing exhibits; improving visitor conveniences; eliminating automobile traffic through the Park; enhancing educational and recreational values of exhibits and the natural park; subordinating buildings and other structures and increasing planting and landscaping; advancing science through the study of the animals, their health, nutrition, pathology, and behavior; and providing maintenance facilities for economy and efficiency of operation.

Funds totaling $1,275,000 in fiscal year 1963; $1,275,000 in 1964; $1,525,000 in 1965; $1,539,000 in 1966; and $1,589,000 in 1967 have been appropriated for the first five years of a continuing program of capital improvements at the National Zoological Park.

These appropriations have provided for construction of:

the bird flight cage and remodeling of the bird house;

the hardy hoofed-stock exhibit and habitat consisting of 7 large pens and shelters for animals that can be exhibited outdoors all year (heavy antelope, oxen, zebra, buffalo, Cape buffalo, and ostriches);

the deer exhibit and delicate hoofed-stock area, consisting of 2 houses with 6 large exhibit pens plus 2 large "summer" paddocks (for such animals as okapis, klipspringer, gerenuk, sable antelope, dik-dik, waterbuck and bongo);

the multiclimate house to exhibit animals so closely associated with their environments that they cannot be successfully exhibited or maintained without simulating their natural habitat by means of controlled heat, light, air and water temperature, and humidity (platypus, tuatara, lizard, kiwi, hoatzin, and penguins);

two paved parking areas for 526 visitors' automobiles and 24 buses;

a property yard, warehouse, mechanical shop, garage, and incinerator; new sewerage system and utilities; and

an animal hospital, laboratory, and holding area.

When the modernization and improvement of the Zoo have been completed, the collection of animals will amount to over 1,000 species (currently, approximately 900) and over 4,000 animals (currently, about 3,000). The National Zoological Park will then contain one of the major zoological collections in the world with the capability of exhibiting the collection in full accord with its statutory purpose: "The advancement of science and the instruction and recreation of the people."

The remodeled Zoo will have adequate parking facilities. A trackless train will provide internal transportation and an interesting view of many of the animals while traveling to and from parking areas and other points. This train will be operated on a concession basis and should make a substantial return to the Government.

Visual barriers between visitors and animals will be largely eliminated by the use of both wet and dry moats, structural glass, and fine stainless-steel tension wires.

The viewing eye-level will begin at approximately 28 inches from the ground for the benefit of children. Stairs will be eliminated wherever possible, and sidewalks will be kept to a maximum slope of 10 percent.

When the 12-year plan has been completed, the animal exhibit area will have increased from 17 acres to 50 acres. Twenty-three acres will be natural parkland; 18 acres will be used for needed primary circulation (automobile parking, roadways, and sidewalks). Service and administrative facilities (educational unit, restaurant, public restrooms, maintenance shops, hospital, and research area) will cover 13 acres. The total developed area of the Zoo will increase from 64 to 104 acres.

There follows a summary of the projects to be undertaken with 1968 funds.

Summary

Planning

Detailed plans and designs for bears, aquatic mammals, goats and sheep exhibits; parking areas; and landscaping	$165,000
Advance planning and consultation for 1970 projects	20,000
Total planning	185,000

Summary—Continued

Construction

Construction of waterfowl area	$300,000
Total	485,000

PLANNING ($185,000)

Detailed plans and designs for 1969 projects, $145,000

Detailed plans will be made for five projects. The animal-exhibit project will be located in the valley west of the small mammal house and present bear dens in and around the existing present sea lion and wild dog exhibits.

(1) *Bears* (Planning): Bear dens will be designed to accommodate 12 species (an increase of one species over our present collection). The new bear exhibit, a dry-moat type, will permit unobstructed viewing of the animals by the visitors. The judicious use of bear-resistant glass will give visitors a close inspection of several species of bears. These pens are designed for maximum flexibility, ease of maintenance and care, and also include hibernation and maternity dens. The polar bear exhibit will be especially attractive and will have a central location for maximum display. Artificial and natural rock work will simulate the animals' natural environment. Water refrigeration is not necessary to exhibit these bears successfully in the Washington climate.

(2) *Aquatic Mammals* (Planning): This exhibit will consist of sea lions, elephant seals and smaller mammals such as seals, copyus, tapirs, otters, and muskrats. The exhibit will consist of four all-year, all-weather outdoor pools. Six minor exhibits will be closely associated with the major ones. These animals lend themselves well to the barless type of exhibit. Filtration and recirculation will prevent unnecessary water wastage. Several of the exhibits will have underwater viewing so that subsurface activities of these animals can be seen by visitors.

(3) *Goats and Sheep* (Planning): Goats and sheep will be exhibited on the steep, precipitous west bank of Rock Creek, an area which duplicates their natural environment. The animals will be viewed from a path along the Creek and may be seen bouncing from crag to crag exhibiting their unique agility and adaptability to rugged conditions.

(4) *Parking Areas* (Planning): An additional hard-surfaced parking area will be planned for visitors. This lot will accommodate 216 automobiles.

(5) *Landscaping* (Planning): A detailed landscaping plan will be developed to provide an orderly method of tree, shrubbery, and flower planting to enhance the natural beauty of the Zoo park.

Smithsonian Institution expenses, $20,000

The Smithsonian Institution will require $20,000 in fiscal year 1968 for the improvement program, including consultants' fees, travel for inspection of good design practices in other zoos, purchase of equipment, and similar expenses directly related to the program of improvements.

Advanced planning and consultation for fiscal year 1970, $20,000

Advance plans will be made for remodeling the small mammal house and for the construction of a new lion exhibit.

CONSTRUCTION ($300,000)

(1) Construction of Waterfowl Area, $300,000

A new waterfowl area is to be constructed at the south end of the National Zoological Park near the Harvard Street entrance to aid in eliminating pollution to Rock Creek. The present pond drains directly into Rock Creek and is the last remaining source of pollution to Rock Creek from the Zoological Park. Construction is presently under way for new sewerage facilities which will eliminate all other sources of Zoo-contributed pollution. Complete reconstruction of the pond will be accomplished by regrading and reshaping. A system will be installed to recirculate water and to drain the pond into the sewerage system. A small structure will be provided to house pumping and chlorination equipment.

CONSTRUCTION AND IMPROVEMENT

Senator BARTLETT. Would you indicate the status of the work which has been going on at the zoo for the past several years, and advise the committee of the work planned for the coming year?

Dr. RIPLEY. Mr. Bradley.

Mr. BRADLEY. Mr. Chairman, funds appropriated during the past 5 years have been used to accomplish a good portion of a 12-year program of improvements at the zoo. We have been able, so far, to recondition and completely rebuild the birdhouse and the great flight cage. We have a new deer area and delicate hoofed stock shelters and paddocks. We have an area for hardy hoofed stock with shelter buildings and paddocks. There is a fine storage building and a new sewerage system. During the present year we have been after approvals which we have sought, and I am glad to say have now been given by the National Capital Planning Commission and the Fine Arts Commission on the particular part of the zoo, 165 acres in size, that includes the site for the animal hospital, the research area, and also the multiclimate house. So we plan, during this year, to get on with the construction of both.

Senator BARTLETT. Have you estimated how long it will take to complete the improvements program at the zoo?

Mr. BRADLEY. Mr. Chairman, if we can continue appropriations at the rate that we have been successful in obtaining during the last 5 years, it would take another 6 or 7 years to complete the total planned improvement.

Senator BARTLETT. Thank you.

RESTORATION AND RENOVATION OF BUILDINGS

Senator BARTLETT. For restoration and renovation of buildings you are proposing an appropriation of $1,353,000, $947,000 less than was appropriated last year. The justification for this request will be printed in the record.

(The justification follows:)

1966 appropriation	$2,248,000
1967 appropriation	2,300,000
1968 estimate	1,353,000

An appropriation of $1,353,000 is requested for fiscal year 1968 for the following projects:

Completing renovation of Smithsonian Institution building	$690,000
Additional improvements to Fine Arts and Portrait Galleries	125,000
Mechanical improvements and minor renovation to:	
Chesapeake Bay Center for Field Biology	75,000
Barney Studio House	35,000
Freer Gallery of Art	98,000
Smithsonian Oceanographic Sorting Center	148,000
Radiation Biology Laboratory	182,000
Total	538,000
Total estimate for 1968	1,353,000
Less amount appropriated in fiscal year 1967	—2,300,000
Decrease in fiscal year 1968	—947,000

SMITHSONIAN INSTITUTION BUILDING

Funds in the amount of $690,000 are requested to complete the renovation of the Smithsonian Institution building. This increase, in addition to the $2,054,000 appropriated in fiscal year 1966, is made necessary by several unanticipated costs: the unexpected extent of deterioration of water, sewer, and electrical lines revealed by complete examination; the difficulty of performing renovation work in this 19th Century building; the modification of additional areas of the building not included in the original project; and substantial increases in construction prices.

This building, designed by architect James Renwick and constructed in 1855, is the original Smithsonian Institution building. It is most conveniently located on the Mall and in the center of the complex of Smithsonian museums and art galleries. In November 1964, it was designated by the Joint Committee on Landmarks, appointed by the National Capital Planning Commission and the Commission of Fine Arts, as a landmark of great importance, having both historic and aesthetic value. It provides a focal point on the Mall for the millions of persons each year who visit the Nation's Capital to gain knowledge and inspiration from the exhibits and collections of the Institution. In 1966, over one million persons visited this building to view the Great Hall which has been restored to mid-19th Century appearance and to study carefully selected and exhibited objects representative of the collections and research work of the Smithsonian.

Many persons enjoyed concerts from the Smithsonian tower during the summer months. In addition to these public service and education functions, the building also houses the archives of the Institution as well as administrative offices. With these requested additional funds, the opportunity will be realized to make this valuable building responsive to functional requirements while retaining and enhancing its historic and architectural significance.

The 1966 appropriation was based on a cost estimate provided by the General Services Administration (Public Buildings Service) for general renovation of a typical building containing 150,000 square feet. Subsequent to the preparation of the initial cost estimates, it was found to be necessary to conduct complete surveys and investigations of the building in order to develop a detailed set of "as built" drawings. These investigations disclosed latent conditions which should be corrected.

The building was constructed with solid masonry walls characteristic of mid-19th Century construction. Since there are no spaces within walls or floors to place utility lines, it will be necessary to cut chases in the masonry, place the utilities and conceal them with plaster. Careful workmanship will be required to protect the architectural features of the building. This method of construction and the extent of work required to replace deteriorated water, sewer, and electrical lines revealed by the building inspection require an additional $190,000.

Although the primary purpose of this project is renovation and restoration of this valuable building, additional floor space also will be provided on the third and fourth floors, to accommodate scholarly activities related to advanced studies. The Smithsonian Institution, founded as a learning center, is cooperating with universities, learned societies, foundations, and others, both in and out of Government, in furtherance of its central purpose, the "increase and diffusion of knowledge."

It is now proposed that improvements be made at the western end of the first floor, comprising the old chapel, west range, and the library. Improved lighting, flooring, partitioning, book stacks, display cases, and appropriate furnishings can convert this area into a study and discussion hall and library. This portion of the project is estimated to cost $200,000.

The intensified use of the building, combined with the inadequacy of restaurants in the area, emphasizes the need for a small staff dining room in this building. A small kitchen and dining room can be installed most economically during the general building renovation and installation of new utilities. This facility is estimated to cost $100,000, including all kitchen equipment, service entrance in the basement, and a dumb-waiter from the basement to a dining room on the first floor.

When the original budget estimate for this project was prepared in 1964, the construction cost index for Washington, D.C., as reported by the E. H. Boechk Construction Cost Index Service, was at a level of 337.

In October 1966 the index had increased to a level of 360 or an increase of 7%. The "National average" construction cost increase was reported by Engineering-News Record (a McGraw-Hill publication) to be 8% for the same period. It is expected that an additional increase of 3% will occur from November 1966 to the expected construction starting date in July 1967. An amount of $200,000 is included in this request to offset this 10% total cost increase.

FINE ARTS AND PORTRAITS GALLERIES BUILDING

Funds in the amount of $125,000 are requested to accomplish additional renovation work in the Fine Arts and Portrait Galleries building in order to protect and enhance the work that has been completed. Some of this additional work had to be excluded from the original contract to make funds available to meet critical construction problems. The need for other modifications did not become apparent until renovation was at an advanced stage. The items include repointing, resetting, and cleaning exterior stonework; birdproofing; yard improvements; exposing hidden marblework; and correcting ceiling heights.

Renovation and modifications to the old Civil Service building at 7th and F Streets, N.W. to accommodate the National Collection of Fine Arts and the National Portrait Gallery are substantially complete. The building is being fitted with shelves, display cases, equipment and other items necessary to receive the collections. This work is being expedited so that the building may be opened to the public at the earliest possible time.

Renovation of this 100-year-old building has been difficult and delayed by latent conditions resulting from the various types of construction encountered and the deteriorated state of obsolete building materials. Exceptionally complex methods are required to thread modern utility lines through this structure. In order to finance necessary and mandatory changes to the contract, a constant management evaluation of the work was maintained to study the effect of the changes and to reduce the work effort in other, less critical areas. Consequently, some features which are necessary for efficient and proper functioning of the building which were previously deleted are now requested. These include:

1. Repointing, resetting, and cleaning exterior stonework, $50,000: A detailed examination of the building exterior has revealed that pointing has washed out of upper portions of the walls. Water entering the walls, and subjected to freeze-thaw cycles, has caused some large stones to move out of place.
2. Birdproofing, $20,000: The building is now a popular bird roosting place for this part of town. The continued installation of electrical impulse birdproofing systems on other nearby buildings will increase the problem at the Fine Arts and Portrait Galleries building. Installation of a birdproofing system will help protect the appearance and reduce the frequency of future cleaning.
3. Improvements to exterior yard, $15,000: The small yard around the building will require repairing of damaged curbs, fencing, and sidewalks. New sod and a very minimum amount of landscaping will be provided to maintain the appearance of the building.

There are also other modifications which should be made to the interior of the building to provide the most appropriate setting for public exhibitions. These items were not fully apparent until the renovation work was at an advanced stage and operational planning was initiated by the staff. Items in this category are:

1. Remove paint from stonework, $25,000: One of the largest galleries in the building to be used for exhibition of fine arts has columns and wall surfaces which have been painted for many years. During the renovation work it was discovered that the columns are marble and the walls are paneled with marble. We now propose to remove all paint from these surfaces and expose this very attractive stonework.
2. Drop ceilings, $15,000: Existing ceilings in four areas are much too high for the intended use of the rooms, the exhibiting of smaller objects of fine arts in display cases and tables. To correct the scale of the space, suspended ceilings and improved lighting are required.

The conversion of this old office building for the National Collection of Fine Arts and the National Portrait Gallery has been very successful and is a compliment to those who endorsed and supported this idea. The interior of the building reflects a dignified and inspiring setting for this purpose and implies a degree of magnificence far beyond the cost of the renovation. With the amount requested here, these essential additional improvements can be accomplished.

CHESAPEAKE BAY CENTER FOR FIELD BIOLOGY

An appropriation of $75,000 is requested for renovation to the Institution's Chesapeake Bay Center for Field Biology, located on the western shore of Chesapeake Bay. These funds will restore existing structures for Center use and provide necessary utilities and roadways.

Approximately 700 acres of land located seven miles south of Annapolis were acquired by the Smithsonian Institution through a bequest and purchases made with generous foundation grants. This land is the only natural preserve on the western shore of the Chesapeake Bay and will become increasingly valuable as an ecological baseline.

To develop a program of research and education in field biology, a consortium was formed between the Smithsonian Institution, the Johns Hopkins University, and Maryland University. Scientific programs planned for this area include the identification and study of the natural populations of plants and animals that make up the ecological system of this marine estuarine area. Physical and chemical factors affecting the populations will be analyzed.

A number of structures on the site (barn, stalls, garage, equipment building, and creamery building) can be restored for use in serving the initial program needs of the Center. By accomplishing minimum repairs, the Smithsonian will be able to initiate a modest scale of operations at this Center at limited cost.

Minimum repairs to roofing and flooring, and interior repairs to structures are estimated to cost $54,000. Utilities, consisting of a new well, pump, service piping, new sewerage system and septic tank, and electrical service, will cost $7,000. An all-weather road surface will be provided between the buildings at a cost of $14,000. Total estimated cost: $75,000.

BARNEY STUDIO HOUSE

An appropriation of $35,000 is requested for the Barney Studio House, located at 2306 Massachusetts Avenue, N.W., Washington, D.C. to correct serious safety hazards and to provide adequate and efficient utilities service.

This house, constructed in 1904, was acquired by the Smithsonian Institution in 1960 for use as a museum headquarters and for meetings of groups concerned with the Smithsonian Institution.

This house has required only minimum maintenance but the effects of time and general deterioration now require that all loose and worn plaster be removed and replaced to insure safety of the occupants and that the interior be painted. This work is estimated to cost $10,000.

The electrical service and electrical wiring are now obsolete and should be replaced to conform to current standards of safety and to provide adequate capacity for modern usage. Replacement of the electrical service and rewiring all lighting and receptacle circuits will cost $5,000.

The existing antiquated and inefficient heating plant needs to be replaced with a modern combination heating, ventilating, and air conditioning system at a cost of $20,000.

This minimum renovation effort is necessary for comfort and safety as well as to assure years of continued satisfactory service from this valuable structure.

FREER GALLERY OF ART

An appropriation of $98,000 is requested for the Freer Gallery of Art to provide fire detection and security systems, to maintain the exterior and interior of the building, and to increase storage capability by the addition of an elevator.

The Freer Gallery is a monumental building located on the Mall at the corner of Independence Avenue and 12th Street. It was constructed in 1923 to house the outstanding collection of Oriental art given to the people of the United States by the late Charles L. Freer.

The Freer Gallery was designed and constructed in accordance with the best standards of its day. It has been well maintained. In the intervening years, however, there have been many technological improvements and new systems developed for fire detection and security which were not available when the building was designed. Our increasing concern for security of valuable art collections and the availability of economically installed fire protection and security systems are the basis of this request for funds for security improvement.

To install a modern fire detection system, watch-tour system, and automatic shutdown of fans and electric motors in case of emergency, funds in the amount of $10,000 are requested.

Funds amounting to $13,000 are requested to accomplish one-time general improvements to the building, including replacement of roofing material, floor tile, and plaster; and painting.

Funds in the amount of $75,000 are requested to extend an existing elevator shaft and install a new cab, new controls and equipment to serve both the attic and the basement which are used for storage purposes. Access to these spaces is available at present only by a stairway. Movement of heavy or bulky objects, which must be stored in the building, through the stairwell is difficult and dangerous. In addition to eliminating an unsafe condition, the storage capability of the building will be increased by this ready access.

SMITHSONIAN OCEANOGRAPHIC SORTING CENTER

Funds in the amount of $148,000 are requested for air conditioning the Oceanographic Sorting Center in order to increase employee productivity and to protect their health.

The Center occupies 30,000 square feet of space in a remodeled building at the Washington Navy Yard Annex. Skilled personnel are employed to sort, preserve, label, identify, package and distribute for scientific study marine organisms collected on oceanic expeditions. The large volume of items handled daily and the fumes from preservatives create nearly unbearable working conditions during the hot and humid summer months.

Funds are requested to provide approximately 100 tons of air conditioning for a portion of the Center. Wall-type fan coil units will be installed around the exposed wall area; chilled water supply and return mains will be provided from the existing chiller plant to the new air handling units; and necessary ductwork, piping, and automatic temperature controls will be provided.

The estimate for this project was prepared by the General Services Administration. Design and installation will be supervised by that agency.

RADIATION BIOLOGY LABORATORY

Funds amounting to $182,000 are requested to relocate and install a major portion of the laboratory equipment and facilities of the Radiation Biology Laboratory at a new location This relocation will provide more suitable and additional space and proper facilities for this scientific activity.

The Smithsonian Institution Radiation Biology Laboratory now occupies approximately 40,000 square feet of floor space in the basement of the Smithsonian Institution building, and several shed-type buildings located in the yard between the Smithsonian Institution building and Independence Avenue. All space now used by this laboratory was originally designed for storage and utility usage and consists of small basement rooms with low ceilings and several wood frame sheds.

Laboratory experiments were initiated in this substandard space only as an expediency. Due to uncertain future requirements for this type of investigation and to the limitation of funds, it was not possible to identify long-range physical requirements and to plan or construct a proper facility. Now the laboratory has developed into an outstanding and widely-recognized activity, specializing in vital research programs in the biological reaction to light. This research activity now completely utilizes all available space and needs additional space to relieve over-crowding and to gain potential benefits from expansion of experimental activities. In addition to the lack of floor space, research experiments are limited by the amount of electrical energy which can be delivered to this location without the construction of a new transformer substation. It is not efficient or economical to continue this operation in the Smithsonian Institution building or on the Mall.

Plans authorized by the Congress, for renovation and restoration of the historic Smithsonian Institution building, do not contemplate the use of the building for laboratories. These plans are based on restoring the building to public exhibition and educational and administrative activities. The design has now progressed to the point where the substantial areas in the basement required for new electrical switch gear and air conditioning mechanical equipment can be identified. It is now apparent that the rooms occupied by the Radiation Biology Laboratory must be used for these and other utilitarian services. It will not be possible to proceed with work related to the building's restoration until the laboratory is relocated.

Alternate site locations are being investigated to find a suitable place for the laboratory away from the Mall areas. The General Services Administration is assisting with this investigation. It is estimated that $182,000 will be required to relocate and install a major portion of the laboratory equipment and facilities at a new location during fiscal year 1968. In view of the need to start relocating this activity concurrent with restoration of the Smithsonian Institution building, which is scheduled to start in July 1967, funds are urgently requested at this time.

1967 Building Renovations

Senator Bartlett. Will you please advise the committee of your plans for building renovations during fiscal year 1967?

Dr. Ripley. Mr. Bradley, would you answer that?

Mr. Bradley. During 1967, Mr. Chairman, there is available to us a little over $2 million, $2,129,000, from 1966 which is primarily available for restoration of the original old Smithsonian Institution Building. In addition, an appropriation of $2.3 million is available for restoration and renovation of the old Court of Claims Building, for use as an art gallery, and for planning future improvements.

OLD COURT OF CLAIMS

The work on the old Court of Claims Building is expected to go under contract by the General Services Administration sometime this spring, and the planning of future improvements is progressing.

SMITHSONIAN BUILDING

The work on the restoration of the Smithsonian Institution Building has been delayed because, frankly, it was an old building and we had to stop and prepare "as built" drawings, in order to know what we had there to improve. However, this work has now been done. We have also accurately located all sewer, water, and other utility lines. We have determined the structural condition of the foundations. This has been accomplished and now the contract drawings for restoration of the building should be completed in several months, and construction work should start this summer.

FINE ARTS AND PORTRAIT GALLERIES

Senator Bartlett. $125,000 of your construction estimate is for additional renovation work in the Fine Arts and Portrait Galleries building. As I understand, this is the old Patent Office or Civil Service Commission building, which has been completely remodeled for gallery use by the Smithsonian Institution. Is the building in use now?

Dr. Ripley. Yes, sir; it is. We have been moving in since February. Both galleries, the National Collection of Fine Arts and the National Portrait Gallery, now have offices and exhibition space there, although they are not completely moved in yet. A great deal of this additional request is due to the fact that this is a 100-year-old building, more than a hundred years old actually, and it has been very difficult to get the work completed because of latent conditions in the building. Types of construction had to be modified in some cases, and a good deal of the interior in certain places had deteriorated badly, more so than first surveys showed. To fund these mandatory contract changes, we had to delete some features of the work. So this is a minimal request for additional funds to complete the work which had to be deleted from the original contract: repointing exterior stone work; bird proofing; landscaping the interior court yard; cleaning interior marble; and adding suspended ceilings in four exhibition areas.

RADIATION BIOLOGY LABORATORY

Senator BARTLETT. Do you have any idea where you will relocate the Radiation Biology Laboratory?

Dr. RIPLEY. Yes, sir, we have been given Building 7, or part of it, at the old Bureau of Standards, and this will be available for us in July 1967. This is a very adequate space for us. We are delighted to get our radiation biologists out of the incredibly cramped quarters where they have been living in the basement of the old Smithsonian castle.

We had an ad hoc survey by biologists familiar with this work during the past summer, who gave the laboratory the very highest recommendations for the efficiency of its work, but were startled, amazed, and horrified by the conditions under which they did this work. Therefore, we are delighted to have a chance to move them out.

Senator BARTLETT. You believe $182,000 will suffice to do this job?

Dr. RIPLEY. Compared to where they are now, they are going to be in a bed of roses. The request for $182,000 will finance the first year's improvements and permit us to move in. It is estimated that $328,000 will be required in future years for further improvements.

Senator BARTLETT. Are they subjected—well, I am going to put it another way. They must be subjected to unusual health hazards, in this activity. Are they tested frequently to determine whether they have overexposure?

Dr. RIPLEY. I assume so. Dr. Galler, do you know about that?

Dr. GALLER. Mr. Chairman, they do wear dosimeters whenever they come in contact with radioisotopes in the course of their laboratory work and the dosimeters are checked regularly, and they do, under AEC regulations, require regular physical checkups.

Senator BARTLETT. Sometimes I wonder, this is somewhat aside from the proposition before us, whether the AEC standards are high enough. I was just reading not long ago a declaration by Dr. Teller, who certainly is no alarmist, who recommended very strongly that all nuclear plants constructed to produce electricity ought to be placed underground, and we are placing them above ground.

JOSEPH H. HIRSHHORN MUSEUM AND SCULPTURE GARDEN

For planning the Joseph H. Hirshhorn Museum and Sculpture Garden, you are requesting $803,000.

The statement in support of this request will be printed at this point in the record.

(The justification follows:)

1968 estimate	$803,000

An appropriation of $803,000 is requested for the preparation of plans and specifications for the Joseph H. Hirshhorn Museum and Sculpture Garden. Public Law 89–788, authorizing establishment of this museum and sculpture garden under the Smithsonian, was approved on November 7, 1966.

The authorization of planning and construction of this museum was in response to an offer from Joseph H. Hirshhorn to give to the people of the United States more than 1,500 pieces of sculpture and 4,000 paintings and drawings valued at over $25,000,000 together with $1,000,000 for the purchase of additional works of art.

During Fiscal Year 1968 plans and specifications will be prepared for the construction of an art museum building and sculpture garden in the Mall area between Seventh Street, Ninth Street, Independence Avenue and Madison Drive, S.W., as specified in the public law.

Concurrently, the Department of Defense proposes to prepare plans and specifications for a new facility to house the Armed Forces Institute of Pathology at Walter Reed Army Medical Center, as authorized by Public Law 89–746. Relocation of the Armed Forces Institute of Pathology from their present building now occupying the Mall site of the Hirshhorn Museum must be accomplished prior to construction of the Joseph H. Hirshhorn Museum.

In consideration of budgetary limitations and to provide time for careful design, construction funds are not requested at this time. In recognition of the magnitude of the gift and its importance to the cultural enrichment of the Nation, the timely initiation of design and planning for a suitable building and sculpture garden is warranted. In order that this collection may begin to play its full role in the inspiration and education of the American public, an uninterrupted development program is also warranted.

The total cost for the Joseph H. Hirshhorn Museum and Sculpture Garden will not exceed $15,000,000. The museum building will contain approximately 250,000 square feet of floor space and will be constructed on the Independence Avenue side of the Mall.

The outstanding collection of modern American paintings to be exhibited in this building assures that the museum will compare favorably with the leading contemporary art museums of the world. The sculpture garden will extend from the museum building across the Mall to Madison Drive. It will provide an appropriately designed setting to display the works of Rodin, Henry Moore, Degas, Matisse, Renoir, Picasso, Giacometti, Brancusi, Lipchitz, and many others. Most careful consideration will be given to this design to assure that the development of the Garden is consistent with the open-space concept of the Mall.

PLANNING AND CONSTRUCTION

Senator BARTLETT. I know that legislation authorizing this construction was approved during the last session of Congress. Is there any requirement as to the time during which the building must be constructed and ready for use?

Dr. RIPLEY. It is a condition of Mr. Hirshhorn's gift, and our subsequent agreement with Mr. Hirshhorn and the Hirshhorn Foundation, that the Congress shall have authorized the construction of the museum and sculpture garden—as in fact the Congress has already done—and also shall have appropriated funds for planning and for construction by the close of the 90th Congress.

Construction is to be completed within 5 years after the appropriation is made available by the Congress.

SMITHSONIAN TROPICAL RESEARCH INSTITUTE

Senator BARTLETT. Let's go back, if you will, to the Smithsonian Tropical Research Institute.

Now, speaking of another program, Mr. Ripley, you said that costs were assessed for photographs, and so forth, except in exceptional cases, to those who desired to have them. And, Doctor, do I understand you to say that in respect to the Tropical Institute, an organization such as Battelle Memorial, came to you for special service?

SPECIAL SERVICES

Dr. GALLER. Mr. Chairman, the special services that I spoke of are in fact needs for fundamental data that have in part already been acquired at the Smithsonian Tropical Research Institute; data that need to be brought together and consolidated to respond to the kinds of questions that a feasibility study would raise.

If the request refers to large increments of work related to a given agency, either public or private, usually this requires a grant or a contract from such an agency.

Dr. RIPLEY. We would become, in this case, a subcontractor.

Senator BARTLETT. Would Battelle pay you?

Dr. RIPLEY. They would give us a grant.

Senator BARTLETT. They would give you a grant, because they are under contract, and otherwise, this would just be in addition to the sum which they were originally allowed.

Dr. RIPLEY. Yes, it would be unavailable unless they did come to us with a grant.

REPROGRAMING REQUESTS

Senator BARTLETT. Now, you used $30,000, was it, out of the current appropriation for these additional needs of the Institute?

Dr. GALLER. Yes, sir.

Senator BARTLETT. Now, my understanding was that before any reprograming of that character were to take place, the consent of the Appropriations Committees first must be had. Is that your understanding?

Mr. BRADLEY. May I speak to that, Mr. Chairman?

Senator BARTLETT. Yes.

Mr. BRADLEY. Certainly that has been our general understanding. This committee has been most reasonable in our requests for reprograming. In this particular case, it was a matter of judgment, and from the way you put the question I suspect it was a matter of an error of judgment, in not submitting a reprograming request for an amount of $30,000. This is an increase on a base of about $300,000. It was about a 10-percent overrun on the program for the current year.

Normally, your understanding is entirely correct. We do approach this committee, and, of course, the committee in the House, in connection with the reprograming of funds during the year.

Senator BARTLETT. I would suggest that approach is highly desirable. I can't anticipate that any difficulties would arise, but the sitution would be easier for you if any great objection were made.

Mr. BRADLEY. Yes, sir.

ALASKA CENTENNIAL YEAR

Senator BARTLETT. Now, Mr. Ripley, you spoke modestly, understandably, about the special exhibit prepared for the Alaska Centennial Year. Indeed, you were far too modest. I was thrilled and excited and pleased by what I saw before the exhibit was packed and started for Alaska.

My recollection is this committee allowed and the Senate appropriated $100,000, specifically, to you to make this contribution to this celebration of the 100th anniversary of the purchase of Alaska by the United States from Russia, and my further understanding or knowledge is that when the conference committee had completed its work, you were allowed $50,000 to be taken from funds otherwise appropriated, and not a penny was allowed for his special activity. Am I correct?

Dr. RIPLEY. That is correct, sir. I would say——

Senator BARTLETT. Let us change that to not a hundred but to $50,000. We gave 50. I guess that was it.

Dr. RIPLEY. I would say that, as I recall, we requested approximately $100,000 for the purpose of these sorts of special exhibits, and the Senate committee recommended that $50,000 be allocated for these sorts of special exhibits which necessitate special overruns in time, labor, materials, efforts, and so on, on our staff.

Senator BARTLETT. Now, I want to go into that a bit more, and I won't do it in the parochial sense. I would like to develop here a little bit of information about the number of requests that come to you for special exhibits, and what difficulties arise, if any, when the Smithsonian has to fund those special exhibits, if you are able to produce them at all, from funds appropriated for other purposes.

Dr. RIPLEY. Thank you very much, Senator. I would like to speak to this, because it is a continual drain on our very slim resources in manpower, time, and money, and I foresee that in connection with 1976 and the buildup toward that commemorative year, the continual pressure is going to mount, every year.

EXPO 67 EXHIBIT

Let me cite to you an example, if I may, of what has just come up. As you know, the international fair in Montreal, Expo '67, is opening on the 28 of April, I believe, in Montreal. We were asked last month by the U.S. Ambassador to that fair to prepare an exhibit. Last month isn't very long ago, and April 28th is very soon, and the idea of attempting to rub Aladdin's lamp—and the Smithsonian, I am sorry to say, bears no relationship to Aladdin's lamp—and produce instantly a set of genii who would produce an exhibit for us was, of course, a shocker for us. But this is very much the way these sorts of requests tend to come. They tend to be last minute, hurry-hurry-hurry, great pressure instantly put on, and "a dramatic and stylish and tasteful show," of course, to be produced.

We were able to suggest that we could put on an exhibit on oceanography, and on the kinds of things which we are working on which are particularly curious and interesting. The Ambassador's response was very warm and friendly. We have discovered that this exhibit will cost something in the neighborhood of $30,000 to construct and put on, working at top speed, with overtime and so on, and we at the present time have the possibility of getting a grant from the National Science Foundation of only as much as $5,000.

FUNDS AND SKILLED LABOR SHORTAGE

As a result, I have had to make a decision that we must turn them down, because we don't have the money.

Senator BARTLETT. You can't do it.

Dr. RIPLEY. We don't have the approximately $25,000. We don't have the ability——

Senator BARTLETT. You don't have the time, either, do you?

Dr. RIPLEY. No, it would have to be overtime, and we would have to subcontract for parts of the work. But we don't have this flexibility. We are continually starved for special people to do exhibit work, and it is all we can do to meet our own schedules, which are then, of course, instantly broken into and hampered by special requests.

Senator BARTLETT. Well, in this instance, of course, the request came to you belatedly.

Dr. RIPLEY. Yes.

Senator BARTLETT. Far too belatedly, and yet I think it is too bad that the Smithsonian can't have something there.

Dr. RIPLEY. Yes, sir.

SPECIAL EXHIBITS UNIT

Senator BARTLETT. Well, there are celebrations and there are anniversaries of all kinds, and as you say, they come with increasing frequency, and demands upon you come with increasing frequency. What if you were to have a special small staff for these special exhibits, have you ever considered how large a staff you might start out with, and what it would cost?

Dr. RIPLEY. My own hope, Senator, would be that we could relate this sort of work to our efforts under the National Museum Act. Under the terms of the act, we are supposed to render help, aid, and comfort to other parts of the country for museumlike activities. We would need to have a small, flexible unit or staff of exhibit people. We could, with this kind of a staff, work on exhibits which are going out to other museums. We could call them sort of a unit for special exhibits. This would be an economic and sensible way of not interfering with the time of the regular people who are concerned with refurbishing and developing exhibits in the existing museums.

PERSONNEL

I would think that something in the neighborhood of $100,000 a year would give us the potential for building up a solid group of really expert technicians who could not only perform themselves, but could train others, which is what I am so keen always to do. We could make this a continuing involvement with the whole exhibits and museum field throughout the country.

Senator BARTLETT. I think there would be an added virtue and value there. Let's assume that Vermont, for example, was going to have some kind of a celebration 3 years from now, and officials representing Vermont inquired of you as to the possibility of doing something of this kind. That would give the Institution, especially the people who were assigned to this activity, if there be such, time to dream and dwell upon what kind of an exhibition would be best to represent the Institution, and perform the service for which the exhibit was desired.

ASSISTANCE TO OTHER MUSEUMS

Dr. RIPLEY. I may point out, Senator, with such potential, we could also send people out in the field to work with the local people. For example, in the past year, we have had to lend, very pleasantly and happily—we have been willing to do this, but at cost to ourselves—two people to go and help develop the museum in Oakland, Calif. This was largely a sort of hands-across-the-continent scheme, because we felt that our people who happened to be specialists in western historical areas would be significantly helpful there, in a way that no other particular specialist would be. They would make a unique contribution, and in order to make a better museum in Oakland, these people were really necessary. But there we would also have been able, if we had had a craftsman or two, to go out and actually help with our own expertise to design and contribute toward the building of some of the exhibits.

This would be wonderful for establishing and maintaining what you might call rapport between the Smithsonian, which, because it is Washington based, tends to sound just a little bit too much like a large bureaucratic arm of the Government, and the great museums of distinguished character around the country. Very often, because of our lack of funds for support, they tend to think of us as monolithic and octopuslike.

We could cooperate wonderfully with them if we had just this kind of support. That is why we think this National Museum Act is a real breakthrough, because it will give us this service and interrelationship aspect in our dealings and relations with other museums.

LOOKING AHEAD

Senator BARTLETT. Today the Smithsonian is an institution of which all Americans are very proud. Have you cast a visionary eye upon the future, say, within the next 5 years, and evolved a program for such a period of time?

Dr. RIPLEY. Mr. Chairman, we have speculated on this, and we have speculated in a variety of ways. One is what we can see coming over the horizon in the way of obligations, like 1976, for example. Another is in the development and utilization of existing buildings such as the Renwick Fine Arts and Decorative Arts Gallery on the corner of 17th and Pennsylvania Avenue, the old Court of Claims building, which the President has allocated to the Smithsonian, and which should be a great decorative arts center in this country. Still another is in the increasing use of the Smithsonian's facilities by universities and higher education institutions.

I hesitate to hazard a guess about the budget increase. I can only point out that, on the basis of wage and salary increases, what we buy now at $1.44, 10 years ago cost us only $1. And so some of this, I am afraid, will inevitably be reflected in obvious cost-of-living increases. But whatever we have done, and whatever we intend to do, should be commensurate with the fundamental principle of the Smithsonian, which, as I see it, is that we do only what no one else can really do well. We are, as I have sometimes called us, "the unconventional in pursuit of the unfashionable." When something that we are doing turns out to be enormously effective, and useful in an applied sense, we then traditionally spin it off into some applied activity.

SPIN OFF ACTIVITIES

That is why, for example, the Smithsonian invented weather forecasting, and discovered that it was possible to assess weather. This is why eventually the Weather Bureau was created, a totally independent agency.

We are happy to spin off activities, we are happy to nurture tender flowers, when at a certain moment they do not have large understanding or acceptance by our people. That is why, for many, many years, we indulged in such unfashionable activities as astrophysics, which was virtually unknown in the rest of the country, and eventually, when combined with our concern in aeronautics, spun off into something now known as NASA.

These sorts of things are the kinds of contributions, I think, which the Smithsonian can make in a very significant way, indulging and carrying on activities which the Nation must afford, but which few other people are courageous enough, shall we say, or persistent or dogged enough to undertake.

Senator BARTLETT. And from the standpoint of your representation, I think it is well that there are spin offs.

Dr. RIPLEY. Yes.

Senator BARTLETT. Such as weather. I am reminded of the letter to the editor, a man in the Midwest wrote just a little while ago, saying, "I have just completed shoveling a foot of partly cloudy off my sidewalk."

SUBCOMMITTEE RECESS

Well, it has been a very interesting morning for me, and I want to thank all of you, and each of you, for your testimony. The committee now will adjourn until 10:30 a.m., Friday, March 17, when the National Capital Planning Commission, and the National Council on Marine Resources, and Commission on Marine Science will testify.

(Whereupon, at 12:30 p.m., Thursday, March 16, 1967, the subcommittee was recessed, to reconvene at 10:30 a.m., Friday, March 17, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

FRIDAY, MARCH 17, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:30 a.m., in room 1223, New Senate Office Building, Senator E. L. Bartlett presiding.

Present: Senator Bartlett.

NATIONAL CAPITAL PLANNING COMMISSION

STATEMENT OF MRS. JAMES H. ROWE, JR., CHAIRMAN; ACCOMPANIED BY CHARLES H. CONRAD, EXECUTIVE DIRECTOR; DONALD F. BOZARTH, DIRECTOR, CURRENT PLANNING AND PROGRAMING; GEORGE H. F. OBERLANDER, DIRECTOR, LONG-RANGE PLANNING AND REGIONAL AFFAIRS; DANIEL H. SHEAR, GENERAL COUNSEL AND SECRETARY; JOHN R. PRITCHARD, ASSISTANT EXECUTIVE DIRECTOR (ADMINISTRATION); AND EDWARD L. GOLDMAN, ADMINISTRATIVE OFFICER, TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

ST. PATRICK'S DAY AND GENEROSITY

Senator BARTLETT. The subcommittee will be in order.

The National Capital Planning Commission will be the first to be heard.

Mrs. Rowe.

Mrs. ROWE. Thank you, sir.

It is very good to see you, and we hope it is an auspicious day, being St. Patrick's Day.

Senator BARTLETT. In what respect?

Mrs. ROWE. That you will be feeling generous.

Senator BARTLETT. On a day like this, one is bound to feel generous.

Mrs. ROWE. Yes.

INTRODUCTION OF STAFF MEMBERS

Mr. Chairman and members of the committee, it is a pleasure to appear before your committee again this year. Before starting my testimony, I would like to introduce the members of the Planning Commission staff who are here with me:

Mr. Charles Conrad, who is the Executive Director;

Mr. Donald F. Bozarth, next to the end, who is Director of Current Planning;

Mr. George H. F. Oberlander, the Director of Long-Range Planning and Regional Affairs;

Mr. Daniel H. Shear, General Counsel and Secretary;

Mr. John R. Pritchard, Assistant Executive Director for Administration; and

Mr. Edward L. Goldman, the Administrative Officer of the Temporary Commission on Pennsylvania Avenue.

Senator BARTLETT. You come notably well flagged.

Mrs. ROWE. Yes, I do. I have got an expert on every subject for you, on every question.

1968 BUDGET REQUEST

Senator BARTLETT. The budget estimate for the National Capital Planning Commission, all salaries and expenses, for fiscal year 1968 is $1,100,000, $95,000 more than was appropriated in fiscal year 1967. Of this amount, $76,000 is for the Temporary Commission on Pennsylvania. The justification and statement will be printed in the record.

(The justification follows:)

NATIONAL CAPITAL PLANNING COMMISSION

Analysis of increases, fiscal year 1968

	Commission	Council	Pennsylvania Ave.	Total
"Salaries and expenses" appropriation, fiscal year 1967	$815,500	$113,500	$76,000	$1,005,000
Deduct nonexpenditure transfer of funds to GSA for office rent provided initially in fiscal year 1966 budget	−10,463			−10,463
Deduct savings resulting from Reorganization Plan No. 5 of 1966, June 29, 1966		−25,000		−25,000
Transfer of funds from NCRPC to NCPC as result of Reorganization Plan No. 5	88,500	−88,500		
Add portion of savings resulting from Reorganization Plan No. 5 required to offset pay costs, Federal Salary and Fringe Benefits Act of 1966	20,000			20,000
Deduct nonrecurring increase in fiscal year 1967 for Capitol Hill study	−40,000			−40,000
Adjusted base, fiscal year 1967	873,537		76,000	949,537
Increases proposed for fiscal year 1968:				
Permanent positions (10)	89,610			89,610
Personnel benefits for above	5,000			5,000
Rental, additional office space for above personnel 1,000 square feet times $5.15	5,150			5,150
Related expenses for above consisting of supplies, materials, equipment, telephone, travel, and transportation	1,837			1,837
Funds to offset reallocation of 5 positions already effected	8,866			8,866
Special consultant studies and services:				
Zoning study, 1st year of 2 years	25,000			25,000
Planning history, 1st year of 2 years	10,000			10,000
Research computer programs	5,000			5,000
Total increases	150,463			150,463
Total budget estimate, "Salaries and expenses," fiscal year 1968	1,024,000		76,000	1,100,000

LAND ACQUISITION, NATIONAL CAPITAL PARK, PARKWAY AND PLAYGROUND SYSTEM

The House Committee on Appropriations in its report dated March 31, 1966 indicated that new authorizing legislation should be submitted before it would give favorable consideration to further funding. Such legislation is being drafted and funding will be requested at a later date.

Increases by priority

A. Funds to offset reallocation of the following 5 positions, already effected:	
Assistant director (administrative), GS-14 to GS-15	$2,444
Architect, GS-12 to GS-13	1,946
Architect, GS-12 to GS-13	1,946
Urban planner, GS-12 to GS-13	1,946
Secretary, GS-6 to GS-7	584
Subtotal	8,866
B. 10 new positions:	
District of Columbia project review planner, GS-13	12,873
Federal planning division planner, GS-12	10,927
Social science analyst, GS-12	10,927
Transportation planner, GS-12	10,927
Comprehensive planning, division planner, GS-12	10,927
Project designer, GS-11	9,221
Urban renewal planner, GS-11	9,221
Messenger, GS-2	3,925
Secretary, GS-5, office of director, current planning and programing	5,331
Secretary, GS-5, office of director, long-range planning and regional affairs	5,331
Subtotal	89,610
Related costs to above personnel	6,837
Rental additional office space 10 persons, 1,000 sq. ft. x $5.15	5,150
Research computer programs (continuing)	5,000
C. Two special projects:	
Joint zoning study (with District of Columbia Zoning Commission) 1st year of 2 years	25,000
History of planning and development of Washington, D.C. (1791-1967), 1st year of 2 years	10,000
Total increases	150,463

	Permanent positions			
	Fiscal year 1966	Fiscal year 1967	Increase	Fiscal year 1968
National Capital Planning Commission	47	61	10	71
National Capital Regional Planning Council	9			
Temporary Commission on Pennsylvania Avenue	2	3		3
Total	58	64	10	74

NATIONAL CAPITAL PLANNING COMMISSION FISCAL YEAR 1968 BUDGET

Analysis by object classification, salaries and expenses appropriation (obligational basis)

	Actual, fiscal year 1966	Estimate, fiscal year 1967	Net fiscal year 1968 increases	Estimate, fiscal year 1968
ACTIVITY 1—NATIONAL CAPITAL PLANNING COMMISSION				
Permanent positions (net of lapses)	$432,075	$619,700	$93,476	$713,176
Seasonal and temporary employees	13,872	15,100		15,100
Part time and when actually employed	11,942	6,700		6,700
Overtime and holiday pay	5,311	4,250		4,250
Total personnel compensation	463,200	645,750	93,476	739,226
Personnel benefits	31,583	52,500	5,000	57,500
Awards to employees		500		500
Travel	8,791	15,000	500	15,500
Vehicle rent	1,996	2,100		2,100
Transportation of things	1,441	7,000	500	7,500
Rent, communications, and utilities	27,666	38,413	−5,313	33,100
Printing and reproduction	54,231	63,000		63,000
Other services	32,014	75,600	−5,000	70,600
Services of other agencies	3,348	4,000	5,000	9,000
Supplies and materials	16,779	19,137	337	19,474
Equipment	4,147	6,000	500	6,500
Total obligations, Commission	645,196	[1] 929,000	95,000	1,024,000
ACTIVITY 2—NATIONAL CAPITAL REGIONAL PLANNING COUNCIL				
Permanent positions (net of lapses)	72,428			
Seasonal and temporary employees	2,376			
Part time and when actually employed				
Overtime and holiday pay	98			
Total personnel compensation	74,902			
Personnel benefits	5,327			
Travel	1,354			
Vehicle rent	88			
Transportation of things	646			
Rent, communications, and utilities	2,590			
Printing and reproduction	17,287			
Other services	2,013			
Services of other agencies	84			
Supplies and materials	3,491			
Equipment				
Total obligations, Council	107,782	(1)		
ACTIVITY 3—TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE				
Permanent positions (net of lapses)	9,404	24,696		24,696
Seasonal and temporary employees		1,060		1,060
Part time and when actually employed	8,683	9,400		9,400
Overtime and holiday pay				
Total personnel compensation	18,087	35,156		35,156
Personnel benefits	1,020	3,000		3,000
Travel	5,213	4,000		4,000
Vehicle rent	41	100		100
Transportation of things				
Rent, communications, and utilities	952	6,000		6,000
Printing and reproduction	977	500		500
Other services	20,732	24,244		24,244
Services of other agencies	92			
Supplies and materials	1,273	2,000		2,000
Equipment	2,073	1,000		1,000
Total obligations, Pennsylvania Avenue	50,460	76,000		76,000
Grand total, obligations	803,438	1,005,000	95,000	1,100,000

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[1] National Capital Regional Planning Council abolished by the President's Reorganization Plan No. 5 of 1966. The $113,500 originally programed for fiscal year 1967 has been transferred to National Capital Planning Commission.

Staff Organization for Planning in the National Capital Region—Salaries and Expenses Appropriation

Fiscal Years 1967 and 1968 (Proposed 1968 Positions Indicated by *)

1. Executive Director, GS–17
2. Secretary (Sp. Proj.), GS–8
3. Secretary, GS–7
4. General Counsel, GS–15
5. Attorney-Adviser, GS–11
6. Secretary, GS–6
7. Special Asst. to the Director (Com. Rel.), GS–13
8. Writer-Editor, GS–13
9. Library Asst., GS–5
10. Asst. Director (Adm.), GS–15
11. Asst. Admin. Officer, GS–12
12. Fiscal Acctg. Asst., GS–7
13. Personnel Asst., GS–6
14. Clerk-Typing, GS–5
15. Chauffer, Ungr.
16. Messenger, GS–2*
17. Director, Long Range Planning & Regional Affairs, GS–16
18. Secretary, GS–6
19. Secretary, GS–5
20. Secretary, GS–5*
21. Asst. Director, Comprehensive Planning, GS–15
22. Urban Planner, GS–14
23. Urban Planner, GS–13
24. Urban Planner, GS–12*
25. Urban Planner, GS–9
26. Urban Planner, GS–9
27. Clerk-Steno., GS–5
28. Chief, Regional Affairs, GS-14
29. Urban Planner, GS–12
30. Urban Planner, GS–12
31. Urban Planner, GS–12
32. Clerk-Steno., GS–5
33. Social Science Analyst, GS–14
34. Social Science Analyst, GS–12*
35. Social Science Analyst, GS–9
36. Urban Planner, GS–7
37. Statistical Clerk, GS–5
38. Architect, GS–13
39. Architect, GS–13
40. Urban Planner, GS–9
41. Cartographic Technician, GS–7
42. Cartographic Technician, GS–7
43. Director, Current Planning & Programming, GS–16
44. Administrative Asst., GS–11
45. Secretary, GS–7
46. Secretary, GS–5*
47. Chief, District Planning, GS–14
48. Urban Planner, GS–13*
49. Urban Planner, GS–12
50. Cartographic Technician, GS–7
51. Clerk-Stenographer, GS–5
52. Chief, Federal Planning, GS–14
53. Urban Planner, GS–12
54. Urban Planner, GS–12
55. Urban Planner, GS–12*
56. Illustrator, GS–5
57. Clerk-Steno., GS–5
58. Asst. Director, Urban Renewal, GS–15
59. Urban Planner, GS–14
60. Urban Planner, GS–11*
61. Planning Aide, GS–9
62. Engineering Draftsman, GS–5
63. Secretary, GS–6
64. Civil Engineer, GS–14
65. Transportation Planner, GS–12*
66. Urban Planner, GS–14
67. Architect, GS–13
68. Landscape Architect, GS–12
69. Project Designer, GS–11*
70. Illustrator, GS–11
71. Architect, GS–7

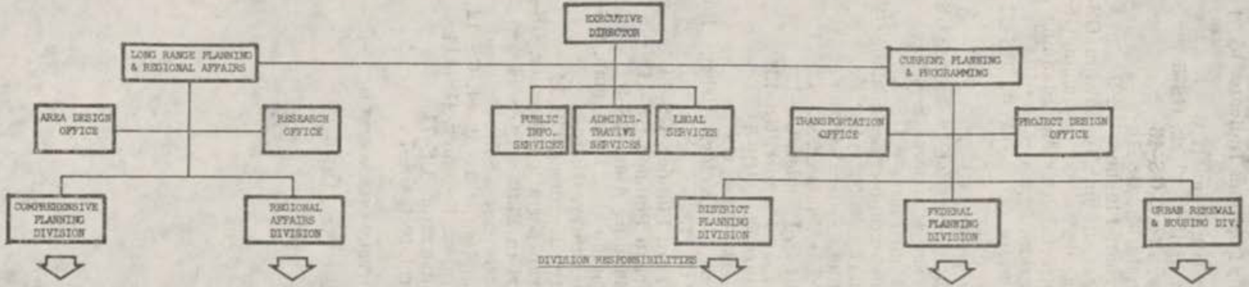
TEMPORARY COMMISSION ON PENNYSLVANIA AVENUE

72. Administrative Officer, GS–12
73. Architect, GS–13
74. Secretary, GS–6

Proposed new positions total 10.

NATIONAL CAPITAL PLANNING COMMISSION

STAFF ORGANIZATION


EXECUTIVE DIRECTOR
LONG RANGE PLANNING & REGIONAL AFFAIRS
CURRENT PLANNING & PROGRAMMING
AREA DESIGN OFFICE
RESEARCH OFFICE
PUBLIC INFO. SERVICES
ADMINIS-TRATIVE SERVICES
LEGAL SERVICES
TRANSPORTATION OFFICE
PROJECT DESIGN OFFICE
COMPREHENSIVE PLANNING DIVISION
REGIONAL AFFAIRS DIVISION
DISTRICT PLANNING DIVISION
FEDERAL PLANNING DIVISION
URBAN RENEWAL & HOUSING DIV.

DIVISION RESPONSIBILITIES

1. Preparation of modifications to the Comprehensive Plan and Development Program for the District of Columbia.
2. Preparation of modifications to the Year 2000 Policies Plan for NCR.
3. Review and evaluation of District and Federal projects and programs to determine their conformance to the Comprehensive Plan for the District of Columbia.
4. Staff services and studies aimed at the timely implementation of the Comprehensive Plan and the Year 2000 Plan.
5. Special planning and design studies related to the preparation of planning district and subdistrict plans within the District of Columbia.

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1. Regional review and coordination of Federal and District projects located outside of the District of Columbia.
2. Liaison and coordination of the Federal interest in the planning of the National Capital Region with the M. W. Council of Governments, local and subregional governing bodies and planning agencies.
3. Preparation of a long-range Federal public improvements program for the National Capital Region in coordination with State and local programs of land acquisition and construction in the region.
4. Review of local, regional, and subregional plans and programs in order to evaluate their impact on Federal establishments in the National Capital Region.
5. Assist the Comprehensive Planning and Federal Planning Divisions in preparing long range Federal employment plans and programs.

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1. Review of the Annual Capital Budget of the District of Columbia, and assistance in the preparation and the review of the District's Five-Year Public Improvements Program.
2. Review of District Site and Building Plans for Individual Construction projects.
3. Preparation of and/or the review of proposed zoning changes, membership on the Zoning Advisory Council and the Board of Zoning Adjustment, review of large scale planned developments under Article 75 of the District zoning regulations and propose or review amendments or changes to the District subdivision regulations.
4. Review of proposed street and alley closings and proposed transfers of jurisdictions between Federal and/or District agencies within the District of Columbia.
5. Assist the Comprehensive Planning Division in the review of the long range development program for the District of Columbia as part of the Comprehensive Plan.

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1. Review of Fiscal Year and Five-Year programs prepared by Federal agencies and departments responsible for land acquisition and construction -- including the review of the General Services Administration's Ten-Year Federal Building Program.
2. Review of Site and Building Plans for individual Federal Projects and Master Plans for Federal installations within the National Capital Region.
3. Preparation of, and updating of, the Federal Inventory Studies.
4. Review of plans for the park, parkway, and playground system for the National Capital, including the George Washington Memorial Parkway and stream valley park programs in Maryland and Virginia under the Capper-Cramton Act.
5. With the assistance of the Regional Affairs Division, responsible for the preparation of long-range Federal employment plans and programs.
6. Assist the Comprehensive Planning Diyision in the Federal employment portions of the Comprehensive Plan for the District of Columbia.

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1. Preparation and/or review of Urban Renewal Plans and modifications thereto, including the review of proposed boundaries and plans for Title I-- assist code enforcement projects in the District of Columbia.
2. Site selection studies and the review of the general location and site development plans for low-rent public housing.
3. Annual review and revisions to the District's Community Renewal Program.
4. Responsible for preparing the planning portion of the annual Program for Community Improvement (Workable Program) in conjunction with the District Government.
5. Responsible for preparing a housing program for the District of Columbia in cooperation with the Research Office and the Comprehensive Planning Division.

December 1966

NATIONAL CAPITAL PLANNING COMMISSION FISCAL YEAR 1968
APPROPRIATION ESTIMATES

PROGRAM AND PERFORMANCE

The Congress established the National Capital Planning Commission in 1952 to succeed the National Capital Park and Planning Commission.[1] The purpose of the Act establishing the Commission is "to secure comprehensive planning for the physical development of the National Capital and its environs—and to establish the agency and procedures requisite to the administration of the functions of the Federal and District of Columbia Governments related to such planning."

The general objective of the Act is "to enable appropriate agencies to plan for the development of the Federal Establishment at the seat of Government in a manner consistent with the nature and function of the National Capital." To this end the Commission is directed "to plan the appropriate and orderly development and redevelopment of the National Capital and conservation of the important natural and historic features thereof."

Provisions of other laws—especially the zoning enabling act for the District of Columbia and the District of Columbia Redevelopment Act of 1945, as amended—place significant additional responsibilities upon the Commission.

In accordance with the National Capital Planning Act of 1952, the District of Columbia Redevelopment Act of 1945, as amended, and various other acts of Congress,[2] the Planning Commission serves two basic responsibilities. It is "created and designated as the central planning agency for the Federal and District Governments." Thus, it is both a municipal planning agency and the responsible agency for representing the Federal interest in the growth and development of the National Capital Region.

The National Capital Region as defined in the National Capital Planning Act of 1952 consists of the District of Columbia, Montgomery and Prince Georges Counties in Maryland; Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia; and all cities existing in Maryland and Virginia within the National Capital Region.

ORGANIZATION AND ROLE OF COMMISSION

The Commission is composed of five eminent citizens appointed by the President (serving without pay); six ex-officio members from executive agencies (the Chief of Engineers of the Army, the Engineer Commissioner of the District of Columbia, the Director of the National Park Service, the Commissioner of Public Buildings, the Federal Highway Administrator, and the Administrator of the National Capital Transportation Agency), and the Chairman of the Committees on the District of Columbia of the Senate and the House of Representatives.

The Commission meets in monthly formal sessions throughout the year and provides policy guidance for, and basic coordination between, the development programs in the District and the Region of District and Federal agencies. This coordination is enhanced by having members from the six Federal and District agencies on the Commission.

There are six standing committees which meet regularly prior to Commission meetings. In addition an Executive Committee meets when necessary. These meetings average more than 20 hours during the first week of each month. The Committees review technical studies, receive recommendations of the staff, and prepare committee recommendations to the Commission.

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[1] The National Capital Park and Planning Commission was established initially in 1924 as the National Capital Park Commission.

[2] Other legislation containing significant Commission functions:
Act of June 12, 1934 (48 Stat. 931) (Public housing plans).
Act of March 2, 1893 (27 Stat. 532), as amended, (Permanent System of Highways Plan).
Act of December 15, 1932 (47 Stat. 747) (street and alley closings).
District of Columbia Motor Vehicle Parking Facility Act of 1942 (56 Stat. 90), as amended, (public off-street parking facilities).
Act of June 20, 1938 (52 Stat. 802) (zoning regulations).
Act of May 20, 1932 (47 Stat. 161) (transfers of jurisdiction).
Act of August 5, 1939 (53 Stat. 1211) (surplus public property in the District of Columbia).
Act of May 29, 1930 (46 Stat. 482), as amended, (National Capital park, parkway and playground system).

Professional Staff

The Commission employs a highly-trained professional staff to perform technical studies and prepare recommendations for and maintain records of its meetings, to carry out general and special urban planning studies, to prepare background information on matters which are to come before the Commission, and to carry out policies, instructions and programs of the Commission.

The staff participates actively in many coordinating groups, maintains liaison with numerous official agencies and conducts an active community relations program in order to effectuate the Commission's program.

Special experts are retained on occasion to use their competence on particularly important problems.

Studies in urban renewal are carried out in part with funds received from District agencies.

An official NCPC Coordinating Committee meets twice monthly to bring together representatives of many District, Federal, and neighboring jurisdiction agencies to coordinate the review, study, and comment on major building and development projects within the District of Columbia, as well as routine review actions required by legal statutes. It also is used to test new projects in relation to the Comprehensive Plan and desirable planning practices.

The Coordinating Committee is composed of representatives from various departments of the District of Columbia Government, National Park Service, Corps of Engineers, Public Buildings Service, National Capital Planning Commission Staff, National Capital Transportation Agency and optional members when necessary from Redevelopment Land Agency, Architect of the Capitol, National Housing Authority, Commission of Fine Arts, Maryland-National Capital Park and Planning Commission and Arlington County Office of Planning.

PROGRAM AND ORGANIZATION OF THE NATIONAL CAPITAL PLANNING COMMISSION

I. OFFICE OF THE EXECUTIVE DIRECTOR

The staff activities of the Commission are directed by professional urban planners. An Executive Director and two Directors constitute the supervisory personnel of the Executive Director's office. The Executive Director is responsible for all administrative functions, not specifically reserved for the Chairman as head of the agency, and for all professional work of the staff.

This office formulates policy proposals on technical matters to present to the Commission; represents the Commission in carrying out its policies and programs; and supervisors, coordinates, and reviews the work of the staff. The office provides staff leadership and direction to ensure that the professional program offers appropriate guidance to the community in urban planning and urban design.

The Administrative, Legal and Public Information Services are also a part of the Office of the Executive Director.

A. Administrative Services

Since the Commission exists as an independent agency, all duties and functions required of a Federal agency are carried out by its own staff. Staff is required to administer financial management, budget preparation and control, personnel, payroll, records and space management, property records and accountability, and general administrative routines.

The need has been apparent for several years for a position of messenger, GS-2, to provide service within the office, between various offices with which we deal, and as an alternate driver to the chauffeur when he is absent on leave. The need for this position became acute when the Commission's offices were relocated August 1, 1966, because the office space is divided into three separate units on two floors, requiring frequent distributiton of material.

B. Legal Services, Commission Secretariat

The Office of the General Counsel and Secretary performs the following activities for the Commission:

1. Serves as official secretariat for the Commission and its several committees at their monthly meetings.
2. Provides legal services on matters of agency administration.
3. Serves as Legislative Counsel in review of proposed and pending legislation coming under the Commission's purview, in the preparation of Congressional testimony, and in statutory drafting.

C. Public Information Services

The public information services perform the following activities for the Commission:

1. Editing and writing publications and reports of the Commission.
2. Providing information on Commission's policies and activities to the press, community and foreign visitors.
3. Arranging meetings and presentations in conjunction with Commission programs with other agencies and the public.

II. PLANNING DIVISIONS

The overall objective of the planning divisions is to assist the Commission in directing the growth and development of the District of Columbia and to represent the federal interest in the planning and development of the metropolitan area.

The major program objectives for Fiscal Year 1968 will consist of methods to carry out the newly adopted Comprehensive Plan for the National Capital. Such standard administrative devices as zoning, subdivision control and capital improvement programming will be evaluated in light of the adopted comprehensive plan recommendations. New methods for plan execution within current or new legislation will be explored in order to establish a more effective planned growth and development within the Nation's Capital.

In order to fulfill the purpose and functions of the Commission, the professional staff is assigned into two basic groupings:

Long-range Planning and Regional Affairs, and
Current Planning and Programming.

A. Long-range Planning and Regional Affairs

The function of this portion of the staff is to determine what kind of city the District of Columbia should be in the future and how the suburban and regional planning efforts affect the federal interest in the metropolitan area. The responsibilities of these functions are divided between the Comprehensive Planning Division and the Regional Affairs Division, supported by the Offices of Research and Area Design.

1. Comprehensive Planning Division

The duties and responsibilities of this divison are indicated on the table of organization, supra.

The workload for this division is diveded between two main elements: the Commission's responsibility for developing and maintaining the Comprehensive Plan for the National Capital, and the application of general plan concepts to current projects through the continuing referral process.

The process of comprehensive planning will not cease with the publication of the plan. One of the key purposes of the Comprehensive Plan for the National Capital is (its development program) to serve as the basis for the orderly coordination of public works scheduled for the District of Columbia during the next two decades. As such, this initiates a process of long-range programming which will be continually subject to review and up-dating. Formulation of the initial 20-year development program objectives as they have been incorporated in the plan is scheduled for up-dating and continuous review in FY 1968.

a. *Program for FY 68–72.*—Following the Commission's adoption of its new 20-year plan for Washington, now scheduled for the latter part of 1967, the five-year period beginning with FY 68 should be one of plan refinement accompanied by a continuing dialogue with the community which itself may be expected to contribute concepts and specific projects.

i. It is the Commission's intent to up-date its 20-year plan for Washington every five years. Accordingly, a major assignment of the Comprehensive Planning Division during the five-year period beginning with Fiscal Year 1968 will be that of contributing to the preparation of a plan for Washington looking toward the 1990 decade.

ii. During this same period, the Division will have the assignment of translating the 20-year plan objectives into more immediate guides in the development of the city, as sets of objectives for the next five years, and as specific programs to be achieved year-by-year.

b. *Direct Application of the Comprehensive Plan FY 1968.*—i. Within the context established by the Comprehensive Plan, as adopted, this Division's work-program will call for initiating a series of area studies detailing the adopted plan. Comprehensive plan concepts will be extended to a more refined level including the detailing of neighborhood plans and working with citizen groups in translating plan objectives into specific private investment opportunities. This will include work on the following areas of the city.

(1) City-area sections: Central employment area near North Capitol East Anacostia.

(2) City-plan elements: housing, transportation, commercial.

(3) Design concepts: Capital Hill, Buzzards Point, Anacostia Park, New York Avenue corridor/bluff, uptown center series, special street series, school campus series.

(4) Publications: plan report supplements.

ii. The series of 40-year (long range) outlook studies (population, economics) to initiate the process of the Year 2010 Plan preparation should be up-dated within FY 1968.

iii. A comprehensive plan is effective only to the degree to which it is used as a guide to public and private development action. In addition to the above mentioned area studies and special-purpose reports detailing the plan, the following steps must be initiated during Fiscal Year 1968 to implement the adopted general plan:

(1) Participating in a joint study of the revision of the District zoning ordinance as a result of the adopted plan.

(2) Strengthening the six-year capital improvements program review process to include all District and Federal capital projects within the District.

(3) Exploring and developing new methods and techniques for carrying out the intent and purposes of the adopted plan.

(4) Reviewing the legislative and other regulatory machinery required to implement the adopted plan and, if necessary, prepare recommendations to improve regulatory methods.

iv. Among supporting systems and component studies and actions, the highest priority will be given to housing and basic transportation systems. Close liaison with other public agencies and community organizations to further the understanding of plan objectives and to identify circumstances requiring reconsideration of plan objectives.

c. *FY 1698 Staff Increase—Comprehensive Planning Division.*—In order to carry out the responsibilities of this Division and undertake the special studies necessary during Fiscal Year 1968, one additional Urban Planner (GS–12) is requested.

2. *Regional Affairs Division*

The Regional Affairs Division was established during Fiscal Year 1967 as a result of the Presidential Reorganization Plan No. 5 of 1966, which stated:

"The reorganization plan will not alter the basic responsibilities of the National Capital Planning Commission. That Commission will continue to represent the Federal interest in the planning and development of the Region. Indeed, its work should increase as comprehensive regional planning by the Council of Governments is accelerated. In accord with the reorganization plan, the Commission will work closely with the Council of Governments in regional planning. The Commission will also deal directly with the suburban jurisdictions and assume the liaison functions now exercised by the National Capital Regional Planning Council."

The responsibilities and functions of this division are derived from the Planning Act of 1952 and include the following:

a. Regional review and coordination of Federal and District projects located outside of the District of Columbia.

b. Liaison and coordination of the Federal interest in the planning of the National Capital Region with the Metropolitan Washington Council of Governments, local and sub-regional governing bodies, and planning agencies.

c. Preparation of a long-range Federal public improvements program for the National Capital Region in coordination with the Federal Planning Division.

d. Review of local, regional, and sub-regional plans and programs in order to evaluate their impact on Federal establishments in the National Capital Region.

e. Assistance to the Comprehensive Planning and Federal Planning Division in preparing long-range Federal employment plans and programs.

f. The work of this division for Fiscal Year 1967 will consist of the following:

i. Federal Interests in the Region: The interest of the Federal Government in the development of the National Capital Region is apparent. It was stated by the 86th Congress in the Washington Metropolitan Region Development Act (74 Stat. 224). It was also the subject of a memorandum by President John F. Kennedy on November 27, 1962 to the Executive Agencies setting forth a number of development policies as a guide for those agencies.

There is a need to identify further and define more precisely the nature of this interest. While it pertains to the basic character of the District and Region which is the seat of the National Government, it also must be spelled out in terms of efficiency and conduct of each of the units of the Government and their requirements for physical facilities and an appropriate environment.

(1) This division will continually review all published local, sub-regional and regional plans to identify the Federal interest in the National Capital Region and to assure its achievement.

(2) The National Capital Region is divided into 93 major planning districts. To date 41 current plans have been published, 20 adopted. During Fiscal Year 1968 it is estimated that 28 more plans will be proposed requiring review.

ii. Regional review and coordination: To accomplish the regional review of Federal master development plans and projects, as required by the Planning Act of 1952, this division works directly with each of the suburban jurisdictions. As the new regional comprehensive planning organization, the Metropolitan Washington Council of Governments, proceeds on its planning efforts, this division will need to coordinate the regional Federal planning interests and programs with COG's program, as well as to coordinate COG's regional program with the central city's planning work. Continuous close liaison with MWCOG will be essential.

It is suggested that this division, in conjunction with the Federal Projects Division, is in a most favorable position to provide an effective exchange of planning and development information between the Federal Government and the local planning jurisdictions. This type of area-wide development coordination, geared with MWCOG's comprehensive planning program, will be a continuing responsibility of this division.

iii. Regional Open Space Program: (1) Work will continue (with MWCOG) on an action program for the selection and acquisition of open space within the National Capital Region. Following the adoption by the National Capital Planning Commission of a "General Procedure for the Selection of Sites for New Federal Facilities in the National Capital Region," the staff established a current inventory of available sites. The Division will maintain sufficient information on the planned highway and transit routes and construction programs, the growth of other Federal facilities planned in the area, and the pattern of growth of residential areas within the region to allow the intelligent comparison and selection of sites.

(2) The Division also will promote adidtional open space research and education. Working with such groups as MWCOG, the Washington Center for Metropolitan Studies and the Conservation Foundation, research projects on the benefit per cost problem of obtaining and maintaining the large low-density wedges and knowledge of the future recreation needs and demands should be initiated.

(3) The Division will continue the educational program on the advantages and possibilities of open space preservation by the use of easements and demonstrate this in selected geographic areas. This educational program logically precedes an easement acquisition or donation program. The Commission would promote through MWCOG and the subregional agencies efforts to locate and purchase critical areas where development pressures may threaten needed open spaces deemed important to local, sub-regional, and regional program. Such a program would utilize the inventory of available sites and the priority designation information already completed.

iv. Federal Capital Improvements Program for the National Capital Region: As the strongest method for effective coordination and plan implementation, a framework for Federal Capital Improvements Programming (on a six-year continuing basis) should be worked out to include capital expenditures of all Federal departments and agencies.

In this framework, a total regional capital improvements program should be developed by MWCOG which would be revised and updated each year for the projected next six years effective coordination can be established in relation to:

(1) Local capital requirements.
(2) Impact on region and local areas.
(3) Federal sites and needs in the region.
(4) Advanced land acquisition or reservation of needed sites.
(5) Reduction of duplication of regional facilities.
(6) Employment growth and distribution.
(7) Timing of Federal development in keeping with local needs and ability to support developments.

Such a Federal capital improvements program would provide the best single programming device for coordinated growth and development in the Region.

g. *Fiscal Year 1968 Request—Regional Affairs Division.*—Due to the Reorganization Plan and the reassignment of staff, no increase is requested for this division for FY 1968. Existing staff of this division can perform the proposed work.

3. Office of Area Design

The major functions and responsibilities of this office are as follows:

a. Advice and technical urban design assistance to the Comprehensive Planning and Regional Affairs Division in the design review of area-wide programs submitted to the Commission and/or long-range studies by these divisions.

b. Preparation of special area-wide design studies and/or area-wide plans, as requested by the Commission.

c. Participate in the review and evaluation of special area-wide studies undertaken by third-party consultants to the Commission, and supervise or direct such studies where required.

The Area Design Office is primarily concerned with area site design studies in connection with general plans and with prototype feasibility studies for the Landmark presentation program.

d. Typical Area Design Office Performance FY 1966-1967.
  i. All area design studies of 1985 Plan.
  ii. South Capitol Street area.
  iii. National Training School for Boys area.
  iv. Union Station Transportation Terminal and Visitors Center.
  v. Judiciary Square and vicinity.
  vi. Mt. Vernon Square and vicinity.

e. Proposed FY 1968 typical area design studies.
  i. Development plan for Capitol Hill area.
  ii. Phase II of *Comprehensive Landscape Plan* for city.
  iii. Identification and descriptions of *The District Communities of Washington* from an urban design point of view.
  iv. Brookland-Eckington uptown center design.
  v. Neighborhood design plan for Columbia Heights and adjacent areas.

f. *Fiscal Year 1968 request—Office of Area Design.*—Existing staff of this office can perform the proposed work.

4. Office of Research

The major functions and responsibilities of this office are as follows:

a. To provide the necessary planning research data and information to assist all divisions in their assigned duties.

b. To initiate special research studies as requested or programmed by the Commission.

c. To participate in the review and evaluation of special studies undertaken by third-party consultants with respect to the population, economic, social, and community facilities aspects of the Commission's work.

The Office of Research is substantially but not entirely a support operation to the other divisions. As the work of the agency expands, the assignment requests made of this office can be expected to increase.

d. *Typical work performance during Fiscal Year 1967.*—During Fiscal Year 1967 this office published "Problems of Housing People in Washington, D.C." a special report to the community. Among other assignments are included the following:

Cardozo Ecology Study
Housing Proposals Survey
Housing Programs Study
Population and Education Studies

In addition, this office continually provides public information services to citizen groups and public or private agencies and organizations in the city.

e. *Fiscal Year 1968 staff increase requested.*—In response to the increasing emphasis and need of research from all divisions and the commission itself, one Social Science Analyst position (GS–12) is needed and requested for the Office of Research.

B. Current Planning and Programming

The current planning and programming activities of the Commission include the District, Federal and Urban Renewal Planning Divisions and the Offices of Project Design and Transportation Planning.

The duties and responsibilities of these divisions are summarized on the table of organization chart, supra.

1. District Planning Division

This Division carries out a major part of the Planning Commission's role as the planning agency for the District Government, as set forth in the National Capital Planning Act of 1952. The District Division's major responsibilities and workloads are as follows:

a. *One and Six-Year Public Works Programs.*—Section 7 of the Planning Act states that "the Commission shall recommend a six-year program of public works projects which it shall review annually with the agencies concerned. To this end each Federal agency and the Board of Commissioners of the District of Columbia shall submit to the Commission in the first quarter of each fiscal year a copy of its advance program of capital improvements within the National Capital and its environs."

During the past several years, the amount of time that has been required for an adequate review of this program has consistently increased. With the completion of the 1985 Comprehensive Plan during Fiscal Year 1967, the Commission will be better able to review and evaluate the proposed projects and their recommended priority and scheduling within the framework of a long-range plan and program for the physical development and redevelopment of the Cty of Washington. More emphasis will, therefore, be given to this function of the Commission than in the past.

b. *Current District Land Acquisition and development plans.*—In accord with Section 5 of the National Capital Planning Commission Act of 1952, as amended, the Commission reviews the general location of proposed District buildings and facilities, and the preliminary and final site and building plans for the District projects within the National Capital Planning Commission.

The Commission's activities under this Section of the Act are to be consistently extended in Fiscal Year 1967 and 1968 as a result of a recent agreement with the District of Columbia Government that all such projects would be submitted for Commission review in the future. As indicated below, an additional staff person will be needed, and is requested, to assist in the review of such project submissions in Fiscal Year 1968.

c. *Zoning Referrals and Recommendations.*—Section 8 of the Planning Act sets forth the functions of the Commission with respect to zoning and subdivision regulations in the District. Section 8(a) provides: "The Commission may make a report and recommendation to the Zoning Commission of the District of Columbia on proposed amendments of the zoning regulations and maps as to the relation or conformity of such amendments with the comprehensive plan of the District of Columbia. The Commission may also submit to the said Zoning Commission proposed amendments or general revisions to the zoning regulations or the zoning map for said District."

There are a number of provisions of the Zoning Regulations which require referral to and a report from the Planning Commission, either to the Zoning Commission or the Board of Zoning Adjustment, prior to action being taken. Among the more significant of these are proposed Group Development Plans for sites 1½ acres or more in size. Each case requires meetings with those interested in the matter including archtiects, university representatives, builders, attorneys, citizens' organizations, and representatives of the District Government. It requires writing or aiding in the writing of new regulations, reporting to the Planning Commission, and presenting the Commission's recommendations at public hearings.

With the completion of the 1985 Comprehensive Plan it is anticipated that many additional recommendations will be made since zoning is the principal control available in realizing the land use proposals of the plan.

In addition, the Division will participate actively in the special zoning study to be undertaken jointly by the Commission and the Zoning Commission as previously mentioned.

d. *Zoning Advisory Council.*—Section 5 of this Act creates a Zoning Advisory Council, one member of which shall be a representative of the Planning Commission. The Act states that "no amendment of any zoning regulation or map shall be adopted by the Zoning Commission unless and until such amendment be first submitted to said Zoning Advisory Council and the opinion or report of such Council thereon shall have been received by the Commission".

As a member of this Council representing the Commission, the Chief of the District Division in Fiscal Year 1966 participated in the review of 173 proposed amendments to the zoning maps and regulations. Each case requires an inspection visit to the site, writing, with other Council members, a report to the Zoning Commission, and attendance at the public hearing and at the executive meeting of the Zoning Commission, this year 16 executive sessions and 13 public hearings were held.

e. *Board of Zoning Adjustment.*—Section 8 of the Act creates a Board of Zoning Adjustment, one member of which shall be a member of the Planning Commission or its staff, designated by the Commission and appointed by the Commissioners of the District of Columbia. The Chief of this Division represents the Commission on the Board. The Board holds hearings once a month on exceptions and variances to the Zoning Regulations. The Board over the past several years has heard the average 45–50 appeals a month. During the past year the Board heard 556 appeals, at thirteen public hearings. This number was an increase of 80 appeals over the previous year. Appeals often require an inspection visit to the site. Every appeal involves a check against other programs of the Commission, attendance at public hearing, review of briefs submitted by applicants, and aiding in the writing of orders granting or denying each case.

f. *Subdivision regulations.*—The District of Columbia is currently reviewing the existing subdivision regulations with the object of revising them. The Chief of this Division is a member of the Committee established by the District Commissioners to undertake this review.

g. *Additional functions of the Division are.*—

i. Street and Alley Closings: The Commission makes recommendations to the District Commissioners on proposed street and alley closings. There were 49 such closing actions investigated and acted upon in FY 1965.

ii. Changes in the D.C. Highway Plan: Planning Commission approval is required for all changes in the "Permanent System of Highways Plan." Two such changes were processed in FY 1965.

iii. Transfers of Jurisdiction: The Planning Commission approves all transfers of jurisdiction over properties within the District of Columbia owned by the United States among and between Federal and District authorities. There were 23 such transfers investigated and acted upon in FY 1965.

iv. Sale of surplus land: Commission approval is required for all sales of District owned land which the District Commissioners and the National Capital Planning Commission find to be no longer required for public purposes.

h. *Fiscal Year 1968 Request.*—In order to properly review and evaluate the proposed general location of, and the preliminary and final site and building plans for District building projects, an additional staff person is required, therefore, a position as Architect-Planner (GS-13) is requested in Fiscal Year 1968.

2. *Federal Planning Division*

This division carries out a major portion of the Commission's responsibilities in regard to projects and developments of the various executive departments and independent agencies of the Federal Government in the National Capital Region under the National Capital Planning Act of 1952. The activities of this division include the following:

a. *Current Federal Land Acquisition Development Plans and Programs.*—The Commission reviews budget proposals, general location proposals for Federal buildings and facilities, preliminary and final site and building plans, monuments and memorials, National Capital Park, Parkway and Playground Plans, and Stream Valley Park Plans and Programs.

i. Fiscal Year and 5-Year Programs: In Fiscal Year 1965, the Commission reviewed and took action on 16 budget proposals. No five-year public works programs were submitted for Commission activity that year. In Fiscal Year 1966, the Commission reviewed and made recommendations on 28 budget proposals and two five-year public improvement programs submitted by Federal agencies. It is anticipated that this activity of the Division will continue to increase.

ii. General Location, Site and Building Plans: In Fiscal Year 1965 the Commission reviewed and approved 31 such submissions. In Fiscal Year 1966, 63 project submissions were reviewed and approved, representing an increased work load of more than 100% in this activity of the Division.

iii. Park, Parkway and Playground System: In Fiscal Year 1965, the Commission reviewed and took action on seven park projects relating to these programs. In Fiscal Year 1966, six projects were acted upon by the Commission.

b. *Long-Range Federal Land Acquisition and Development Plans and Programs.*—The Commission reviews five-year construction programs and master plans for the various Federal facilities and installations in the National Capital Region. In Fiscal Year 1965 the Commission reviewed and approved four master plans for Federal installations. In Fiscal Year 1966, eight master plans were reviewed and approved, representing an increased work load of 100% in this activity of the Commission. It is anticipated that the work load related to the review of Master Plans and proposed modifications to approved plans will continue to increase rapidly.

c. *Site Utilization Studies of Federal Installations and Facilities.*—In response to a request from the Bureau of the Budget and, as a part of the Commission's continuing master planning studies, the division is reviewing existing Federal land holdings in the District of Columbia and in Virginia and Maryland within the National Capital Region, as a basis for recommendations on the future use of these sites.

d. *Participation in the Preparation of the 1985 Comprehensive Plan.*—The division, in conjunction with the Comprehensive Planning Division, is in the process of developing a long-range plan and program for Federal employment in the National Capital Region. The policy and program recommendations resulting from this study are to be a part of the Commission's 1985 Comprehensive Plan for the National Capital.

A technical report incorporating the detailed proposals and recommendations of the Federal Employment Plan and Program is to be completed early in Fiscal Year 1967. This will mark the first time the Commission has had such a detailed program, and it is important that it be kept up-to-date and made a useful, effective guide to evolving Federal land acquisition and development programs.

e. Preparation of a long-range Federal public improvements program for the National Capital Region in coordination with the Regional Affairs Division.

f. *Fiscal Year 1968 Request.*—With Commission approval of a Federal Employment Plan and Program for the National Capital Region expected in Fiscal Year 1967 it is important that it be kept current, updated and extended on a systematic basis in keeping with day-to-day decisions and developments in the National Capital Region. A full-time permanent staff person is required to do this and to aid in the preparation of a Federal public improvements program for the National Capital Region. Therefore, a new program-planner position (GS-12) is requested as a part of the Fiscal Year 1968 budget.

3. Urban Renewal and Housing Division

The principal activities and responsibilities of this Division are the preparation of urban renewal plans or modifications thereto, the review of proposed low-income housing sites and development plans, participation in the continuing review and revisions to the District's Community Renewal Program and special renewal related studies.

a. *Preparation of Urban Renewal Plans.*—The Commission, in cooperation with the District of Columbia Redevelopment Land Agency, prepares urban renewal plans for the adoption of the Commission and for the approval of the Board of Commissioners of the District of Columbia. The execution of these plans is the responsibility of the Redevelopment Land Agency. The preparation of these plans is usually done by special staff personnel recruited by the Commission for this purpose with funds provided by RLA under the provisions of the District of Columbia Redevolpment Act of 1945, as amended, and Title I of the Housing Act of 1949, as amended. This work is carried out under the direction and supervision of the Urban Renewal Planning Division with general supervision and technical and administrative services furnished by the permanent staff of the Commission from appropriated funds.

i. *Anacostia-Bolling:* The Commission, assisted by consultants on major technical problems, began detailed planning studies for this project under contract with the Redevelopment Land Agency during Fiscal Year 1965. The planning budget calls for an estimated $120,000 to be spent during Fiscal Year 1966, Fiscal Year 1967, and Fiscal Year 1968.

It is expected that an Urban Renewal Plan for the development of those portions of the area which are excess to the needs for the Department of Defense will be completed during Fiscal Year 1967. During Fiscal Year 1966, General Planning and Design Objectives, including the allocation of land to various uses and the relationship of the Project Area to adjoining uses and areas, were formulated as a guide to the preparation of the urban renewal plan. During project planning, the staff of the Division is required to work closely with the staff of the Federal Planning Division, the Comprehensive Planning Division, and planners for the Department of Defense who are responsible for the preparation of the Master Plan for the Bolling-Anacostia Cantonment Area, approved by the Planning Commission during Fiscal Year 1966, and for the development of a Defense Office Building.

ii. *Shaw School:* During Fiscal Year 1966, the Planning Commission adopted urban renewal boundaries for planning purposes for the Shaw School Urban Renewal Area. The Redevelopment Land Agency has prepared and submitted an application to the Department of Housing and Urban Development for a planning advance which is expected to be approved in early Fiscal Year 1967.

It is expected that the Commission will begin detailed planning studies for this project under contract with the Redevelopment Land Agency during the early part of Fiscal Year 1967. The planning budget calls for about $160,000 to be expended during Fiscal Year 1967 and Fiscal Year 1968.

It is expected that the Urban Renewal Plan and supporting documentation prepared by the Commission staff will be completed during Fiscal Year 1968 with the major portion of the work being accomplished during Fiscal Year 1967.

iii. Downtown: The preparation of a Feasibility Study of the Downtown Area, as a result of the passage of enabling legislation in Fiscal Year 1966, is the start of the renewal process there. The Commission anticipates starting detailed planning studies for the Feasibility Study under a contract with the Redevelopment Land Agency early in Fiscal Year 1967. The work is being undertaken with an estimated budget of $50,000 to be expended during Fiscal Year 1967 and Fiscal Year 1968.

During Fiscal Year 1967, the Commission will report on environmental conditions and public facilities, conduct surveys to identify buildings of significant historic or aesthetic value and classify them as to importance. The Commission is to participate with the Agency and its consultants in the evaluation of the consultants work, preparation of an Illustrative Development Concept and proposals for public action to eliminate and prevent recurrence of blight and determination of the extent to which urban renewal action would be feasible.

b. *Proposed Urban Renewal Activities.*—The regular staff of the Division is also responsible for reviewing proposals for possible future urban renewal projects, for undertaking and/or assisting in urban renewal feasibility studies and, within the framework of the *Comprehensive Plan for the National Capital* and Community Renewal Program studies, initiating and recommending specific urban renewal proposals for consideration by the Commission and the District Commissioners. Studies of this nature in the past have been initiated by the Commission or have been undertaken in response to requests by the District of Columbia, the Redevelopment Land Agency, or other groups or institutions.

i. Community Renewal Program: During Fiscal Year 1966, the Commission staff that is preparing portions of the Community Renewal Program with funds supplied under an agreement with the District of Columbia Government completed a staff report, *The Physical Development Proposals for the Community Renewal Program, Washington, D.C.* This constitutes a major technical contribution to the final recommendations to the District of Columbia Government on a Community Renewal Program for the Nation's Capital.

During the early part of Fiscal Year 1967, the Commission staff will assist in revisions and modifications of the CRP as a result of review by the Department of Housing and Urban Development and the District of Columbia Government. After approval of the Community Renewal Program, the permanent staff of the Urban Renewal and Housing Division will participate with other agencies and the District of Columbia Government in the annual review and revision of the CRP as new data become available and implementation of its proposals proceeds, so that a long-range Community Renewal Program can be maintained in the future. The staff will also be involved in the preparation of a 6-year housing program in conjunction with the District of Columbia Government. This will constitute an addition to the workload of the Division in Fiscal Year 1968.

ii. Special Area Studies: The Division staff has continuing responsibility for preliminary planning or eligibility studes n potential urban renewal areas in various parts of the Districts. The number and kinds of areas currently under consideration indicates an expansion of the Division's workload in Fiscal Year 1967 and Fiscal Year 1968.

(1) National Training School for Boys Site: The use of the urban renewal process as the most appropriate and effective means of replanning and disposing of all or major portions of this site is now under study by the District of Columbia Government, the Redevelopment Land Agency and the Commission.

In the event that this approach is adopted by the District and Federal Governments, the Commission—with funds supplied by the Redevelopment Land Agency—could begin preparation of the urban renewal plan in Fiscal Year 1967 and complete it during FY 1968.

(2) Coordinating Renewal and Rapid Transit Programs: Limited studies of the potential development impact of subway station locations on surrounding areas have been initiated by the National Capital Transportation Agency. These stations will exert a significant development potential on surrounding areas and more extensive planning and design studies should be initiated by the Commission in FY 1967 and FY 1968.

In areas of the transit system that are in or near areas that are apparently eligible for urban renewal assistance, the Urban Renewal and Housing Division will investigate the potentials for urban renewal activities as a means of coordinative public and private investment within the framework of an over-all development plan.

These studies will be coordinated with the Transit Development Program and are intended to support that system as well as coordinate its impact. It is anticipated that priority study will be given to the Fourteenth Street and Park Road station and its immediate vicinity.

(3) Howard University Area: The Community Renewal Program and studies leading to the delineation of the Shaw School Urban Renewal Area have also identified the Howard University area and the surrounding Cardozo area as needing attention and having a high priority for future renewal action. In addition, Howard University is contemplating a major expansion and a future development plan and program that will have considerable impact on the surrounding areas. An opportunity exists in the Howard University area, where land has already been acquired or where it is proposed to be acquired for University use for noncash grants-in-aid credits under Section 112 of the Housing Act of 1949, as amended. (It may be desirable to combine these studies with that proposed in the Fourteenth and Park Road area.)

(4) South Capitol Street Area: In order to further the Commission's interest and the Comprehensive Plan recommendations in the South Capitol Street area between the Southwest Expressway and the Anacostia River, an urban renewal feasibility study should be undertaken to determine the feasibility of the general proposals in regard to cost, relocation and the proper methods and techniques for phasing or staging the private and public uses proposed in this strategically located area.

(5) Neighborhood Conservation: In conjunction with recent Community Renewal Program and Comprehensive Plan proposals, the first step to initiate Title I—assisted Concentrated Code Enforcement—one of the major tools to conserve neighborhoods—was taken in Fiscal Year 1967 by the District. This step consisted of preparing an application for a Federal grant to carry out Section 117 (dealing with code enforcement) along with other programs permitted under the Housing Act of 1949, as amended.

The Commission anticipates starting detailed planning studies for the Trinidad area and other areas designated for conservation by the Community Renewal Program. This work will be undertaken with an estimated budget of

$50,000 to be expended during Fiscal Year 1967 and Fiscal Year 1968. These expenditures will be a part of the local one-third share of the total project costs. It is anticipated that the District of Columbia Government will transfer the funds necessary for the Commission to assist in these studies.

During Fiscal Year 1967, the Commission staff will prepare detailed studies on land use, zoning, building, conditions, circulation and potential public housing sites and urban renewal area. Surveys that will be made by the District's Housing Inspection Division, National Capital Housing Authority, Redevelopment Land Agency, etc., will be utilized in formulating specific recommendations to conserve the Trinidad area and other comparable residential neighborhoods. These efforts will be designed to halt the spread of blight in sound neighborhoods, to remove deteriorated and unsafe structures and incompatible land uses and to reduce unnecessary through-traffic.

(6) Demonstration Cities Program: During Fiscal Year 1967, the Commission staff will continue to coordinate with the District of Columbia Government in the preparation of an application for a Demonstration Cities Grant for the District. The scope of this work will be aimed towards describing and defining the priority areas for selected human and physical renewal. These efforts will serve to expedite already defined urban renewal areas and initiate others.

It is anticipated that the Shaw School Urban Renewal Area may become a part of this new program at an early date.

c. *Low-Rent Public Housing Site Development.*—In Fiscal Year 1966, the division staff continued to work with the staff of the National Capital Housing Authority in the review of potential sites for low-rent public housing projects and in the review of development plans for approved sites. Readily available undeveloped sites for public housing in the District of Columbia have now been virtually exhausted. Program authorization exists for approximately 500 units of housing for which appropriate sites have yet to be selected, and further increments will be required to accommodate anticipated displacement from public works and urban renewal. The difficulty of site selection, the probability of an increase in the number of projects, the expected expansion of the scattered site acquisition and rehabilitation program, and the care required to assure the successful physical integration of projects into the existing structure of the city indicate an expansion of the division's workload in Fiscal Year 1968 and beyond.

d. *Activities in Connection with Current Urban Renewal Projects.*—The division staff has a continuing responsibility and workload resulting from the consideration, review and study (and/or the development) of proposed modifications in previously adopted and approved urban renewal plans.

Frequent proposals for plan modifications originate from the Redevelopment Land Agency, property owners in the area involved, potential redevelopers, the District of Columbia Government, or the Commission staff. Staff studies are involved in each case prior to presentation for the Commission's consideration.

Adopted and approved urban renewal plans exist for each of the following areas of the District of Columbia:

i. Southwest B, C, and C–1: During Fiscal Year 1966, the staff of the division reviewed with the Redevelopment Land Agency the Waterfront Plan, particularly traffic circulation through the area. In addition, the staff has continued an intensive review of the remaining undeveloped and uncommitted sites in Southwest to determine the feasibility of constructing additional Federal office buildings there.

ii. Northwest No. 1: Continuing staff study of the Urban Renewal Plan for Northwest Project No. 1, in cooperation with the Redevelopment Land Agency and the District of Columbia Government, has identified a need for minor modifications relating to the development of specific parcels. An amended Plan will be submitted to the Commission in Fiscal Year 1967.

In addition, the need for a new building for the Government Printing Office, will necessitate a reexamination of the area around the present Government Printing Office to determine what, if any, modifications in the Plan may be desirable or necessary. As land disposition proceeds, and proposals from redevelopers are received, additional modifications of the Plan will be needed during Fiscal Year 1967 and Fiscal Year 1968.

iii. Northeast No 1: Continuing staff study, in conjunction with the RLA, will be required as land disposition proceeds in order to evaluate whether the existing Plan is workable in the present market for commercial and industrial land.

iv. Columbia Plaza: Development is underway on the 8.4-acre residential portion of the project, and highway construction on the remaining 5.6 acres is well advanced.

Fiscal Year 1968 Request

In order to strengthen the division's resources to undertake special urban renewal and housing studies of potential future project areas and in order for the Commission to participate effectively in the annual review, and revision of the District's Community Renewal Program, an additional Project Planner (GS-11) is needed and is requested in the Fiscal Year 1968 Project.

4. Office of Project Design

a. The major functions and responsibilities of this office are as follows:

i. Advice and technical assistance to the District, Federal and Urban Renewal Planning Divisions in the design review of projects submitted to the Commission and/or current studies by these divisions.

ii. Initiation and preparation of special design studies and/or plans, as requested or programmed by the Commission.

iii. Participation in the review and evaluation of special studies undertaken by third-party consultants to the Commission. In some cases, supervision and direction of such studies is required.

The Project Design Office is primarily concerned with detailed project and site plans for small areas within the National Capital Region.

Fiscal Year 1968 Request

In response to the increasing needs for special design services in the Urban Renewal and Housing Division and in the Federal Planning Division, an architect-planner (GS-11) position is needed and is requested in Fiscal Year 1968 in the Project Design Office.

5. Office of Transportation Planning

a. The major functions and responsibilities of this office are as follows:

i. Preparation of, and modifications to, the transportation elements of the Comprehensive Plan for Washington, D.C. in conjunction with the Comprehensive Planning Division.

ii. Advice and technical assistance to the District, Federal and Urban Renewal Planning Divisions on the transportation elements of proposed projects, master plans, low-income public housing and urban renewal plans.

iii. Continued liaison with the District of Columbia Department of Highways, the National Capital Transportation Agency, the Washington Metropolitan Area Transportation Commission, the Transportation Planning Board of the Metropolitan Washington Council of Governments and other organizations within the National Capital Region.

iv. Close coordination with the Washington Council of Governments and the Regional Transportation Board in the development of coordinated transportation plans for the District of Columbia and for the National Capital Region, as a whole.

Fiscal Year 1968 Request

In FY 1968, the construction programs of both the District of Columbia Highway and the National Capital Transportation Agency will be at their highest level of activity requiring continual review and Commission approval of detailed design of projects.

Two large urban renewal projects: Downtown and Shaw, will be in the planning stage and will require a considerable amount of participation by the Commission's transportation planner in coordinating the transportation elements of those plans.

Due to the increased need for: (1) an adequate technical review of the transportation element of proposed District and Federal projects in the National Capital Region, and (2) close cooperation by the Commission's technical staff with the Regional Transportation Board and its staff, an assistant transportation planner (GS-12) is required on the staff and is requested in Fiscal Year 1968.

III. SERVICES OF EXPERTS AND CONSULTANTS

The nature of urban growth and change, the rapidity with which it is occurring in Washington and, indeed, the whole National Capital Region, and the necessity to cope with special problems by special efforts lead to the need for selected special programs from time to time and the utilization of specialized insights and experiences. The Commission employs the services of experts on a daily basis or through contract studies when this is to the economy and convenience of the Government.

A. *Major projects performed by experts during Fiscal Year 1966 for the Commission were as follows:*

Robert Gladstone & Associates, population matrices	$2,500
Robert Gladstone & Associates, Eastern Market Study	2,500
Robert Gladstone & Associates, Georgetown Market Study	5,000
Henry M. Bain, Jr., consultation and final drafting of the 1985 comprehensive plan	9,100
Alan M. Voorhees & Associates, District of Columbia residential parking study	4,000
Total	23,100

B. *Projects contemplated for Fiscal Year 1967 are as follows:* D. C. Landscape Plan (part of the Beautification Program), $25,000.

C. *Projects contemplated in Fiscal Year 1968 are as follows:* The projects listed under Fiscal Years 1966 and 1967 could not be anticipated in advance. Those projects that can be anticipated for Fiscal Year 1968 are listed in Section V, *Special Projects.* For use of experts on special programs which are directed by the Commission from time to time and which we cannot anticipate, we are requesting the same amount as allotted in Fiscal Years 1966 and 1967, $25,000.

IV. PUBLICATIONS PROGRAM

A. *Printing requirements for Fiscal Year 1967 include the following major documents:*

Title:

1. Comprehensive Plan for Washington, D.C.

2. Publication of Consultants' Reports.

a. Towards a Comprehensive Landscape Plan for Washington, D.C.

The final report of consultants Wallace & McHarg Associates describing a method for a Comprehensive Landscape Plan for the District of Columbia.

b. Skyline Report

Recommendations of Chloethiel W. Smith for large scale concepts of over-all city design.

c. Prototype for Uptown Center Study

Final report of consultant Victor Gruen's recommendations of Uptown Centers.

3. Federal Site Utilization (Inventory).

4. Informational Booklet (Personnel and Purpose).

A brief outline of the functions of the National Capital Planning Commission and short biographies of Commission members and top level staff.

5. Monthly Informational Bulletin.

Summary of activities and projects of the National Capital Planning Commission.

6. Special Projects.

a. Pennsylvania Avenue, S.E.

Plan for development of a special street from Capitol to Barney Circle.

b. Shaw Area and Its Problems

A review of the problems of the Shaw neighborhood and what urban renewal could accomplish for its residents.

c. National Training School

Proposed design scheme for development of National Training School site as residential community of 15,000 people.

d. Anacostia Park

Staff recommendations for development and extension of Anacostia Park.

e. Problems of Housing People in Washington, D.C.

Commission's findings on the Condition of Housing and Social Problems of the People in Washington, D.C.

7. Regional Reports

a. Summary of Regional Growth 1950–2000

b. Appendices—General Development Guide 1966-2000

It is estimated that the cost for the above documents will be within the amount appropriated for publications in Fiscal Year 1967. Total $57,500.

B. *Printing requirements for Fiscal Year 1968 will follow the same pattern as set forth above for Fiscal Year 1967 and include the following categories:*

1. Further reports on the Federal Government Site Utilization (Inventory).
2. Further delineation of Comprehensive Plan Proposals, particularly those dealing with community and neighborhood developments.
3. Special reports among which would be:
    a. Research documents on housing and population
    b. Transit stop design studies
    c. Special street designs
    d. South Capitol Street development designs
    e. Buzzards Point development concepts.
4. Usual miscellaneous printing costs.

It is estimated that costs for publications during Fiscal Year 1968 will be the same as for Fiscal Year 1967. Total $57,500.

V. SPECIAL PROJECTS

A. Zoning Regulation Revisions

"Section 8(a) The Commission may make a report and recommendation to the Zoning Commission of the District of Columbia on proposed amendments of the Zoning Regulations and maps . . ."

One major means of carrying out the newly adopted Comprehensive Plan policies is through modification of the Zoning Regulations. Such a review and revision is also needed since the last major modification was in 1958.

This would be a joint project with the District of Columbia over a two-year period.

Commission's share for Fiscal Year 1968, $25,000.

B. The History of Planning and Development of Washington, D.C. 1791–1967

This history project would bring together in one document the planning, developments and changing organization in the evolution of the Nation's Capital. Many of the early participants in the contemporary planning process for Washington, D.C., are still living and it would be desirable to take advantage of their knowledge. This is the first year request for a 2-year program estimated at $25,000 in total.

Cost (exclusive of publishing), $10,000.

C. Research Computer Program (Continuing)

During Fiscal Year 1968 it will be necessary to develop computer programs for the mathematical housing model funded previously.

The model requires as an input a set of District-wide forecasts of population and households by income, race, and household size. The Research Office developed a matrix technique that takes a metropolitan area forecast and steps it down to a District forecast. It is desirable to use more than one District forecast in the model for any given time period. Use of the model for short-range planning also will require short-range District-wide forecasts as inputs to the model. The computer can work much more economically because of the time required to run the Step-Down Matrix manually to obtain these forecasts.

A Sub-Model would predict age profiles of the population associated with housing that would be applicable and important for planning for schools and recreation, special facilities for the aged, and other age-associated facilities and programs.

Cost for the above computer program (FY 1968), $5,000.

TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

I. Background

President Kennedy appointed a Council on Pennsylvania Avenue in June of 1962 to prepare a plan for the revitalization of the Avenue. The plan was prepared and submitted to the President in April 1964. That concept has been endorsed and approved by all interested agencies.

The report of the Council on Pennsylvania Avenue, recommending a plan for development of the area of Pennsylvania Avenue between the Capitol and the White House, has received a great deal of enthusiastic support from many sources.

On October 23, 1964, President Lyndon B. Johnson stated that the details may require modification and that the plan must remain flexible but that "I believe that it should be accepted as a worthy and challenging goal for our Nation's most important street, our Nation's ceremonial drive." He said further, "I was particularly impressed by the approval of the National Capital Planning Commission, which really has the major responsibility for the development of the city; by the Commission of Fine Arts; and by the District of Columbia Board of Commissioners. I have likewise been heartened by the enthusiastic response to the plan from so many national and local organizations concerned with the development of our Nation's Capital."

President Johnson established the Temporary Commission on Pennsylvania Avenue by Executive Order No. 11210 of March 25, 1965. The President appointed a thirteen member Commission including Cabinet Officers and the heads of agencies with specific interests in the Avenue. Congress appropriated a small amount of money to the National Capital Planning Commission to carry out the work of this Temporary Commission during FY 1966 and 1967.

At the recommendation of the Temporary Commission, the Avenue between the Capitol and the White House and certain areas adjacent to it have been declared a historic site under the Historic Sites Act of August 21, 1935. Furthere, upon recommendation of the Commission the President has recommended legislation to establish a Pennsylvania Avenue Commission. Joint Resolutions have been introduced in both Houses of Congress for this purpose.

Early acceptance of the concepts of the plan has caused the redesign of two major buildings to fit into the plan, the FBI building and the building on the site of the old Raleigh Hotel. Other private and public decisions and actions about projects in the area await guidance from detailed plans and engineering controls which must be formulated.

II. Current Status

As mentioned above, Joint Resolutions were introduced in both Houses of Congress in the recently concluded session. The Senate passed the Resolution and it was reported favorably out of the House Interior Committee, but it did not reach the House floor. New legislation is expected to be introduced in the first session of the 90th Congress.

III. Program Objectives

The immediate objective of the Commission is to continue to develop reliable information upon which decisions can be based. Technical data must be available for those agencies, both public and private, which must now make decisions relating to development on the Avenue.

The Commission must retain an adequate staff with broad experience to assure accomplishment of the tasks encountered in a complex program of this nature.

Consultation with and coordination of the activities of all interests in the Avenue improvements are constantly necessary. This is required to assure integration of all plans and activities with the Pennsylvania Avenue plan and with the comprehensive plans for the National Capital developed by the National Capital Planning Commission.

IV. Work Program

The work program of the Commission will include such activities as the following:

Economic and Engineering Feasibility Studies
Cost Studies
Program Studies
Impact Considerations
Development of Legislative Proposals
Coordination Activities
Public Relations

With the limited staff and funds available to date, beginnings have been made in a number of the above mentioned areas.

Land acquisition, National Capital park, parkway, and playground system

No appropriations for land acquisition are requested pending review of the authorizing legislation for the George Washington Memorial Parkway by the appropriate legislative committees of the Congress in accordance with the directive of the Committee on Appropriations of the House of Representatives in its report on H.R. 14215, the Department of the Interior and Related Agencies Appropriation Bill, 1967 (H. Rept. 1405, 89th Congress, Second Session, pp. 34–35).

Unobligated balances

The December 31, 1966 unobligated balances of appropriations under the Capper-Cramton Act (Act of May 29, 1930, 46 Stat. 482, as amended) are follows:

George Washington Memorial Parkway:	
Arlington County, Va.	$844
Fairfax County, Va	500
Montgomery County, Md	100,700
Total	102,044
Maryland stream valley parks	12,345
Park, parkway, and playground system in the District of Columbia	656,297
Total unobligated balance	770,686

EXPLANATION OF BALANCES

George Washington Memorial Parkway

Arlington County, Virginia.—This $844 represents the balance of funds appropriated for the Parkway and allotted to Arlington County but unmatched by the local jurisdiction. Unless required to meet deficiency awards in pending condemnation cases and matched by the local jurisdiction or reallotted, these funds will be returned to the Treasury.

Fairfax County, Virginia.—This $500 represents the balance of funds appropriated for the Parkway and allotted to Fairfax County but unmatched by the local jurisdiction. Unless required to meet deficiency awards in pending condemnation cases and matched by the local jurisdiction or reallotted, these funds will be returned to the Treasury.

Montgomery County, Maryland.—$100,000 of this amount was appropriated in the Department of the Interior and Related Agencies Appropriation Act, 1963, for the acquisition of portions of the D.C. Transit Co. Cabin John right-of-way and several other properties necessary for the connection of the GWMP with the Little Falls Branch Parkway. It is anticipated that an agreement with the Maryland-National Capital Park and Planning Commission, providing for the matching of this amount, will be executed, and the amount obligated, during Fiscal Year 1967.

Maryland stream valley parks

This $12,345 represents the balance of funds appropriated under Section 1(b) of the Capper-Cramton Act and not covered by agreements with the Maryland-National Capital Park and Planning Commission.

Park, parkway and playground system in the District of Columbia

The $16 million authorized to be appropriated under Section 4 of the Capper-Cramton Act has heretofore been appropriated and the unobligated balance has been programmed for expenditure by the Commission. The projects for which substantial amounts are unobligated are as follows:

1. *Palisades Park.*—$135,000 is available for obligation for acquisition of the remaining properties comprising this project. It is anticipated that a substantial portion of this amount will be obligated in Fiscal Year 1967.

2. *Addition to Morgan-Happy Hollow Playground.*—$375,000 has been allotted for the acquisition with the District of Columbia Government of additional land for the Morgan-Happy Hollow Playground at 18th and California Streets, N.W. It is anticipated that the $375,000 or a portion thereof will be obligated during Fiscal Year 1967 or obligated and transferred to the District of Columbia Government in Fiscal Year 1968 for the joint acquisition of land for addition to the Playground.

COMMISSION RESPONSIBILITY

Mrs. Rowe. The summary of the Commission's statutory responsibility can be found in the budget recommendations. Briefly, the

Commission is the municipal planning body as well as the agency which plans the Federal establishment in the city and the region.

As the city's planners we are concerned with schools, parks and playgrounds, public housing, urban renewal projects, highways, and mass transit. In all of these areas we work with the operating agencies to see that new projects and facilities meet the needs of the people and fit into the fabric of the city. In its municipal work, the Commission also advises the city's zoning authorities.

LONG-RANGE PLAN

Since my appearance before you last year, the Commission and staff have been hard at work on a long-range plan for the District. The plan was published last week. And it is the green document, Senator, you have before you, and I do recommend it for reading and for browsing through. It is a fascinating document, and if you would like additional copies, or members of the committee would, we would be glad to supply them. It might be useful to planning agencies in your State, or in the States of other members of this committee.

Senator BARTLETT. I would like a few, very much.

Mrs. ROWE. We will be glad to send you some.

Senator BARTLETT. Thank you. I could use about half a dozen.

Mrs. ROWE. All right.

Senator BARTLETT. You have done me in. I was going to read my first James Bond story, over the week end.

Mrs. ROWE. Well, this is rather different reading, but almost as fascinating.

Operating as the physical planning agency of the Federal Government in the city and the region, the Commission and its staff spend a great deal of time reviewing Federal projects in the city and the region—including the military installations.

A glance at the agenda for the last Commission meeting will, I believe, give the committee some indication of the variety of the problems and projects considered by the Commission. I thought it would be good to introduce the agenda into the committee records, because following the Commission's activities in the newspapers gives you a very unbalanced view of the variety of projects which are reviewed. The only ones that meet the public eye are the ones on which there are disagreements, and this will show you that we accomplish a great deal with minimum disagreements on many projects.

SPECIAL PROJECTS

In addition to its regular program, the Commission has undertaken or expects to undertake a number of special projects including: a transportation center study for Union Station, special street studies, a South Capitol Street/Buzzard Point development study, and a joint study with the District government of the existing zoning regulations. Then, too, the Commission expects to continue its work with Mrs. Johnson's beautification committee and its landmarks preservation work.

ADDITIONAL FUNDS REQUISITE

I am aware of the need for economy in Government, particularly at this time, but I would be less than honest if I did not present what the Commission considers to be its minimum budget needs. We are seeking additional funds for the National Capital Planning Commission, but no additional funds for the Temporary Commission on Pennsylvania Avenue.

No appropriations for land acquisition are requested pending review of the authorizing legislation for the George Washington Memorial Parkway by the appropriate legislative committees of the Congress, in accordance with the directive last year of the Committee on Appropriations of the House of Representatives.

BEAUTY AND BRIGHT FUTURE FOR CITY OF WASHINGTON

I know the members of the committee agree that Washington is a great and beautiful city. Like all cities, it has its problems. But in finding solutions to these pressing present problems as well as in planning the future physical growth of the Nation's Capital, we must be sure the city's beauty is enhanced and not diminished; we must also be sure that the Washington of the future will be a good place to work and to live. We ask you to give us the tools to help insure a bright future for this great city.

Thank you.

Senator BARTLETT. Thank you.

Mrs. ROWE. That concludes my prepared testimony, and we would be glad to answer any questions you might have.

DISTRICT OF COLUMBIA SIZE, POPULATION AND VISITORS

Senator BARTLETT. I have some.

Before coming to them, do you happen to know offhand how large the District of Columbia is?

Mrs. ROWE. By acreage?

Senator BARTLETT. By square miles.

Mrs. ROWE. By square miles?

Mr. CONRAD. It is about 69 square miles. It used to be a hundred square miles, until the portion on the other side of the Potomac River was ceded back to the State of Virginia. Taking out some 30 square miles on that side, it is about 69 square miles.

Senator BARTLETT. And how many people within that area?

Mr. CONRAD. Approximately 820,000 people. Of course, these are the people who live in the District. This doesn't go into the employment, and people who come into the District to make a living.

Senator BARTLETT. Hundreds of thousands more.

Mr. CONRAD. That's right. Plus the many tourists who come into the District during the summertime, over 9 million.

Senator BARTLETT. We were told yesterday by Mr. Ripley of the Smithsonian Institution that 7 million people visit there every year.

Mr. CONRAD. That is right.

Senator BARTLETT. You need more land. We will give you a little bit from Alaska. We have 586,000 square miles and 272,000 people.

Mrs. ROWE. We could use some.

REORGANIZATION PLAN

Senator BARTLETT. One of the first things I noticed in reading your budget justification was a reference to Reorganization Plan No. 5 of 1966, dated June 29, 1966. Would you please explain what this reorganization plan accomplished?

Mrs. ROWE. I think Mr. Conrad would be glad to answer that question.

REGIONAL AFFAIRS DIVISION ESTABLISHMENT

Mr. CONRAD. I will be glad to, Mr. Chairman.

The Regional Affairs Division was established during fiscal year 1967 as a result of the Presidential Reorganization Plan No. 5 of 1966, and I would like to state it, Mr. Chairman, for the record.

The reorganization plan will not alter the basic responsibilities of the National Capital Planning Commission. That Commission will continue to represent the Federal interest in the planning and development of the region. Indeed, its work should increase as comprehensive regional planning by the Council of Governments is accelerated.

In accordance with the Reorganization Plan, the Commission will work closely with the Council of Governments in regional planning. The Commission will also deal directly with the suburban jurisdictions and assume the liaison functions now exercised by the National Capital Regional Planning Council.

PROTECTION OF FEDERAL INTEREST

Since this reorganization plan was approved, Mr. Chairman, we have established a Regional Affairs Division within the Commission to carry out the Federal interest in the regions, which we are still required to do under Public Law 592. This involves review of all Federal installations that will go into the region, and coordinating directly with the jurisdictions involved. It also involves the review of their land use master plans, which the jurisdictions send to the Planning Commission for review and comment as to how they relate to the Federal interest in the area. The Regional Affairs Division will also be working with the Council of Governments in carrying out their regional planning prerogatives.

FORMER WORK OF NATIONAL CAPITAL REGIONAL PLANNING COUNCIL

Senator BARTLETT. Thank you. Who now does the work formerly performed by the National Capital Regional Planning Commission.

Mrs. ROWE. Well, I think Mr. Conrad's explanation in part answers that. The Council in the past was a separate body. It was made up of representatives from the surrounding jurisdictions. The Council itself was an unpaid body, the —members were—, and they listened to the jurisdictions, for instance, when the problem arose, and then reported to us. For example, just last week, during our Commission meeting, we had two items on the agenda. We had representatives from Arlington County speaking directly to the Planning Commission. In the past, they would have spoken to the Regional Planning Council, which in turn would have made a report to the Commission.

I don't know whether Mr. Conrad wants to comment.

Mr. CONRAD. That is fine, Madam Chairman.

SAVINGS RESULTING FROM REORGANIZATION

Senator BARTLETT. It is indicated that $25,000 were saved through the implementation of this reorganization plan. What became of that money?

Mrs. ROWE. Well, we will give you a report.—Mr. Pritchard.

Mr. PRITCHARD. Mr. Chairman, it is explained on page 1 of our justification, $20,000 of that amount was required to offset pay costs under the Federal Salaries and Fringe Benefits Act of 1966. In other words, we are not coming before the Congress for supplemental money to offset the pay increase. The other $5,000 is a saving and was deducted before arriving at the 1968 base as indicated on page 1 of our justification.

FUNDING OF 1967 POSITIONS

Senator BARTLETT. I see.

In fiscal year 1967, you proposed an increase of approximately $104,000 in order to pay for 11 new positions and the related costs. However, Congress approved only $82,500 for these expenses, a difference of some $22,000. The material submitted with your fiscal year 1967 budget indicated that allowance of 11 new positions would provide a total of 59 positions. It appears, however, from your 1968 submission in which you ask for 10 new positions that you had 64 in fiscal year 1967. Where did you get the funds to employ the additional 16?

Mr. CONRAD. I can't give a direct answer to that question, Mr. Chairman. It is a rather detailed one. We would like to supply the information for the record.

Senator BARTLETT. All right.

(The information follows:)

The confusion results from using figures only for the National Capital Planning Commission for Fiscal Year 1967 and comparing them with total figures for Fiscal Year 1968 which include the former Council and the Pennsylvania Avenue Commission. In addition, the Fiscal Year 1967 budget submission included a line entry for personnel of the National Capital Regional Planning Council. Those positions were taken over by the Commission as part of the $88,500 transferred from the Council to the Commission, as indicated on pages 1 and 2 of our justifications.

The increases are summarized as follows:

	Fiscal year 1966	Increases	Fiscal year 1967	Proposed increases	Estimate, fiscal year 1968
Commission and Council combined	[1] 56	5	[2] 61	10	71
Pennsylvania Ave	2	1	3		3
Total	58	6	64	10	74

[1] 47 Commission; 9 Council.

[2] Includes 9 positions formerly assigned to Council.

1967 NEW POSITIONS

Senator BARTLETT. What positions by grade and title did you add in fiscal 1967?

Mr. CONRAD. We would have to supply that for the record, too, Mr. Chairman.

Senator BARTLETT. All right.

Mrs. ROWE. But I do want to reassure you, Mr. Chairman, that we have not gone beyond what has been allowed us. We will be glad to supply the figures.

(The information follows:)

The new positions provided in Fiscal Year 1967 were as follows:

Commission:
1. Assistant Administartive Officer, GS-12
2. Urban Planner, GS-9, Comprehensive Planning
3. Social Science Analyst, GS-7, Research
4. Urban Planner, GS-12, District Planning
5. Urban Planner, GS-12, Federal Planning

Pennsylvania Avenue:
1. Architect, GS-13

Total, 6.

1968 NEW POSITIONS

Senator BARTLETT. With respect to the 10 additional personnel requested for next year, would you please describe briefly the duties of these, indicating the grades at which you propose to appoint them?

Mrs. ROWE. Mr. Conrad.

Mr. CONRAD. We are proposing 10 additional positions which primarily range between grades GS-2 to GS-13. They are not the higher grades. We are trying to supplement the working force of the Commission, plus the secretarial staff, in order to catch up with the workload which the Commission now has, and which we can foresee in the coming year.

PROJECT REVIEW PLANNER

The first request is for a District of Columbia project review planner at a grade 13. The purpose of this position is to review and evaluate the proposed general locations and the preliminary and final site and building plans for District building projects. This division now has two professionals in it, and it is the only division which deals with District affairs. The Chief of the District division is on the Board of Zoning Adjustments and also advises the Zoning Commission on zoning amendments. This division is responsible for the review of District of Columbia public works programs, both annual and 5-year programs.

I would like to present a pamphlet that was put out by this division on the review of the Capital improvement program of the District of Columbia for this year and their 5-year program. This is a function of the District division.

But this is just at the public works level, or the review for budgetary purposes. The Commission is also delegated the responsibility for review of the subsequent location of these various public works, and also the site planning for these facilities. We have not been able to carry out this function, because of the workload and the lack of an adequate staff in the District division. We are asking for the project planner, in this division, to carry out this function.

FEDERAL PLANNING DIVISION PLANNER

The Federal Planning Division is requesting one additional planner at GS-12 grade. It has now three professionals. With Commission approval of a Federal employment plan and a program for the National Capital region expected in fiscal year 1967, it will be important that this program be kept current, updated, and extended on a systematic basis, in keeping with the day-to-day decisions and developments in the National Capital region.

SOCIAL SCIENCE ANALYST

We are requesting a social science analyst position, GS–12. This division has three professionals on its staff. There has to be a tie between the social problems in the District of Columbia and the physical plans and programs. The physical plan is for people, and to provide for the needs of the people of the District.

For instance, the questions that you asked, Mr. Chairman, at the beginning of the hearing as to how many people live in the District, what is the function of the District, and how many tourists come to visit us each year is a part of the research function of this Division. It deals with population statistics, social implications of the plans, and provides information upon which physical planning is based. We are asking for one additional position in this Division.

Mrs. ROWE. We might at this moment show you this report produced by the Research Division. It is the report on housing. It is the fundamental document on the Washington housing situation, which is largely the work of one man, working day and night.

Senator BARTLETT. I can tell that he would be busy on that.

Mrs. ROWE. He needs some help.

TRANSPORTATION PLANNER

Mr. CONRAD. The next position request is for a transportation planner at a GS–12 grade. We have one transportation planner on the Commission staff at the present time. He functions as a consultant to all the divisions. On overall projects, for instance, the Anacostia-Bolling urban renewal project, he will prepare the traffic analysis as to what highways are needed, and what is the possibility of getting rapid rail into this area. He is also the major individual in the office who works on the rapid rail system with the National Capital Transportation Agency, and reviews the various transit stops and access to these points, and environmental impacts around these stops. He is also the staff member who works with the Council of Governments and the Transportation Planning Board, on regional transportation. The District is the center or the hub of the whole region, and therefore, must coordinate transportation plans and studies of the region. He is the individual staff member who is responsible for these functions. It is too much for one individual to do. We are requesting one additional staff to help out the transportation planner.

COMPREHENSIVE PLANNING DIVISION PLANNER

The Comprehensive Planning Division is requesting one additional planner at grade GS–12.

The Comprehensive Planning Division has produced the comprehensive plan which you now have before you. The next step in the planning process is to present it to the citizens of the District, as well as District and Federal agencies for comment. The latter part of the year we hope to have an adopted comprehensive plan. At that point, the work just starts. We then work with the people in the community to improve their neighborhoods and to carry out the basic concepts as contained within this report.

The District is contemplating establishing what it calls multipurpose centers throughout the District, so that many of the social and welfare functions of the District can be in actual contact with the people. We would hope that our planning process could also work through these various centers in the District. In order to do this, we will need one additional planner in the initial phases of getting this program set up and in carrying out the objectives of the comprehensive plan.

PROJECT DESIGNER

An additional project designer is requested in the Current Planning Branch as a grade GS-11. This position is in response to the increased needs for special design services in the Urban Renewal and Housing Division in the Federal Planning Division, and in the District Division.

Do we have the chart on the Buzzard Point area?

I can show you an illustration of what the project designer does. National Training will be all right, if you have that.

Excuse me, Mr. Chairman. We can give you two examples of the work of the project designing staff. We not only propose locations and objectives for an area, but we also show how they can be accomplished. This is the National Training School for Boys site. Bladensburg Road is here and the Baltimore-Washington Parkway comes in at this angle. New York Avenue goes here, and this is South Dakota Avenue.

This shows how the site can be laid out for residential purposes, for commercial and all the community facilities that are needed to supply the needs of a balanced community. It also indicates the possibility of a special employment center here, or even a center of learning, where one of the educational facilities that are now being proposed for the District of Columbia might be located.

So the purpose of the urban designer is to design these installations, and to show how they can actually be site planned in order to carry out the land-use objectives.

Here is another example, where we were proposing an international center, just north of Washington Circle. The urban designer will take over from the land planner, who lays out the basic objectives in the program. He will then show how the program might be carried out, through urban design.

We are getting more and more into the design process. At the present time, we have four urban designers. We are asking for one more in the project design staff.

Senator BARTLETT. Does that complete the list?

Mr. CONRAD. No, I am half way through, sir.

Senator BARTLETT. You go ahead.

Mr. CONRAD. I will be brief.

Senator BARTLETT. No, no; this is fine.

URBAN RENEWAL PLANNER

Mr. CONRAD. Next division is the Urban Renewal Division, which is requesting an urban renewal planner, GS–11. This is to strengthen this division's staff resources to undertake special urban renewal and housing studies for potential future project areas, and in order for the Commission to participate effectively in the annual review and revision of the District's community renewal program, and the model cities program, when it once gets underway.

This division has two professional planners. It is the permanent staff of the Commission, which deals with urban renewal, as contrasted with the urban renewal staff based on specific projects funds under title I, which is earmarked just for that specific project and can't be spent for anything else. This division provides the studies for the creation of new urban renewal areas and works with the District on the community renewal program and in the future on the model city program. This division also reviews all public housing projects that come before the Commission.

The Urban Renewal Division is greatly understaffed, and we are asking for one additional urban planner.

MESSENGER AND SECRETARIES

The other three positions, one is the messenger, GS–2. We have one messenger now, who is primarily chauffeur for the chairman and the director. We have moved our quarters recently. Where we used to be on one floor, now we are on three different locations, and we find it necessary to have another messenger, or else we rely on secretaries or other type of personnel to carry out this function.

The other two are for secretaries, which would support the staff that is being asked for.

Senator BARTLETT. You say that messenger is a GS–2?

Mr. CONRAD. Yes, sir.

Senator BARTLETT. What does that mean in terms of an annual salary?

Mr. PRITCHARD. The starting salary is $3,925 per year.

Senator BARTLETT. And how about the secretaries?

Mr. CONRAD. The secretaries are GS–5, and that would be $5,331.

Senator BARTLETT. Do you have trouble getting secretaries at that figure?

Mr. CONRAD. We have trouble getting secretaries at any figure, Mr. Chairman. They are just like the urban planners. They are quite difficult to obtain, but through persistence we succeed.

At the present time, I believe, Ralph, that we have all of the secretarial positions occupied.

Mr. PRITCHARD. There is one vacancy.

Mr. CONRAD. One vacancy?

Senator BARTLETT. And they can go up to what grade?

Mr. CONRAD. We are a rather small agency, and the highest secretarial grade that we have is a grade 8. We have two at grade 7, and two at grade 6, the others are grade 5's and 4's.

Senator BARTLETT. What does a grade 8 pay?

Mr. PRITCHARD. The starting salary is $7,068 per year.

CONSULTANTS' COSTS

Senator BARTLETT. Thank you. How much work do you have done by outside consultants?

Mrs. ROWE. Mr. Conrad.

Mr. CONRAD. Yes. Last year, we spent $23,000 for outside consultants, including Gladstone Associates, Henry Bain, Jr., and Alan Voorhees. Most of our consultant service is to supplement staff work. The comprehensive plan is a staff product; but in order to get nationwide review of it, and analyses of certain specialized sections like the industrial implications on the District of Columbia outside consultants were utilized.

For insance, last year, Robert Gladstone was retained to prepare a population matrix upon which many of the population forecasts in the comprehensive plan are based. Special projects which are unforeseen also require consultants' services. The Eastern Market disposition, which the District Commissioners wanted the Planning Commission to study, required a market analysis consultant. This was also true of the Georgetown market disposition study. Another special study was made by Alan M. Voorhees & Associates which dealt with curb parking in residential areas of the District. The Commission was interested in finding out what was the nature of the car parking on residential streets of the District and why, particularly adjacent to the District line.

And what kind of traffic was this, what was the origin and destination, and what could be done about clearing some of the District residential streets for residential purposes.

Senator BARTLETT. Did you find any answers to either of those questions?

Mr. CONRAD. Yes, sir. We are going to have a second part of the study with Alan Voorhees & Associates to study specific areas of the city, such as Sixteenth Street and District line, and also in the vicinity of Georgetown, where quite a bit of out-of-town parking occurs. It was found out that many of the people who park within the District were Maryland drivers. The zone change for bus fares is just across the District line, as a result they parked on residential streets just over the District line to take advantage of the reduced bus fare downtown. So the residential areas adjacent to the District line were becoming parking lots for the Maryland people working downtown. We don't think this is right. The second part of this study will be to explore what can be done about this situation, and also how it can be correlated with the transit stops of the National Capital Transportation Agency in this vicinity.

Senator BARTLETT. And maybe conversations with Mr. Chalk or his successor?

Mr. CONRAD. Or his successor; yes, sir.

FLAT FEE AND PER DIEM PAYMENTS

Senator BARTLETT. Well, when you employ consultants, is there a flat fee for a specified job? Or do you pay each consultant so much a day or both?

Mr. CONRAD. Ralph, I believe it would be both.

Mr. PRITCHARD. The type that you are speaking about, Mr. Conrad, is always a flat fee. A specified job for a specified sum of money.

Senator BARTLETT. How much did you pay for this study to which you referred, for example?

Mr. CONRAD. $4,000.

Senator BARTLETT. How much?

Mr. CONRAD. $4,000, sir.

Senator BARTLETT. And when you hire a consultant by the day, what do you pay him?

Mr. PRITCHARD. The maximum amount in the fiscal year 1967 appropriation bill is $83, sir, and we pay far less than that, in most cases.

Mrs. ROWE. We haven't paid over $50, have we?

Mr. PRITCHARD. In most recent years, we have gone mostly to the contract basis. The only expert at the present time is Mr. Grotecloss, who is paid from the land acquisition appropriation. He is paid $80 per day less retirement annuity. There are two experts on the Pennsylvania Avenue Commission, one at $36 and one at $56 per day.

URBAN RENEWAL FUNDS

Senator BARTLETT. On page 8 of your justification statement you say that studies in urban renewal are carried out in part with funds received from District agencies. Do these funds pay only expenses of the Commission, or do they provide additional personnel?

Mr. CONRAD. These are the urban renewal title I funds to carry out urban renewal projects in the District of Columbia.

Mrs. ROWE. They pay for staff which is not a part of the permanent staff. It is a project staff, working on the particular project.

Mr. CONRAD. These funds, sir, are based on personnel which are required to carry out the projects. And not only personnel, but the publications which may be necessary, plus the supplies that would be necessary to carry out the projects. But this is as far as that goes.

20-YEAR DEVELOPMENT PROGRAM

Senator BARTLETT. You say that during fiscal year 1968 you will update and review the initial 20-year development program objectives as they have been incorporated in the comprehensive plan for the National Capital. Just what is entailed in this activity?

Mr. CONRAD. The comprehensive plan as it is now constituted represents a plan for 20 years, also a plan for 40 years. As the Commission reviews the various projects which come before it, it is necessary to keep the plan up-to-date on a yearly basis. Every 5 years, we are planning to come out with a document as you see before you now. This is to avoid the time lapse as was experienced between the 1950 comprehensive plan and the 1985 comprehensive plan, which we now have.

In this way, the Commission will be able to keep abreast of all the developments, and the operating agencies will have a better document upon which to base their operating functions. Planning is a continuous process, and just the publication of a report like this does not mean that the work is completed. It is a continuous process of updating the plan as developments occur.

REGIONAL AFFAIRS DIVISION

Senator **Bartlett**. There was established, during the past year, the Regional Affairs Division. Will you please tell us what this Division is for, and how it it working out?

Mrs. **Rowe**. This, Mr. Chairman, was reviewed to some extent in one of your earlier questions that was concerned with the Regional Planning Council.

Senator **Bartlett**. I would like a little bit more detail.

Mrs. **Rowe**. A little bit more.

Mr. **Conrad**. The Regional Affairs Division has created with the Council of Governments a means of coordinating so that the region knows what the Federal projects are in the region, and has a means of commenting upon them. For instance, we have a joint committee set up, which consists of all of the regional planning directors of the metropolitan area. This committee serves the Planning Commission and the Federal interests, and is also jointly used by the Council of Governments. As the schedule for our last Commission meeting will show, we had at least a half dozen Federal projects before the Planning Commission. These are referred to this committee of the planning directors, and if they want it referred to their jurisdictions, it is referred to their jurisdictions. We then work with them and report back to the Planning Commission. We have already set up the process of coordination between the region directly and also the Council of Governments, which is the body carrying out the regional planning process.

I would like to point out that the Regional Council, in its existence, came out with some very good reports. For instance, the Mass Transportation Survey, which brought out the first balanced transportation system. There is some disagreement as to what "balance" meant, but at least here was the first system which coordinated the highways along with the rapid rail. One of the recent documents put out by the Council before it went out of existence is this Regional Development Guide in 1960–2000, which we hope will be a basis for the Council of Governments to prepare its own regional planning.

The Regional Council, never did get into regional planning as such. The region was just not ready, and about all that the Council could do was to pull together their plans, so we could relate one to another. It was understood in 1952, when the Regional Council was established, that one basic purpose was to have the region accept the responsibility of regional planning, rather than the Federal Government. They have done this. This is why the Planning Commission did not object to the Regional Council being taken over by the Council of Governments. We felt there had to be strong regional planning in this area, since by the year 2000 it is forecasted there will be 5 million people in the metropolitan area, and about a million of them in the District. You can see the need for strong regional planning.

The Regional Council's function was not so much regional planning as it was concern for the Federal interest which the Regional Affairs Division is now taking over. The regional planning which heretofore had not been done is the function which the Council of Governments is now taking over, and in which we are delighted.

PROTECTION OF FEDERAL INTEREST

Mrs. **Rowe**. If I might just emphasize what Mr. Conrad said, the real job of this section of the staff is to represent at the staff level the Federal interest in the region, and to report back to the Commission which does have a statutory responsibility to plan the Federal facilities.

Mr. **Conrad**. A minor example of the Regional Affairs Division in carrying out the Federal interest is the recent Marriott sign proposed in Rosslyn. The sign is to be placed on the Marriott future motel in Rosslyn, which is to be 12 stories high. It can be seen by every person who visits our Nation's Capital—from the Mall. This is an item on which the Federal interest is going to have to be heard. It is the duty of the Regional Affairs Division to keep abreast of such projects as to how they relate to the Federal interest.

Senator **Bartlett**. What is the status of that now? Do you know?

Mrs. **Rowe**. I believe that Mr. Marriott is thinking it over.

TECHNICAL URBAN DESIGN

Senator **Bartlett**. I am going to drop that subject.

What is technical urban design?

Mr. **Conrad**. Technical urban design is illustrated by the National Training School site plan which I went through to show you the relationship of program and planning policies and putting them into a two- and three-dimensional site plan. Another example is the Bolling Cantonment area, which was worked out by the Department of Defense. Our technical urban designers in cooperation with the DOD reviewed this particular site plan to come up with the best possible site plan obtainable. One of the major issues in this design was the large parking areas which take up so much room, and so much land which could otherwise be utilized for office buildings and actually productive space, rather than that of parking an automobile. We have been asking the Department of Defense to study the possibilities of putting this parking into structures, so that the land can be better utilized.

This is an outgrowth of analyses by our technical urban design staff. The planning process started with the urban planner, who studied this area for use of the military and what part of the area should be for an urban renewal project, and what part for a balanced residential community. The urban planner also recommends the number of employees to be housed, and what land use functions should be located here. From that point the urban designer shows how these land-use functions would be related to the ground, in a site plan, and how one building would be related to another. This is the technical urban design phase.

Senator **Bartlett**. What has been the reaction of Defense to this suggestion?

Mr. CONRAD. They concur with this. Currently, the Department of Defense is planning for a 10,000 employee office building adjacent to the Bolling cantonment area. It is providing for parking underneath, and not on the surface, as a part of the building complex. This is to some extent a result of our previous review of the Bolling cantonment area plan.

DOD is still studying these areas. It accepts the idea of putting the parking into structures, but the problem is in getting Congress to see the need for parking structures for the Department of Defense, so we can better utilize the land. Parking structures cost money, and when added to the cost of the office building, it comes up to something like $4,000 or $5,000 per space.

Our position is that this land can be better utilized, and is worth more that what the parking would cost as a part of the building. The Department of Defense is pursuing this.

Mrs. ROWE. I think that the Senator might be interested in a letter that we had about a year ago from the officer who was in charge of the planning in this area, and who was leaving for another assignment. He wrote and said that he was very grateful to the Planning Commission and to its staff for its great help in planning; that he felt the planning had been tremendously improved through the work with the Planning Commission staff. And I would be glad to send you a copy of it, if you would be interested to see it.

Senator BARTLETT. I would be.

Mrs. ROWE. It has been a very good relationship, and the difference in the quality of planning in the years that I have been in the Planning Commission has been really quite spectacular. The new military planning in particular has been very heartening. It is done with much more thought and care than it had been in previous years.

Senator BARTLETT. Off the record.

(Discussion off the record.)

CAPITOL HILL STUDY

Senator BARTLETT. One of these designs, according to your justifications, is a development plan for the Capitol Hill area. Would you please tell the committee what would be sought through such a plan?

STUDY ABANDONMENT AND ANTICIPATED REPROGRAMING OF FUNDS

Mrs. ROWE. Yes, I might just review the past history of that, and then ask Mr. Conrad to speak.

We have in this present year's budget the money set aside for the Capitol Hill plan. We did talk to Mr. Stewart, because we had anticipated having a joint study with the Architect of the Capitol's office. He felt he could not; that he had no mandate from the Congress to make the kind of study that we were looking forward to making with him. So we have abandoned for this year the Capitol Hill study.

Senator BARTLETT. What happened to the $40,000 that was appropriated for that purpose?

Mr. CONRAD. We still have the $40,000, Mr. Chairman. In 2 or 3 days, there will be a letter to you requesting that this $40,000 be used on other major projects.

Senator BARTLETT. Did you spend any money at all?

Mr. CONRAD. No.

MASTER PLAN WORKLOAD INCREASE

Senator BARTLETT. I note that you anticipate a rapid increase in the workload related to review of master plans and proposed modifications of approved plans. Why do you anticipate such an increase?

Mrs. ROWE. Maybe Mr. Conrad would like to speak to this, but I would like to say in introduction that when, for instance, in Anacostia-Bolling, the plan started coming in piece by piece, we asked for a master plan of the total area, of the total cantonment area, and we have been asking the different agencies that come before us if they could present a master plan, rather that just a project plan. If we get more master plans coming, it is going to take more time to look at them, but this is the way to do good planning. Once you have a master plan approved and then a project comes in, it fits into the master plan, and then it makes the agency's life easier, and the Planning Commission's life easier.

Mr. CONRAD. This is a result of two forces in action. One, the Planning Commission requiring a better quality of master plan upon which projects can be based; and, two, the complete acceptance of this by many of the Federal and military agencies, who have seen that through master planning and project planning, that there are savings to be made, and at the same time coming up with a better plan.

For instance, the Department of Defense has issued regulations requiring that within a year or two, all military installations shall have master plans. As a result, all Department of Defense activities within the region are coming before the Planning Commission for review. There are 50 different Federal and military sites in the National Capital region which have master plans or will have master plans, which are going to be up for review. As the present time we have somewhere between six or eight approved master plans from the Federal Establishment.

The District Building is also coming in, and we are working with District officials now on procedures for review of master plans for the various District facilities. I might show the master plan procedures that the Planning Commission goes through. These charts are ideally set up just for this purpose.

Here is the overall land distribution master plan for Anacostia-Bolling site of approximately 900 acres. It indicates that portion which would be retained by the Department of Defense, and that portion proposed as a balanced residential community. This map is the master plan which DOD developed for its section. Now when the Department of Defense comes in with a specific project, such as the bachelor officers' quarters in this position, it will be in conformance to the master plan, which shows its relationship to all of the other buildings, the circulation pattern and the other community facilities.

Here is an example of the bachelor officers' quarters preliminary site plan. This shows an individual building and its immediate environment at a large scale and its relationship to the adjacent facilities, the pedestrian circulation and the landscaping for the project.

This is the Commissions review procedure from the master plan to the specific project.

The Commission has a procedure set up with the various operating agencies which sets forth the major steps of approval which includes master plan, approval of location, approval of the preliminary site plan and approval of final site plan. It is working very well.

FEDERAL EMPLOYMENT PLAN AND PROGRAM

Senator BARTLETT. Please describe briefly the Federal employment plan and program?

Mr. CONRAD. Could I ask Mr. Bozarth to?

Senator BARTLETT. Certainly.

Mr. BOZARTH. Mr. Chairman, the comprehensive plan report which was mentioned earlier contains the essential elements of the Federal employment plan and program proposals by the Commission. The technical report is still in the process of preparation. We have here this morning a chart which shows some of the maps prepared as a part of this study the maps on this side of the panel, on your left, show the results of an inventory of Federal employment in the National Capital region, both in owned space and in leased space, as of the end of 1964.

The panels on the right show the Commission's proposals for the distribution of the Federal employment increases that are forecasted to take place in the National Capital region between now and 1985. The Commission's studies indicated that Federal employment increases in the National Capital region will be on the order of a net increase of 6,000 paid civilian employees per year.

And so the plan and program propose how and where these 6,000 increased employees would be located, whether along the Mall, in the District of Columbia or outside the District. And it also proposes that Federal employees and activities now housed in temporary buildings and spaces, be rehoused in new space by 1985. In effect, the Federal Employment program is an inventory of Federal employment in the National Capital region in 1964, and a plan and a program for how to accommodate this increase, while at the same time eliminating the temporaries. It goes into considerable detail.

If you have some questions, Mr. Chairman, I would be glad to try and answer them.

Senator BARTLETT. No, no specific ones. I just wanted to know in a general way.

But referring to this program, which you expect to complete during this fiscal year, as I understand it, you now say that in connection with it a program planner position is needed in fiscal year 1968. It seems to me that having completed the program, the personnel who worked on it would be available to keep it current. Why is that not so?

Mr. BOZARTH. I think, Mr. Chairman, if I may, Mr. Conrad and Madam Chairman, previous mention has been made of the fact that the staff of the Federal Planning Division has been faced with a sharply increased workload of: (1) Master plan proposals for the 50 different Federal sites that were previously mentioned; (2) preliminary sites and building plans for individual Federal construction projects in the region. The workload has actually doubled in the last fiscal year. The small staff in the Federal Planning Division has been literally swamped with the increase in the workload of these projects.

We would like to extend the work of the Federal employment plan program and, specifically as indicated in the budget justification statement, to work with the Regional Affairs Division and with the Council of Governments to prepare a 5-year Federal development program for the National Capital Region. Such a program, in conjunction with the District's capital budget and 5-year public improvements program would, in toto, provide a composite 5-year program for the Federal and District Governments for the National Capital region and provide a key tool for implementing the comprehensive plan for both Federal and District facilities in the National Capital region.

The preparation of the Federal employment plan and program was given special priority in order to complete the comprehensive plan. The Commission has never had a full-time person in this area, and the request is to provide one such full-time person.

SPECIAL AREA STUDIES

Senator BARTLETT. With respect to special area studies, you say that the number and kinds of areas currently under consideration indicate an expansion of workload in this fiscal year and the next. Would you please explain this statement?

INTERNATIONAL CENTER

Mr. CONRAD. Some of these charts will explain the special area studies. One of the special area studies that has already been mentioned, Mr. Chairman, is the International Center. Should the legislation be passed which is now before the Congress—there will be a special plan developed for the International Center. The Planning Commission will be involved in its development.

This International Center site plan is an illustration of how it could be accomplished. This would be one of these special areas studies.

BUZZARD POINT AND OTHER AREAS

Other special area studies would be the Buzzard Point area and the 4-year community college which is proposed in the vicinity of South Capitol Street and the 11th Street Bridge, on the Anacostia side. The community college would be correlated with the future transit stop there and the possibility of an uptown center.

BUREAU OF STANDARDS SITE

Another special area study is the Bureau of Standards site, where the initial rapid rail system will terminate. Here is the opportunity to develop Federal facilities as well as private and commercial facilities in conjunction with a transportation stop where various modes of transportation come together.

The comprehensive plan outlines many of these areas, where further planning is essential to provide for orderly development.

Mrs. ROWE. I think the Senator might be particularly interested in the South Capitol Street development, since it is such a close neighbor of yours, and I am sure, looking at it, you realize that something could be done there. It is just waiting for development, and we have been giving a lot of thought to its possible future use for Federal buildings, and making it a great entrance to the city and a great view back from Capitol Hill to the river, rather than the rather dilapidated and shabby hodgepodge that is there now.

This offers a great opportunity, because the displacement here, human displacement, would be very small, as compared to that amount of acreage almost anywhere else in the city.

ANACOSTIA RIVER VALLEY

Mr. CONRAD. Mr. Chairman, this map shows the Anacostia River Valley. What I might do is go from the district line to Buzzard Point, and indicate the special studies that are now being carried on in conjunction with this valley. I have already mentioned the National Training School for Boys, which borders on the valley.

ARBORETUM

The second major area is the Arboretum, which is under the jurisdiction of the Department of Agriculture. And they are now in the process of modifying their master plan, and tying it in to the east leg of the Inner Loop, between Barney Circle and Maryland Avenue.

The entrance to the Arboretum is being designed in conjunction with the east leg of the Inner Loop, which we are coordinating with the District Highway Department in an effort to obtain the best urban design we can. Here is another special area that is being coordinated by the Commission with the Highway Department, the Department of Agriculture, and the Park Service, in coming up with an acceptable plan for this whole area of the Anacostia valley.

WASHINGTON NAVY YARD

Another specific project in the valley is the Washington Navy Yard. Three or four years ago, the Planning Commission prepared a complete redesign and new master plan for this area. The old facilities of the Navy Weapons Plant were phased out. It has a wonderful place in our history. There are many landmarks on its site and the Commission felt an overall study should be made to assure retention of these landmarks and to provide for employment and recreation along the waterfront. Following through on this overall study, the Department of Defense hired consultants, who prepared this master plan, which has been approved by the Planning Commission as being in agreement with the initial study.

This retains the historic quadrangle of the Washington Navy Yard, it enhances the waterfront, and it provides for the possibility of walking all the way from Buzzard Point up to the National Training School for Boys site at the northern terminus of the Anacostia valley.

The waterfront is open to the public. The pedestrian way ties together all of the facilities along the waterfront.

The other portion of the Washington Navy Yard has been transferred to GSA and it is now in the process, as an operating agency, of detailing that section of the master plan. It will probably have that completed within a month or two, and then the whole Navy Yard will be tied together.

SOUTH CAPITOL STREET

Another special area in the valley is the South Capitol Street as shown on this plan, which focuses on the dome of the Capitol. This is one of the best views of our Nation's Capitol. We are proposing that this approach from the South Capitol Street Bridge to our Nation's Capitol be a Government complex of approximately 25,000 Government employees, to take care of the need for new housing in the District of Columbia for the Federal Government.

As you know, at the present time the frontages along South Capitol Street are dilapidated. They are eyesores. It is a disgrace as an approach to the Nation's Capitol. We are proposing that this be a Federal complex, and that the area between South Capitol and Washington Navy Yard be predominantly residential. Buzzard Point is west of South Capitol Street and if you are familiar with this section of the city you will know that it is an obsolete industrial area. There are coalyards, junkyards, and undeveloped land. It is underused. It never will be a first-rate industrial area. We are proposing a complete revision of this area of the city for residential purposes. This will provide residential living adjacent to the South Capitol Street Federal building complex. As a result a 24-hour type of population will be in this area, rather than like the Federal Triangle, where people are there during the day, but then during the night it is no-man's land. The Anacostia-Bolling project, which I previously showed you on this chart, continues to the south. At this location is the proposed 4-year college, located on the Anacostia River. And here is one of the uptown centers that we are proposing, which is based on the transit stop proposed in this area.

As soon as a transit stop is located here, we are sure that the values are going to increase in this section of the city and that development opportunities are going to occur. The Commission is endeavoring to give logical direction to this development. So, just by taking one section of the city, you can see all of the special areas and the special problems that we deal with.

The planning goes across the whole fabric of our city and includes coordination with all the District, Federal, and military agencies. The Park Service is involved. The GSA is involved. The Department of Agriculture is involved. The Department of Defense is involved. And the function of the Commission is to give direction to these projects and to tie them all together. I think you can see the type of planning that we do.

TRANSPORTATION PLANNING

Senator BARTLETT. Concerning your transportation planning functions, do you now have in your employ a transportation-planner, a position which I do not find listed as current on page 5 of your justification statement?

Mr. CONRAD. The position is listed as Civil Engineer, GS-14 on line 64 of page 5.

RESEARCH COMPUTER PROGRAM

Senator BARTLETT. Is the research computer program, for which you request $5,000 in the coming year, a new one and would you please describe its operation and advantages?

Mr. CONRAD. The research computer program, for which we requested $5,000 in the next fiscal year, is a new program, as such, although it is a continuation of work already being done by this agency, in the past through consultants.

The work intended with this funding consists of further developmental work and operations of a mathematical population-housing impact model for the District of Columbia. We have already completed basic developmental work on a mathematical model which has capabilities to make current estimates and forecast future characteristics of populations and housing for 96 census tracts in the District of Columbia. The characteristics include: (1) average household sizes and numbers of households by size and income, (2) numbers of households by size in seven household income-housing program groups, (3) numbers of housing units by bedroom size, and (4) numbers of overcrowded housing units. The funds requested for the next fiscal year would enable: (*a*) operations of the model, (*b*) important refinements to be made in the model already developed, and (*c*) development of an age distribution submodel that would make current estimates and future forecasts of age groups in the District's population, including school-age categories.

Population and housing estimates and forecasts continue to be an important input for planning by this agency. Up to now, it has been necessary to make these estimates and forecasts manually.

The population-housing impact model is able to do this work and make updated revisions more systematically, at more frequent intervals, and at lower costs to the Federal Government than is possible now. At comparative small costs the population-housing impact model also is able to estimate different prospective impacts on population and housing comparing alternative project and other types of plans proposed. In this way, the model also is able to provide a new input for planning decisionmaking by answering questions about impacts which have not been practicable or economical to answer before.

PRESIDENT'S TEMPORARY COMMISSION ON PENNSYLVANIA AVENUE

Senator BARTLETT. For the Temporary Commission on Pennsylvania Avenue, you are requesting $76,000, the same amount as was appropriated in fiscal year 1967. A statement by Chairman Owings will be printed in the record.

(The statement follows:)

Mr. Chairman, the Temporary Commission on Pennsylvania Avenue is currently in its second year. During this last year, the Congress saw fit to give us the added responsibility of working with the American Battle Monuments Commission in reviewing the design for a memorial to General John J. Pershing to be built on the site of National Square. Further, the Woodrow Wilson Memorial Commission in its final report to the Congress recommended that our Commission prepare a detailed study to implement the plans for a living memorial Center for Scholars as a tribute to President Wilson. On February 27, the President in his message to the Congress on the District of Columbia endorsed the recommendations of the Woodrow Wilson Memorial Commission and asked our Commission to commence work on the study.

This last year also saw work progress on the first two buildings to be built on the Avenue in complete consonance with our plans. Land clearance for the FBI Building on the Avenue between 9th and 10th is well along and the Congress appropriated money for beginning the substructure. Another building, being built with private capital, is well along and will be completed by the end of this year.

The staff of the Temporary Commission currently consists of Mr. Goldman, two architects and a secretary. Although it is small, it is adequate for our current needs.

There is also pending before the Congress a bill to establish a Permanent Commission on Pennsylvania Avenue. This bill provides for a statutory Commission with a five-year life to carry on the work of the Temporary Commission. Last year this bill was passed by the Senate, reported favorably out of the House Interior Committee, but did not reach the House floor. The bill was passed by the Senate on Monday. We are hopeful that this bill will receive favorable consideration in the House very soon.

1967 ACCOMPLISHMENTS

Senator BARTLETT. What physically was accomplished by the Commission during fiscal year 1967 to this time?

Mr. GOLDMAN. The question is framed in terms of "physical" accomplishments during the fiscal year to date. Such accomplishments are always the result of many months of serious and detailed planning and negotiations with the various governmental and private interests involved. Thus, it is difficult to talk in terms of "physical" accomplishments while pegging them to a specific fiscal year. However, we can point to the very recent beginnings made on the construction of the Capitol Reflecting Pool which is being built in conjunction with the center leg freeway in front of the Capitol Building. We can point to the land clearance which is proceeding in preparation for the excavation for the new FBI Building and to the recent completion of the second floor of the John Hancock Building. These, of course, were started at least in terms of negotiation and planning, prior to the beginning of the fiscal year.

There have been other less tangible accomplishments which will yield the "physical" within a relatively short period of time. The inclusion of the Constitution Avenue underpass, where it crosses Pennsylvania Avenue, and the tunneled E Street in the master plan for roads in the District; the enactment by the last Congress of legislation authorizing the construction of a monument to Gen. John J. Pershing in the southern half of our National Square; the recommendation by the Woodrow Wilson Commission that the monument to our 28th President be built on Pennsylvania Avenue at the site of Market Square; and the opening of serious negotiations with private developers for certainties along the avenue. All of these things, taking time and effort on the part of the Commission, will yield the "physical" accomplishments about which the committee asks.

PROGRAM FOR FISCAL YEAR 1968

Senator BARTLETT. Specifically, what does the Commission plan to accomplish in the coming year?

Mr. GOLDMAN. During the coming year, the Commission expects to complete sectional development plans, as called for by the zoning regulations for the entire length of the avenue. It is anticipated that within 6 months we will be able to announce the commencement of major private construction along the avenue. We will start and finish a complete study of the nature, design, and source of nongovernmental funds for the proposed Woodrow Wilson Center for Scholars on Pennsylvania Avenue. Many of the details of the Pennsylvania Avenue plan will be further refined and submitted for approval to the National Capital Planning Commission and the Fine Arts Commission. We plan to accomplish all this, and more.

Senator BARTLETT. Can you give an example of the "reliable information upon which decisions can be based," which is stated to be the immediate objective of this Commission?

Mr. GOLDMAN. Perhaps the best example of this information is the soon to be commenced feasibility study of the E Street tunnel. Before we can make firm decisions on certain land use problems, details of building design and layout, and pin down many structural details, we must have accurate grade and route information on the E Street tunnel. This entails an engineering study to determine subsoil conditions, traffic handling capabilities, linkage with feeder streets, study of traffic plans for as far away as the North Central Freeway, and many other details. At the present time, we do not have this information and it must be developed so that we may be able to advise the many private persons interested in developing their land along the avenue as to exactly what route and depth the tunnel will take.

LAND ACQUISITION

Senator BARTLETT. No additional funds for land acquisition are requested during the coming year. However, I want to place in the record a table provided by the National Capital Planning Commission indicating that as of December 31, 1966, there were available unexpended funds in the amount of $1,435,603. These include both the Federal appropriations and funds contributed by the governmental jurisdictions in the Washington area.

(The table follows:)

NATIONAL CAPITAL PLANNING COMMISSION

Unexpended land acquisition funds, Dec. 31, 1966

Project	Amount	Fiscal year for which appropriated	Additional funds necessary to complete acquisition
GEORGE WASHINGTON MEMORIAL PARKWAY			
A. Montgomery County, Md.:			
1. Little Falls Branch parkway connection	[1] $100,000	1963	0
2. Residual funds:			
(*a*) Matched by Maryland-National Capital Park and Planning Commission.	49,716	1956, 1958	------------
(*b*) Unmatched	3,185	1940, 1958	------------
B. Prince Georges County, Md.:			
1. Unit No. 1—vicinity of approaches to Woodrow Wilson Memorial Bridge.	136,885	1961	(2)
2. Unit No. 2 (Fort Foote extension in the Smoot Bay area), No. 3 (Harmony Hall historic area between Indian Queen Estates and Broadwater Estates subdivisions), and No. 4 (extension of Fort Washington to Broad Creek).	384,521	1962	$2,200,000
3. Remainder of parkway, District of Columbia line to Fort Washington.	------------	------------	5,800,000
C. Arlington County, Va.:			
1. Residual funds:			
(*a*) Matched by Arlington County and Commonwealth of Virginia.	20,582	1954, 1955, 1956, 1957.	------------
(*b*) Unmatched	844	1957	------------
D. Fairfax County, Va.:			
1. Capital Beltway to Great Falls	------------	------------	6,400,000
2. Residual funds:			
(*a*) Matched by Fairfax County and Commonwealth of Virginia.	5,102	1954, 1955, 1956, 1957.	------------
(*b*) Unmatched	1,447	1955, 1957	------------
STREAM VALLEY PARKS			
A. Maryland	[3] 12,345	1960	(4)
B Virginia	------------	------------	(4)
PARK, PARKWAY, AND PLAYGROUND SYSTEM IN THE DISTRICT OF COLUMBIA			
1. Palisades Park	138,000	1958, 1960	0
2. Morgan-Happy Hollow Playground	381,000	1960	[5] 1,419,000
3. Watts Branch Park	10,590	1958	1,550,000
4. Klingle Valley rights-in-land	48,000	1958	0
5. Land acquisition expenses	3,090	1960	------------
6. Reserve	[6] 140,296	1958, 1959, 1960.	------------

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[1] Not available for expenditure until matched by the Maryland-National Capital Park and Planning Commission in accordance with sec. 1(a) of the Capper-Cramton Act.

[2] All parcels in this unit have been acquired except the Potomac Sand & Gravel tract, containing 80.759 acres, and the residue of the Sellner tract, containing 73.057 acres. On Sept. 6, 1961, Potomac Sand & Gravel Co. offered to convey its 80.759 acres in fee simple for a consideration of $75,000 reserving the right to remove sand and gravel therefrom for a period of 12 years and to refill the area for a period of 14 years from the date of deed. The present authority of the National Capital Planning Commission to acquire fee title to land subject to limited rights reserved to the grantor does not extend to limited rights for business purposes. The fee simple appraisal of this property prepared on behalf of the Commission is in the amount of $452,500. On Dec. 11, 1963, Potomac withdrew its offer, indicating its willingness to consider the same or a similar sale at favorable terms to the United States when and if legislation authorizing acquisition by the Commission subject to limited rights for business purposes is enacted. A condemnation complaint, without declaration of taking, covering the residue of the Sellner tract, was filed Nov. 4, 1964. This condemnation has been consolidated with the condemnation of portions of the Sellner property on behalf of the Bureau of Public Roads filed May 5, 1958, and a stipulation in the amount of $450,000, covering all of the Sellner property, has been entered into with the defendants in the consolidated proceedings. Final award will be entered after adjudication of certain questions relating to title. The amounts to be paid by the Commission and the Bureau of Public Roads have not yet been determined.

[3] This amount represents the balance of funds appropriated under sec. 1(b) of the Capper-Cramton Act and not covered by agreements with the Maryland-National Capital Park and Planning Commission.

[4] Secs. 1(b) and 1(c) of the Capper-Cramton Act authorize the appropriation of funds to the National Capital Planning Commission for the purpose of making grants to local park authorities in Maryland and Virginia, respectively, covering ⅓ of the cost of acquiring lands for stream valley parks. No estimates are available from the local park authorities in Maryland and Virginia as to the cost of acquiring all of the lands determined to be necessary for all stream valley parks for which grants are authorized under the act.

[5] $723,000 for this project is included in the fiscal year 1967 District of Columbia public improvements program.

[6] This amount represents the balance of appropriations under sec. 4 of the Capper-Cramton Act which have not been obligated nor allotted by the Commission to specific projects within the District of Columbia. It is anticipated that all or a substantial part of this amount will be reallotted by the Commission to 1 or more uncompleted projects and/or expended for land acquisition expenses.

GEORGE WASHINGTON MEMORIAL PARKWAY, MARYLAND

Senator BARTLETT. All of this money has been available at least since fiscal year 1963. One hundred thousand dollars were appropriated in that fiscal year for the Little Falls Branch Parkway connection and is still unused because the matching grant has not been provided by Maryland. What is the reason for this delay?

Mr. SHEAR. The delay results for the most part from difficulties in establishing the precise alinement of the connection between the George Washington Memorial Parkway and the Little Falls Branch Parkway in order that an agreement with the Maryland National Capital Park and Planning Commission, providing for the matching of the appropriation, can be executed.

Senator BARTLETT. How long should the fund remain available?

Mr. SHEAR. It is anticipated that the alinement will be established, an agreement with the Maryland commission executed, and the appropriation obligated during this fiscal year or early next fiscal year. Since the fund is essential to completion of the George Washington Memorial Parkway, it should continue to remain available until matched and obligated.

SELLNER PROPERTY, GEORGE WASHINGTON MEMORIAL PARKWAY

Senator BARTLETT. The information which you have provided indicates that a stipulation was entered into in the amount of $450,000 for the Sellner property near the Woodrow Wilson Bridge. Do you estimate that the approximately $130,000 remaining available for purchase of this land will be sufficient?

Mr. SHEAR. The commission and the Bureau of Public Roads have agreed that the commission would pay $100,000 and the Bureau would pay $350,000 of the $450,000 award for the Sellner property and these amounts have been paid over to the Department of Justice for deposit into the registry of the court in satisfaction of the award.

POTOMAC SAND AND GRAVEL TRACT

Senator BARTLETT. Has any step been taken to seek legislation to acquire title to this land subject to limited rights for business purposes which would permit you to consider the Potomac sand and gravel tract at the Woodrow Wilson Bridge?

Mr. SHEAR. It is anticipated that the Congress will be asked to amend the statute permitting the commission to acquire fee title to land subject to limited rights reserved to the grantor, to permit such acquisition subject to limited rights for business purposes, in connection with the pending review of the authorizing legislation for the George Washington Memorial Parkway in accordance with the directive of the House Committee on Appropriations last year.

UNUSED FUNDS

Senator BARTLETT. I observe that with respect to the minor amounts remaining of appropriations for the George Washington Memorial Parkway relating to lands both in Arlington County and Fairfax

County that the funds will be returned to the Treasury unless they are required to meet deficiency awards in pending condemnation cases. What are these cases?

Mr. SHEAR. I believe that awards have been entered and paid for all parcels in the several condemnation cases filed in connection with the parkway in Arlington and Fairfax Counties.

Senator BARTLETT. Have the condemnations which have been filed included declarations of taking?

Mr. SHEAR. In most instances condemnations filed for parkway land acquisition have included declarations of taking.

Senator BARTLETT. If so, what is your situation should the awards be greater than the amounts of your appropriations?

Mr. SHEAR. All of the condemnation cases filed to date, including those involving declarations of taking, have been completed and all awards have been paid.

MORGAN-HAPPY HOLLOW PLAYGROUND DISTRICT OF COLUMBIA

Senator BARTLETT. Would you bring the committee up to date with regard to the addition to the Morgan-Happy Hollow Playground for which $375,000 is available?

Mr. SHEAR. It is contemplated that acquisition of the addition to the Morgan-Happy Hollow Playground will be carried out jointly by the commission and the District of Columbia government in connection with the replacement of the Morgan Elementary School. The District Commissioners have included in the District's fiscal year 1968 appropriation estimates $723,000 for site acquisition for the playground and $1,187,000 for site acquisition for the school, including the school playground.

Senator BARTLETT. Thank you.

FRIDAY, MARCH 17, 1967.

NATIONAL COUNCIL ON MARINE RESOURCES AND ENGINEERING DEVELOPMENT AND COMMISSION ON MARINE SCIENCE, ENGINEERING, AND RESOURCES

STATEMENT OF EDWARD WENK, JR., EXECUTIVE SECRETARY, ACCOMPANIED BY ENOCH L. DILLON, PROGRAM PLANNING OFFICER; AND CHARLES S. BARDEN, JR., EXECUTIVE OFFICER, NATIONAL COUNCIL ON MARINE RESOURCES AND ENGINEERING DEVELOPMENT; AND STATEMENT OF JULIUS A. STRATTON, CHAIRMAN, COMMISSION ON MARINE SCIENCE, ENGINEERING, AND RESOURCES

Senator BARTLETT. The committee will now hear testimony from the National Council on Marine Resources and Engineering Development, and the Commission on Marine Science, Engineering, and Resources.

SALARIES AND EXPENSES

For the fiscal year 1968, a budget of $1,330,000 is proposed for salaries and expenses of the National Council on Marine Resources and Engineering Development, and the Commission on Marine Science, Engineering, and Resources. This is $230,000 more than was appropriated in fiscal year 1967. The justification statement will be entered into the record.

(The justification follows:)

NATIONAL COUNCIL ON MARINE RESOURCES AND ENGINEERING DEVELOPMENT—COMMISSION ON MARINE SCIENCE, ENGINEERING, AND RESOURCES

Justification of estimates for fiscal year 1968

	Millions
1967 appropriation	$1.10
1968 estimate	1.33

THE NATIONAL POLICY AND PROGRAM

Public Law 89–454 the "Marine Resources and Engineering Development Act of 1966" established the national policy of the United States to develop, encourage and maintain a coordinated and comprehensive, long-range program in marine science for the benefit of mankind. This policy looks forward to the accelerated development of marine resources, the expansion of our knowledge of the sea, and the improvement of our capabilities to operate in and exploit the marine evironment. The Law established the National Council on Marine Resources and Engineering Development and directs the President to establish the Commission on Marine Sciences, Engineering, and Resources.

Public Law 89–688, amended PL 89–454 to authorize the establishment and operation of sea grant colleges and programs by initiating and supporting programs of education and research in the various fields relating to the development of marine resources, and assigned certain advisory functions to the National Council on Marine Resources and Engineering Development.

The Council and the Commission form the basis for the Budget Activities described below:

1. *Planning, policy development and program coordination (Council).*—This activity will finance the work and studies of the National Conucil on Marine Resources and Engineering Development. These relate to exploration, description and prediction of the marine environment to enable exploitation of the ocean's resources and potentials. The Council advises and assists the President by:

(a) surveying all significant marine science activities, including Federal policies, plans, programs and accomplishments,

(b) developing a comprehensive program to be conducted by the Federal government, independently or in cooperation with non-Federal organizations,

(c) coordinating a program of international cooperation in work done pursuant to Public Law 89–454, as amended,

(d) undertaking a comprehensive study of legal problems arising out of management, use, development, recovery, and control of marine resources,

(e) designating and fixing Federal agency responsibilities for conducting marine science activities,

(f) insuring cooperation between, and resolving differences among, Federal agencies,

(g) reviewing annually all Federal marine science activities, and

(h) preparing the annual report required by PL 89–454 for the President's transmittal to Congress.

Also, as provided for by PL 89–688 (Title II) the Council shall, as the President may request,

(a) advise the National Science Foundation with respect to policies, procedures, and operation of the Foundation in carrying out its function under Title II,

(b) provide policy guidance to the Foundation with respect to contracts and grants in support of Sea Grant Programs, and

(c) submit an annual report on its activities and its recommendations under Title II.

Finally, the Council will undertake technical, economic, and other studies related to national security, resource development, enhancement of commerce transportation, protection of life and property and other benefits resulting from programs in marine resources, engineering, and science.

2. *Reviews of marine science, engineering and resources programs. (Commission).*—This activity will provide for the public advisory Commission on Marine Science, Engineering, and Resources. Representing industry, universities, state and federal government, the Commission with four advisors from the Congress will:

(a) Review existing national research programs to insure realistic and adequate support for basic oceanographic research,

(b) review existing oceanographic and ocean engineering programs, including education and technical training in relation to advancing oceanographic competence,

(c) review known and contemplated needs for natural resources from the marine environment,

(d) conduct a comprehensive investigation and study of, and make recommendations with regard to, the adequacy of existing and planned marine science activities to meet the national objectives set out in PL 89–454, and

(e) recommend to the President, via the Council, and to the Congress, such organizational and other measures as they deem necessary.

THE COUNCIL

Public Law 89–454, the "Marine Resources and Engineering Development Act of 1966," designates the Vice President as Chairman of the Council. It also designates as members the Secretaries of State, Navy, Interior, Commerce, Health, Education and Welfare, and Transportation,* and the Chairman of the

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*With the transfer of the Coast Guard to the Department of Transportation, the Secretary of Transportation replaces the Secretary of the Treasury.

Atomic Energy Commission and the Director of the National Science Foundation. In addition, heads of the National Aeronautics and Space Administration, the Smithsonian Institution, the Office of Science and Technology, the Bureau of the Budget, the Agency for International Development, and the Council of Economic Advisers have been invited as Observers to the Council.

The budget estimate for the Council provides for a small professional staff of senior specialists representing the fields of science, engineering, economics, foreign affairs, public administration, and law to prepare Federal policies and to review and coordinate the programs of each of the eleven agencies and their twenty-four subdivisions presently engaged in marine science and technology.

The Executive Secretary of the Council, appointed by the President, is responsible for administering this appropriation, supervising the staff of the Council, and providing liaison with the Commission. Expertise of the Council staff is supplemented by consultants and contract studies.

In carrying out its responsibilities, the staff works closely with the President's Office of Science and Technology, the Federal Council for Science and Technology, the President's Science Advisory Committee, and other offices, commissions and councils located in the Executive Office of the President. This staff does not exercise operational or management responsibilities in connection with the agencies' programs, but supports the policy and program planning of the National Council on Marine Resources and Engineering Development. The Council itself, composed of the Vice President and the responsible cabinet officers and agency heads, in turn recommends necessary policies and programs to the President.

At the July 13, 1966, commissioning of the ESSA ship *Oceanographer*, the President requested the Council to review the report, *Effective Use of the Sea*, prepared by his Science Advisory Committee, and to develop initial recommendations by the following January. In addition to analyzing the more than 100 recommendations included in this report, the Council staff also considered suggestions from the Interagency Committee on Oceanography and the National Academy of Sciences Committee on Oceanography as well as recommendations submitted by individual Federal agencies relating to new possibilities in marine sciences. The Council then selected nine programs for priority attention and made recommendations to the President accordingly. A report embodying these recommendations has been prepared by the Council as part of the President's report required by Section 7 of PL 89–454.

THE COMMISSION

In addition to the Council, PL 89–454 provides for an independent Commission on Marine Science, Engineering and Resources. The Commission was established by the President on January 9, 1967. The Commission's report is due no later than 18 months after its establishment.

These estimates provide for the Commissioners and for a small staff. This staff will be supplemented by assistance from the Council staff and from appropriate government agencies, in order that the Commission may have ready and adequate access to all information necessary to carry on its functions. It is anticipated that specialized panels of additional consultants will be used.

ESTIMATE FOR FISCAL YEAR 1968

The budget activities in the attached appropriation request are designed to provide financial support for the Council and the Commission. The budget estimate for FY 1968 is for $1.33 million of the $1.5 million authorized, and represents an increase of $230,000 over the FY 1967 appropriation of $1.1 million. This increase reflects the Council and Commission operating at full strength through the entire fiscal year. This estimate will provide for the Commissioners, Council and Commission staffs, and operating expenses required to carry out the provisions of Public Law 89–454 and Public Law 89–688, and those scientific, economic and legal studies which will be conducted to determine the potential benefits to the United States economy, security, health and welfare to be gained from marine resources, engineering and science. These studies will be aimed at establishing goals, cost/benefit relationships and feasibility of various programs concerned with such areas as fisheries, minerals, environmental prediction, prevention of beach and coastal erosion, pollution of estuaries, and the oceanographic data system. The Council and Commission will also use such contracting and consulting services as are necessary for these purposes.

Personnel summary

	1966 actual	1967 estimate	1968 estimate
Total Number of permanent positions		25	25
Full-time equivalent of other positions		6	6
Average number of all employees		23	29
Average GS grade		10.9	10.9
Average GS salary		$11,488	$11,826
Average salary, grades established by executive secretary, council		$24,549	$24,847

Personnel summary

	1966 actual	1967 estimate	1968 estimate
Total number of permanent positions		5	
Full-time equivalent of other positions		1	
Average number of all employees		6	
Average GS grade		8.0	
Average GS salary		$7,068	
Average salary, grades established by executive secretary, council		$22,085	

Program and financing

[In thousands of dollars]

	1966 actual	1967 estimate	1968 estimate
Program by activities:			
1. Planning, policy development, and program coordination, council		850	930
2. Reviews of marine science, engineering, and resources programs, commission		250	400
10 Total program costs, funded, obligations		1,100	1,330
Financing:			
40 New obligational authority (appropriation)		1,100	1,330
Relation of obligations to expenditures:			
71 Total obligations (affecting expenditures)		1,100	1,330
72 Obligated balance, start of year			200
74 Obligated balance, end of year		−200	−130
90 Expenditures		900	1,400

Program and financing

[In thousands of dollars]

	1966 actual	1967 estimate	1968 estimate
Program by activities:			
10 Planning, policy development, and program coordination—Total obligations		50	
Financing:			
11 Receipts and reimbursements from: Administrative budget accounts		−50	
New obligational authority			
Relation of obligations to expenditures:			
10 Total obligations		50	
70 Receipts and other offsets (items 11-17)		−50	
71 Obligations affecting expenditures			
90 Expenditures			

Object classification

[In thousands of dollars]

		1966 actual	1967 estimate	1968 estimate
	Personnel compensation:			
11.1	Permanent positions	----------	271	362
11.3	Positions other than permanent	----------	87	100
	Total personnel compensation	----------	358	426
12.0	Personnel benefits	----------	21	27
21.0	Travel and transportation of persons	----------	70	90
23.0	Rent, communications and utilities	----------	38	50
24.0	Printing and reproduction	----------	30	60
25.1	Other services	----------	450	500
25.2	Services of other agencies	----------	85	120
26.0	Supplies and material	----------	8	15
31.0	Equipment	----------	40	6
99.0	Total obligations	----------	1,100	1,330

Object classification

[In thousands of dollars]

		1966 actual	1967 estimate	1968 estimate
	Personnel compensation:			
11.1	Permanent positions	----------	11	----------
11.3	Positions other than permanent	----------	3	----------
	Total personnel compensation	----------	14	----------
12.0	Personnel benefits	----------	1	----------
21.0	Travel and tarnsportation of persons	----------	1	----------
23.0	Rent, communications, and utilities	----------	1	----------
26.0	Supplies and materials	----------	1	----------
31.0	Equipment	----------	3	----------
44.0	Refunds	----------	29	----------
99.0	Total obligations	----------	50	----------

PREPARED STATEMENT

Senator BARTLETT. Dr. Wenk is here as chairman of the National Council on Marine Resources and Engineering Development; Dr. Julius A. Stratton, chairman of the Commission on Marine Science, Engineering, and Resources, was supposed to be here, but is not. Where is he?

Dr. WENK. Sir, he is delayed by a blizzard in New York City.

Senator BARTLETT. On March 17th?

Dr. WENK. On March 17th, a St. Patrick's Day Blizzard.

Senator Bartlett, whereas we looked forward to the benefits of science, here is one case where it hasn't helped us a great deal.

Senator BARTLETT. That is what I thought when I looked out the window this morning. It is snowing even in the Nation's Capital.

Dr. WENK. He has asked me to extend his regrets, and asks also if he might have permission to have his prepared statement inserted in the record at an appropriate time.

Senator BARTLETT. It will be placed in the record.

(Dr. Stratton's prepared statement follows:)

INTRODUCTION

The Marine Resources and Engineering Development Act of 1966, Public Law 89-454, constitutes an historic step on the part of the Congress in recognition of the growing importance of these resources to the security and economic progress of our country, as well as for the general benefit of mankind.

OBJECTIVES OF ACT

Specifically, the Act was designed to contribute to the following objectives:

1. The accelerated development of the resources of the marine environment.
2. The expansion of human knowledge of the marine environment.
3. The encourage of private investment enterprise in exploration, technological development, marine commerce, and economic utilization of the resources of the marine environment.
4. The preservation of the role of the United States as a leader in marine science and resource development.
5. The advancement of education and training in marine science.
6. The development and improvement of the capabilities, performance, use, and efficiency of vehicles, equipment, and instruments for use in exploration, research, surveys, the recovery of resources, and the transmission of energy in the marine environment.
7. The effective utilization of the scientific and engineering resources of the nation, with close cooperation among all interested agencies, public and private, in order to avoid unnecessary duplication of effort, facilities, and equipment, or waste.
8. The cooperation by the United States with other nations and groups of nations and international organizations in marine science activities when such cooperation is in the national interest.

ESTABLISHMENT OF INDEPENDENT COMMISSION

To fulfill these objectives, Public Law 89-454 establishes in the Executive Office of the President a National Council on Marine Resources and Engineering Development under the chairmanship of the Vice President of the United States, and an independent Commission on Marine Science, Engineering and Resources. Provision is made for appointment by the President of fifteen members to the Commission to be drawn from Federal and State governments, industry, universities, or research institutions. In addition, four advisory members are to be appointed from among the Members of the Senate and House of Representatives.

On January 9, 1967, President Johnson announced the appointment of the new Commission. The attached copy of the official press release provides a brief account of the membership.

FIRST COMMISSION MEETING

The Commission met for the first time on February 24 and 25, with Senators Magnuson and Cotton and Representatives Lennon and Mosher present through much of the discussion. We were addressed by Vice President Humphrey on the nature of our mandate and on the relation of the Commission to the Council. We initiated a series of background briefings which will be continued through future meetings. But the primary purpose of this first session was to arrive at a clear understanding of our task and to organize our efforts to insure the effective fulfillment of that task within the prescribed eighteen months.

In a number of areas the responsibilities of the Commission and the Council appear from the wording of the legislation to overlap, and, where appropriate, the two bodies propose to work closely in concert. Nonetheless, it was clearly the intent of Congress to establish the Commission as an independent entity, charged with specific duties.

MAJOR OBJECTIVES OF COMMISSION

Out of our initial discussions the Commission has arrived at the following formulation of major objectives:

1. To become familiar with the whole range of projects and programs relating to marine affairs; including the state of relevant science, technology, and education; the abundance and distribution of mineral and food resources; the interaction of sea and air as it affects climate; the conservation of shore lines and estuaries. In the course of this examination the Commission will draw freely upon available material, including studies carried out under the Council, and the numerous reports prepared by other groups, such as the National

Academy of Sciences, the National Academy of Engineering, the President's Science Advisory Committee, and others. Further studies will be initiated only when it appears to the Commission that there are serious gaps in our information.

2. The Commission, as an independent body free of operational responsibilities, will plan and take at least the first steps within the brief time available a thorough evaluation of current activities in the broad field of marine affairs.

3. We shall attempt to identify major trends and opportunities, and to project these into the future; thus endeavoring to determine the needs as well as the problems of the future. In the course of this effort we shall pay particular attention to:

a. the needs and interests of the private sector;

b. the international implications of an expanded program;

c. international, federal, state, and private inter-relationships and responsibilities;

d. the development and maintenance of a balanced program.

4. Finally, on the grounds of these investigations, the Commission proposes to recommend:

1. a plan for the organization of the national effort; and
2. an administrative structure for governmental activities.

We take this to be our primary and overriding responsibility.

COMMENTS OF VICE PRESIDENT CONCERNING COUNCIL/COMMISSION FUNCTIONS

In his very lucid and constructive comments on the occasion of our first meeting, the Vice President noted that the Council and the Commission serve distinct functions. They are not competing but complementary. The Council, he pointed out, is a coordinating body of existing machinery. The Commission is directed to pioneer, to experiment, to look to the future, to have a free hand —so to speak—working more closely with the private sector as to how we can upgrade, improve, expand, enhance the whole field of marine sciences.

STAFF SUPPORT

The Commission proposes to carry on its work with the aid of special consultants and a small staff. Thus far we have drawn on Dr. Wenk, the Executive Secretary of the Council, for support. The Commission will need to appoint a Staff Director and Assistant Director with appropriate secretarial help if it is to carry out its mission effectively. To this end a budget plan will be worked out jointly with the Council.

PREPARED STATEMENT

Senator BARTLETT. And your prepared statement, Dr. Wenk, will be placed in the record, the complete text, and perhaps you care to highlight it.

(Dr. Wenk's prepared statement follows:)

INTRODUCTION

I very much appreciate the privilege of appearing as a witness today to provide background justification in support of the FY 1968 appropriations requested for the National Council on Marine Resources and Engineering Development and for the Commission on Marine Science, Engineering, and Resources.

I am pleased that the Chairman of the Commission, Dr. Julius Stratton, is present to testify with me. Dr. Stratton, I am sure you know, is a former President of MIT and presently Chairman of the Board of the Ford Foundation. President Johnson appointed him as Chairman of the Commission on January 9 of this year.

I will comment briefly on the responsibilities and progress of the Council, and Dr. Stratton has a statement regarding the work of the Commission.

Last October I appeared before you to present President Johnson's FY 1967 supplemental budget request for both the Council and the Commission. I reviewed the general provisions of the Marine Resources and Engineering Development Act of 1966, discussed the role of the Council, what we proposed to do, and how we planned to go about doing it. Now, five months later, we can add to those remarks in terms of some operating experience, to explain what we have done, and more explicitly what we hope to achieve with the funds now requested.

MARINE SCIENCE AFFAIRS—NEW RELATIONSHIPS

By way of perspective—marine science affairs is a term intended to portray the body of oceanic activities that link science and society. Many of these relationships are old, dating to man's earliest efforts to extract fish and salt from the sea, and to exploration of our planet. But many of the relationships are new. While extending knowledge of the marine environment, a significant transition in marine science activities is underway toward focusing ocean engineering and technologies on explicit purposes:

to contribute to national security;

to rehabilitate domestic fisheries and harvest fish protein for the undernourished;

to develop seashore resources and reduce pollution of the Great Lakes, bays, estuaries and near-shore waters;

to improve forecasting of weather, climate, and ocean conditions;

to supplement continental sources of oil, gas, and minerals; and

to promote international understanding and cooperation through the use of the oceans.

This list illustrates that marine science affairs cannot be considered in isolation. Just as research and development activities in the oceans must be related to similar activities on land, so, too, must man's exploration and exploitation of the oceans' resources. Marine science goals, policies, programs, and activities must therefore be examined in two ways: as they relate to the unity they derive from the marine environment, and as they contribute to major goals of society and the nation. It is in this second context—the relatively unfulfilled promise of the sea to contribute to human needs—that recent efforts became increasingly related to major issues of world peace and national security; nutrition and welfare; the requirements and problems of a growing and increasingly urbanized population; and the protection of our environment and seashore resources from the unnecessary degradation.

1966—TURNING POINT IN MARINE SCIENCES

For marine sciences, the year 1966 was a significant turning point. Through the Marine Resources and Engineering Development Act, the 89th Congress developed and the President approved a new national policy to intensify the study of the sea, and to convert its promise to practical reality.

The principal responsibilty of the National Council on Marine Resources and Engineering Development is to assist the President in planning and coordinating the many Federal marine science activities. Since its creation last summer, the Council has met five times. The Vice President presided at all meetings and attendance by Council members has been excellent. At the President's request, the Council started to carry out the provisions of Section 4(a) of the Act by:

surveying public and private marine science activities;

developing a program of marine science activities—in cooperation with the departments and agencies, especially in terms of filling gaps and establishing areas of special emphasis;

designating and fixing responsibilities for the conduct of certain marine science activities;

insuring cooperation and resolving differences arising among departments and agencies . . .; and

planning studies . . . of the legal problems arising out of the management, use, development, recovery, and control of the resources of the marine environment.

The Council is also taking steps to

establish long-range studies of the potential benefits to the United States economy, security, health, and welfare to be gained from marine resources, engineering, and science, and the cost involved in obtaining such benefits; and

review the marine science activities conducted by departments and agencies . . .

PRESIDENT'S REQUEST FOR COUNCIL RECOMMENDATIONS—COUNCIL REPORT

The President is required by law to submit to the Congress annually a report that describes and evaluates Federal activities and accomplishments in marine science and contains an estimate of funding requirements of each Federal agency for marine science activities during the succeeding year. The Council was assigned this responsibility. In addition, the President requested the Council to develop initial recommendations within the FY 1968 time frame that required a fast start last fall. Most of the Council's early efforts were devoted to familiarization with the issues involved and then with selection of areas deserving priority attention.

After screening well over 100 proposals from numerous public and private sources, and the many continuing efforts that could be effectively mobilized around a smaller number of explicit goals, the Council identified priorities, recommended steps to strengthen management, clarified agency responsibilities, and provided additional methods for coordinating multi-agency support of programs.

The areas of special emphasis are set forth in the President's report now being transmitted to the Congress.

PROPOSED TOTAL FEDERAL EXPENDITURES—FY 68

As the new scope of marine science affairs was studied and defined, categories were established to reflect more clearly the end purposes of Federal expenditures in marine science and technology such as national security, seafood technology and pollution abatment. The total amounts to some $462 million proposed for FY 1968.

LEAD AGENCY CONCEPT

Many of the goals and programs, incidentally, were found by the Council to cut across agency lines. Wherever possible, the Council recommended a lead agency to take responsibility in developing specific areas and to provide Government-wide leadership.

In discussing the role of the Marine Sciences Council, I should like to emphasize that it is not an operating agency. Its purpose is to assist the President in identifying Government-wide goals, in developing alternative strategies for their achievement, in identifying issues, and in helping the President reach an informed decision. But we also try to assist the operating agencies in doing their job.

COUNCIL PLANS

During the coming months, the Marine Sciences Council will give special attention to a selected number of policy areas:

to understand the goals of the nation and of society and the capacity of marine sciences to accelerate progress toward these goals;

to examine the potential contribution of marine science and technology to national security and peace;

to define the role of the Federal Government along the shoreline and in the oceans, and methods of cooperation between the Federal Government and States, regions, universities, and private industry;

to clarify the administrative, legal, and technological framework for encouraging the rational exploitation of the resources of the sea; and

to identify steps needed to strengthen the base of scientific research which underlies our marine technology.

This year, Congress has not been asked to enact new marine science legislation. The many instruments already provided allow us to move forward in meeting many of the urgent problems of our times.

STAFF SUPPORT—BUDGET REQUEST

In order to effectively support the policy and program planning of the Council, we are striving to develop and maintain a small but highly qualified staff. Our own capabilities are being extended through the use of consultants and policy studies that combine considerations of marine science with engineering, law, public administration, economics, and foreign affairs.

This FY 1968 budget request before you today for $1.33 million will provide for the Commission Members, Commission and Council staffs operating in

FY 1968 at full strength for a full year, and consultants to both the Commission and the Council. Operating expenses, and studies that are required by law or are necessary to evaluate marine science and technology programs in terms of benefits to the United States economy, security, health and welfare, are also provided for. Justification background material for this FY 1968 estimate has already been provided to the Committee.

MAXIMUM USE OF EXISTING KNOWLEDGE AND CAPABILITIES

As required by the Act, we will continue to solicit the views of departments and agencies concerned with marine sciences and the views of non-Federal organizations and individuals with capabilities in the marine sciences. We intend to make maximum use of the studies and surveys that are already completed or underway by Federal agencies and others.

This completes my statement. Dr. Stratton's statement regarding the nature and work of the Commission on Marine Science, Engineering, and Resources has been placed in the record.

MARINE RESOURCES AND ENGINEERING DEVELOPMENT ACT OF 1966

Dr. Wenk. Senator Bartlett, it is quite a privilege to appear here before your committee. This is my first appearance before this group. It is all the more a privilege, because the legislation that established our Council was cosponsored by Senator Bartlett, and many of the provisions of that legislation, S. 944, were derived from separate legislation that you had introduced in the last session of the Congress.

By way of background, the Congress had taken initiative to advance our activities in the sea for many years. The legislation under which we operate that was enacted last June is considered by everyone, both in and outside of Government, as a landmark.

It did three things. It established a mandate for the Nation to develop a long-range set of policies and programs in marine sciences. It established a policy planning and coordinating council. And it established an advisory commission. The Council, as you know, is chaired by the Vice President, includes five Cabinet officers, and three department heads; that is, the most senior representatives of those agencies of Government that have major statutory responsibilities for operating programs related to marine sciences.

COUNCIL MEETINGS

I am pleased to report to you that since the enactment of that bill, the President activated the Council. It met first August 17 of last year, and has met a total of five times since. Excuse me, a total of four times since—a total of five meetings since August 17. The Vice President has presided at all, and we have had excellent attendance from these Cabinet officers and senior representatives from these agencies.

PRESIDENT'S FIRST REPORT

The first assignment that we received was to develop for the President his first report provided by the legislation to be submitted to the Congress. This report was transmitted by the President to the Congress last week, on March 9. The report describes for the first time what we believed to be the scope of activities of marine science defined by the legislation; sets forth some nine new initiatives which the executive branch has included within the budgets now before the Congress for fiscal year 1968. It summarizes the activities of the Council as they reflect a review and evaluation of the $462 million of on-going activities in these 11 agencies that are involved, some new steps toward coordination, some initiatives in international cooperation, and finally, the designation of agencies responsible for each of these nine initiatives.

EXPLANATION OF 1968 BUDGET

The budget that the President has submitted this year for this activity is for $1.33 million. It would provide for continuation of policy planning and coordinating activities of the Council, and for initiating the activities of the Commission. That is to say, the $1.33 million is for both. It is $230,000 more than last year, because for fiscal year 1968, both the Council and the Commission will be operating at full strength for a full 12 months. For fiscal year 1967, the Council was operating only 10 months, and the Commission that was appointed by the President January 9 of this year, would have been operating only 6 months. The main difference therefore between the two budgets represents the full operation of both activities for a full 12 months.

We would be pleased to answer any questions that you may have, Senator Bartlett.

Senator BARTLETT. Thank you very much, Dr. Wenk.

You were organized in August?

Dr. WENK. Yes, sir; the first meeting of the Council occurred August 17. The executive secretary was sworn in August 17.

JUSTIFICATION FOR BUDGET INCREASE

Senator BARTLETT. Your first appropriation came in the second supplemental appropriation bill which became law last October. Prior to that time you were funded through money borrowed from other agencies. I assume that the increase in your budget this year is to carry you for a full fiscal year.

Dr. WENK. That is correct.

Senator BARTLETT. When you testified last fall, you told the committee that there were five full-time employees. How many employees are there now?

Dr. WENK. We now have 13 on board, four commitments and three vacancies, totaling 20 for the Council. There are five staff vacancies for the Commission, and many candidates who are being interviewed. No commitments made, but commitments should be made within the next few days.

Senator BARTLETT. How large do you expect this group to become?

USE OF CONSULTANTS

Dr. WENK. With regard to full-time staffing, the personnel allowance by the Bureau of the Budget is 25, and we do not expect to go above that, or to request an increase. We do have the opportunity, however, of employing part-time consultants, and we are making extensive use of these individuals. By this means, we can tap expertise in a wide variety of fields, in science, engineering, in law, in economics, and public affairs, outside of Government. Considering the arduous assignment given us by the Congress and the short period of time in which we are to come in with some recommendations, we feel that we want to pick the best brains the country has to offer.

1968 PROGRAM PLANS

Senator BARTLETT. What program do you have in mind for the fiscal year starting July 1?

Dr. WENK. The activities of the Council comprise a day-to-day assistance and advice to the President. And this concerns a review of all of the on-going programs of the 11 operating agencies, which, incidentally, total for this year some $462 million. Secondly, we will be endeavoring to identify more clearly the goals for these activities, in terms of well-defined public purposes. By that, I mean we interpret the legislation as an important step to translate scientific discoveries about the sea, to some practical application. And these public purposes include defense, but they also include energy and minerals exploration; they include a new program mentioned by the President on extracting food from the sea, steps to improve weather forcasting, steps to control pollution of bays and estuaries, and to make better use, multiple use, of our shoreline.

Finally, we will be, during this fiscal year, doing a good deal of thinking about the organization of government. One of the provisions of this law requires the commission to examine whether the present assignment of responsibilities and, to some extent, fragmentation of responsibilities might be altered by some new organization arrangements in government. A number of proposals have been made that stretch all the way from consolidating all of these activities into one superagency to their being assigned to one or another of our departments, or at least consolidated in a smaller number of agency units. This, in other words, is a step to evolve better management of a multiagency program. One of our main responsibilities would be in this direction.

Senator BARTLETT. Did you say, Dr. Wenk, that $462 million was appropriated for this fiscal year, or it has been requested for the next?

Dr. WENK. Requested for the next, Senator Bartlett. For the current fiscal year, it is $409 million.

Senator BARTLETT. For marine sciences in general?

Dr. WENK. Yes, sir.

Senator BARTLETT. And this is distributed among 11 agencies?

Dr. WENK. Yes, it is. There is a table in our report on page 25, if that would be of any assistance in elaborating on the details between the different departments, and also the budget for 3 successive years.

Senator BARTLETT. Thank you. That table will be included in the record.

(The table follows:)

Program plan of Federal agencies for marine sciences and technology

[In millions of dollars]

Agency	1966 actual	1967 estimate	1968 estimate
Department of Defense	174.9	235.8	258.7
Department of the Interior	56.5	71.2	72.3
National Science Foundation	[1] 47.7	29.0	40.1
Department of Commerce	25.0	32.5	36.0
Department of Transportation	8.1	10.8	24.6
Atomic Energy Commission	8.3	13.7	15.8
Department of State	5.0	5.1	5.4
Department of Health, Education, and Welfare	5.4	7.0	4.8
Agency for International Development	.1	2.0	2.0
Smithsonian Institution	1.5	1.6	1.8
National Aeronautics and Space Administration	.9	.4	.8
Total	333.4	409.1	462.3

[1] Includes Project Mohole which was discontinued in fiscal year 1967.

SEA GRANT PROGRAM

Senator BARTLETT. What is the sea grant program?

Dr. WENK. The sea grant program is a new law, Public Law 89-688, established by the Congress last year, with three objectives. The first is for training and education, particularly of engineers oriented toward marine activities. The second concerns the stimulation of applied research as it relates to the sea, and the third concerns improvement in information transfer, particularly to take academic research, and put it in the hands of people in industry. Some people have compared that third stage, incidentally, to the agricultural extension service.

The law provides that our Council establish policy guidance in implementing the legislation, but the funding for the sea grants themselves, and the administration of the program, comes through the National Science Foundation.

EFFECT OF SEA GRANT LEGISLATION

Senator BARTLETT. The National Science Foundation. Now, in my opinion, this is a statement, not a question, and to coin a phrase, generations yet unborn will bless the memory of Senator Pell, the author of this bill, because it sets up a situation comparable to that of the land-grant colleges. And my own conclusion is that it is going to have enormously beneficial effects upon this entire program.

Will you agree with that?

Dr. WENK. Senator, I would wholeheartedly. The Council includes that sea grant legislation as one of the nine specific recommendations to the President, to implement immediately. In fact, the National Science Foundation is being encouraged to ask approval from the Congress to reprogram some fiscal 1967 money, so that it can get that program started even before the Congress has acted on the fiscal 1968 budget. So you have now very enthusiastic support from the President and Vice President for this legislation.

SEA GRANT BUDGET

Senator BARTLETT. Can you tell us how much money is going to be asked for this sea grant program in the next fiscal year?

Dr. WENK. For the request to the Congress for reprograming, $1 million. That is, in fiscal 1967.

Senator BARTLETT. Yes.

Dr. WENK. Of new money, $4 million.

Senator BARTLETT. Four million dollars?

Dr. WENK. Yes, sir.

Senator BARTLETT. In your opinion, is that a sufficient amount for launching the program? Because that, in effect, is what would occur, the reprograming wouldn't give very much of a start.

Dr. WENK. This is such a new program that the universities themselves are going to have to think through how to implement it.

Senator BARTLETT. You want to feel your way carefully?

Dr. WENK. Yes; feel our way carefully. There are two reasons for this. One is that the program is multidisciplinary, and the universities have not had extensive experience in bringing together people from different departments of science and engineering, economics and law, and this will be an encouragement in this direction.

Secondly, it provides for matching funds, and we feel that it is going to take a while before the States will have developed their own funds to match Federal grants.

COOPERATION WITH AGENCIES

Senator BARTLETT. Now I would like to ask you this, Dr. Wenk. So far, have you found a willingness on the part of each of these agencies to cooperate, or do some of them which have been in this business for long on their own have a standoffish attitude?

Dr. WENK. First, Senator, the attendance and participation by the members of the Council or their immediate subordinates who have been attending these meetings, had been accompanied only by enthusiasm and a willingness to consider issues, to express their opinions candidly, to debate differences of view, and finally, to try to reach a consensus to advance the program.

I think it is fair to say that any new institution of government has an effect of rocking the boat. This new Council is a new institution of government. But we are trying to make our way not in any sense of competition with the operating agencies, but rather, as an extra element of government that will help even plead their cause. In other words, one of our objectives is to help these individual agencies to do their job better, by clarifying goals, even coming to their assistance in defending the budget of Council endorsed elements before the Bureau of the Budget. And from this point of view, I think each of these agencies has the opportunity, as it were, of one more friend in court. At the same time, we feel we must assume an independent and objective point of view in serving the President, and not support any single agency, or special interest.

VICE PRESIDENT'S PARTICIPATION

Senator BARTLETT. I have been informed—and I would like to check this with you, Dr. Wenk—that the Vice President, either acquired or already had developed a tremendous interest in this subject, and has been most actively engaged in helping the Council and the Commission. Is that right?

Dr. WENK. It is absolutely correct. He has personally presided at all Council meetings; he has had extensive briefings prior to them, and this, in terms of keeping up with issues, means a personal involvement—and I believe he has said this publicly—of at least 2 to 3 hours every week. He has a strong interest in visiting all of the major oceanographic research laboratories throughout the country, and especially to see ways of translating the untapped potential of the sea to serve our public interest. You have a most enthusiastic supporter for this program in the Vice President.

Senator BARTLETT. This is good.

I suspect you have already noted that you are presenting your testimony to one Senator who is somewhat prejudiced in favor of this activity.

TECHNOLOGY INTERCHANGE BETWEEN DOD AND CIVILIAN AGENCIES

I note, referring to the table you said was on page 25 of your report, that the bulk of the requested funds for the next fiscal year will go to the Department of Defense, and that if the full budget amount is allowed, it will amount to $258,750,000. Now is the work that the Department does in this field exclusively related to defense, or are there spinoffs, to use the term that was employed here frequently, that will be of great benefit to oceanography in general?

Dr. WENK. Senator Bartlett, there is an advantage both to the civilian agencies of work being done by the Navy, but an advantage to the Navy of work being done in the civilian agencies. By that, I mean the measurements of ocean temperatures, and currents, and salinity, is important to the Navy with regard to antisubmarine warfare, but also important to the Bureau of Commercial Fisheries in terms of understanding the migratory habits of fish. These same data are important to the Department of Commerce's Environmental Sciences Services Administration, with regard to oceanic effects on weather and climate. One of the things we are trying to do through this Council is to make sure that all of the agencies know what the other agencies are doing, and each make best possible use of the other's data.

So in answer to your question—and this is one of the most important jobs we have to do—there is great benefit in the civilian sector of work being done by the Navy; and in turn, though as the funds indicate at a somewhat smaller scale, a benefit to the Navy of work being done in the civilian agencies.

DEPARTMENT OF TRANSPORTATION

Senator BARTLETT. Now what will the Department of Transportation, a new agency, do with almost $25 million for this work?

Dr. WENK. Virtually all of these funds reflect the transfer of the Coast Guard from the Department of Treasury to the Department of Transportation and the bulk of the increase is for the construction of a previously planned Coast Guard ship as an oceanographic ship.

BENEFITS OF MARINE SCIENCE AND ENGINEERING PROGRAM

Senator BARTLETT. Dr. Wenk, we are doing lots of things in space. We are spending a very considerable amount of money in space. Whether or not there will be any material gains from that, we don't know. We aren't actually looking for any, insofar as I am aware. But if we explore the oceans more intensively, more scientifically, more dramatically, is there a possibility that within a very short space of time, as time runs, that tremendous benefits might come to the United States in terms of recovered minerals, better fishing methods, and a host of other things?

Dr. WENK. There is very great promise of these benefits. People have estimated these for many years, but it has taken this action by the Congress and the response by the administration, to translate this possibility into reality. This is reflected in the report the President transmitted to the Congress, so this is just a beginning. But it shows something about what the potential is of the sea.

For example, there is a world problem of hunger. All of the normal sources of food, agricultural products, and so on, can't meet the worldwide shortage today. And that disparity between demand and supply continues to increase. We have recognized for a long time that the food from the sea is still an untapped potential. People have estimated the productivity of the sea at anywhere from five to 50 times the amount of the worldwide catch, and one of our first projects that the President is proposing is to develop some specific action now that would help our domestic fisheries, but also, make available the technology for fish protein concentrate to help some of the less-developed nations of the world that suffer from protein deficiency make use of the fish that are in their own backyard.

Senator BARTLETT. I am glad you mentioned that.

Dr. WENK. So this is an example of just the opportunity you mentioned of now not just talking about the sea, but really doing something about it.

PRESIDENT'S SPECIAL MESSAGE, MARCH 9, 1967

Senator BARTLETT. I think it might be well to put in the record at this point, if there is no objection, the special message which the President sent to the Congress on March 9, 1967, in connection with transmitting the report of marine sciences which we have been discussing, and since there is no objection, that message will be included.

(The President's report follows:)

REPORT ON MARINE SCIENCE ACTIVITIES OF THE FEDERAL GOVERNMENT—MESSAGE FROM THE PRESIDENT (H. DOC. NO. 79)

The ACTING PRESIDENT pro tempore. The Chair lays before the Senate a message from the President of the United States, transmitting a report on marine science activities of the Federal Government. Without objection, the message will be printed in the RECORD, without being read, and appropriately referred.

The message was referred to the Committee on Commerce, as follows:

To the Congress of the United States:

I am pleased to report on the marine science activities of the Federal Government.

The resources of the oceans can help us meet many of the challenges that face our Nation and the world today.

The vast food reserves of the sea must be developed to help end the tragic cycle of famine and despair.

The continuing pollution and erosion of our seashores, bays, estuaries, and Great Lakes must be arrested and reversed to safeguard the health of our people and to protect the resources of the sea.

The influence of oceans on the environment must be understood so that we may improve the long-term forecasting of storms, weather and sea conditions; protect life and property in coastal areas; and improve the prediction of rainfall in the interior.

The wealth of the ocean floor must be freed for the benefit of all people.

Finally, the seas must be used as pathways to improved international understanding and cooperation.

The great potential of the seas has not gone unnoticed. During the past 6 years, we have invested increasingly in the development of marine scientific and technical manpower, ships, and facilities. The quality of our research fleet, deep sea vessels, and laboratories is unsurpassed. The small but growing corps of highly trained specialists provides a strong creative base for our marine science and technology.

The 89th Congress also responded to the challenge of the oceans by enacting:

The Marine Resources and Engineering Development Act which provides a stronger policy and organization framework and gives new momentum to our marine science activities.

The Sea Grant College and Program Act, which will improve our capabilities for training and research in marine sciences and engineering.

The act authorizing pilot plants for the production of fish protein as a usable source of food.

The new National Council on Marine Resources and Engineering Development, chaired by the Vice President, has made significant progress in carrying out its responsibilities for planning and coordinating the Nation's marine science activities. In consultation with the President's Science Advisory Committee, the National Academy of Sciences, and other agencies of the Federal Government, the Council has reviewed our current work and has identified the areas in which action should be taken.

We must:

Launch a pilot program to assist the protein-deficient countries of the world in increasing their capacity for using the fish resources of the seas;

Implement the Sea Grant College and Program Act to strengthen oceanographic engineering, expand applied research and improve technical information activities;

Accelerate studies to improve the collection, storage, retrieval, and dissemination of oceanographic data;

Expand ocean observation systems to improve near-shore weather prediction services, and study ways to make more accurate long-range predictions of precipitation levels and drought conditions;

Study the Chesapeake Bay to determine the effects of estuarine pollution on shellfish, health, recreation, and beauty, and to provide a basis for remedial measures;

Explore off-shore solid mineral deposits;

Improve technology and engineering for work at great ocean depths;

Equip a new Coast Guard ship to conduct oceanographic research in sub-Arctic waters.

Details of these programs are set forth in the accompanying report of the National Council on Marine Resources and Engineering Development.

I have this year recommended to the Congress a 13-percent increase—from $409 million to $462 million—in appropriations to support marine science activities. These funds will permit us to expand our efforts to understand the seal and develop its vast resources. They will enhance the capabilities of local government, universities, and private industry to join in this vital enterprise. They will enable us to support the important new efforts recommended by the National Council on Marine Resources and Engineering Development.

I urge the Congress to provide the necessary funds to support these important efforts.

In January I appointed 19 distinguished Americans, including four Members of Congress, to serve as members and advisers of the Commission on Marine Science, Engineering, and Resources. This Commission will complement the activities of the National Council on Marine Resources and Engineering Development, by providing impartial insights into the strengths and weaknesses of our marine science programs.

The Commission will be called upon to identify still more opportunities for a concerted public and private effort—to develop the resources of the sea through a creative and cooperative partnership of Government, industry, and the academic community.

The depth of the sea is a new environment for man's exploration and development, just as crossing the West was a challenge in centuries past.

We shall encounter that environment with the same conviction and pioneering spirit that propelled ships from the Old to the New World.

We shall bring to the challenge of the ocean depths—as we have brought to the challenge of outer space—a determination to work with all nations to develop the seas for the benefit of mankind.

LYNDON B. JOHNSON.

THE WHITE HOUSE, *March 9, 1967.*

Senator BARTLETT. Thank you, gentlemen, very much.

Dr. WENK. Thank you, Senator Bartlett.

SUBCOMMITTEE RECESS

Senator BARTLETT. The committee will adjourn until 10 o'clock, Monday morning, March 20, 1967, when outside witnesses will be heard.

(Whereupon, at 12:10 p.m., Friday, March 17, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Monday, March 20, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

MONDAY, MARCH 20, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senators Russell, Bible, McGee, and Bartlett.

DEPARTMENT OF THE INTERIOR

NONDEPARTMENTAL WITNESSES

STATEMENT OF A. R. SHIRLEY, PRESIDENT OF THE NATIONAL ASSOCIATION OF STATE FORESTERS

FOREST FIRE PREVENTION

INTRODUCTION OF WITNESS

Chairman HAYDEN. The subcomittee will come to order.

Senator Stennis.

Senator STENNIS. I would rather yield and hear what the Senator from Georgia has.

Senator RUSSELL. I wish to present Hon. Ray Shirley, State of Georgia. He is a career employee and president of the State Foresters Association of the United States.

Mr. Shirley is outstanding in all phases of conservation and has done a wonderful job in my State, which I am proud to say has the largest commercial forest plantings of all States of the Union.

Chairman HAYDEN. We will be glad to hear from you.

Mr. SHIRLEY. Thank you, sir.

My name is Ray Shirley, I am director of the Georgia Forestry Commission and president of the National Association of State Foresters. My statement is on behalf of all 50 States, since all are members of the National Association of State Foresters.

I would like at this time to introduce five State foresters who will not make a statement and are here and interested in this program, and will substantiate the statement I will make and I would like to introduce first Mr. Lester D. McClung, State forester, Division of Forestry, Department of Natural Resources, Charleston, W. Va.

Mr. John A. Beale, chief State forester, Wisconsin Conservation Department, Madison, Wis.

Mr. Samuel S. Cobb, director, Bureau of Forestry, Department of Forests and Water, Harrisburg, Pa.

Mr. Osal B. Capps, State forester, Missouri Conservation Commission, Jefferson City, Mo.

And Mr. George W. Dean, State forester, Division of Forestry, Charlottesville, Va.

COOPERATIVE FIRE PREVENTION

We request the 1968 Federal appropriation for cooperative State and private forestry include an increase of $3 million for cooperative forest fire prevention.

The 1967 appropriation for this item is $12,811,000. We are requesting an increase in Federal funds for forest fire prevention from $12,811,000 to $15,811,000.

This requested increase in Federal funds is based upon the following factors.

Federal funds budgeted to this program in 1950, 1956, 1962, and 1967 are as follows:

Year	Amount of Federal appropriation	Amount allotted to States
1950	$9,000,000	$8,550,000
1956	10,000,000	9,485,000
1962	12,465,500	11,654,000
1967	12,811,000	11,826,500

1967 APPROPRIATION AND AUTHORIZATION

Of the Federal appropriation in 1967 of $12,811,000, the States received in direct allotment $11,826,500; $810,370 was spent for Federal administration; $160,000 was spent for the nationwide forest fire prevention campaign; and the remaining $14,130 was for various miscellaneous items.

Federal funds received by the States in 1967 amounted to $11,826,500—or an increase of only $172,500 more than 1962.

According to Public Law 392, which was approved by the 81st Congress, October 26, 1949, Federal authorization for cooperative forest fire prevention with States was increased to a total of $20 million.

1966 EXPENDITURES

The combined expenditures by the 50 States for forest fire prevention in 1966 totaled $72,966,345, an increase of $9,187,395 over 1965. Of the total funds for the fiscal year 1966, 14.93 percent were Federal funds.

The above facts reveal the tremendous acceptance and support given to this program by State and local governments.

STATE PARTICIPATION

The amount of lands being protected under the cooperative program have greatly increased since 1960. Four States: Wyoming, Alaska, Kansas, and Arizona have come under the program since 1960.

ADDED LAND COVERAGE

Since 1962, 41,951,000 acres of commercial and noncommercial forested area have been brought under the program as of December 31, 1966. Reports for the calendar year 1966 show there still remain 32,057,000 acres of forest land without the cooperative forest fire prevention program. This area lies within 15 States.

SALARIES AND EXPENSES

The various State forestry agencies consider the need of forest protection as the present greatest problem. This need has come about by the increase in the cost of salaries, equipment, and operation and maintenance for forest protection. Data from the States reveals that between the fiscal year 1962 through the fiscal year 1966, salaries increased by 22.80 percent; expenditures for equipment and materials used in forest fire prevention and suppression activities increased 18.45 percent; and maintenance and repair costs increased 31.71 percent.

These increases only apply to State costs. The problem has been compounded by virtue of these increased costs, and during the same period having four States and 41,951,000 acres of forest land added without obtaining the Federal funds to meet this added demand. This condition has resulted in 18 of the participating States receiving less Federal funds in fiscal year 1967 than in fiscal year 1962.

There are also other facts affecting increased costs. The Fair Labor Standards Act of 1966 will increase the wage rate paid in many States and will also result in increased costs for some equipment and supplies.

FOREST MATERIAL DEMAND INCREASE

The most recent U.S. Department of Agriculture "Timber Trends in the United States," Forest Resource Report No. 17, dated February 1965, predicts an 80 percent increased demand for forest material by the year 2000.

The trees planted in 1967 will require from 10 to 25 years to grow into pulpwood size for the first thinning, and sawtimber will require 35 to 100 years to reach harvest size. Growth will vary this much, depending upon the section of the United States. Forest fire prevention is basic to timber protection and the long-term investment values represented by trees.

COMMERICAL FOREST LANDS OWNERSHIP

It is well to consider who owns the commercial forest lands that must produce the forest products needed by the Government, the general public, and forest industry now and in future years. The Federal and State Governments own 28 percent of the Nation's commercial forest land, with the Federal Government owning most of it.

Private forest lands comprise 72 percent of the total and account for 75 percent of the annual timber cut. Miscellaneous private owners, other than forest industry, own 59 percent of the private commercial forest area of the United States. Most of this is in the category of small ownerships.

RELATED FOREST FIRE PREVENTION PROGRAMS

In addition to our timber needs, we have many related programs depending upon a sound forest fire prevention program, such as soil and water conservation, game and fish, recreation, tourism, and others.

SUPPORT OF FOREST SERVICE BUDGET REQUEST

We earnestly solicit your favorable consideration by increasing the Federal funds for cooperative forest fire prevention in the amount of $3 million to strengthen and make possible a more realistic and effective program.

We wholeheartedly support the U.S. Department of Agruiculture, Forest Service budget items for State and private cooperative forestry programs. These include:

Cooperation in forest tree planting (unchanged from 1967)	$300,000
Cooperation in forest management and processing (contains $8,000 increase for Federal pay adjustments)	3,546,000
General forestry assistance	1,571,000

(Increase of $123,000—$23,000 for pay adjustments and $100,000 for hardwood improvement program.)

EXPRESSION OF APPRECIATION FOR NATURAL RESOURCES CONSERVATION SUPPORT

We deeply appreciate the opportunity to make known on behalf of all the States our request for the additional funds. We believe that a realistic and adequate forest fire prevention program is vital to the public and national interest.

It is a program too vast and far reaching for any single landowner or State to cope with, regardless of size. The support being given by State and local governments attests to their acceptance of this conservation program and need of assistance to achieve it.

On behalf of the State foresters of the 50 States, we thank you for the excellent support we have received from the Congress for the conservation of our natural resources.

Senator RUSSELL. I want to thank you, Senator Stennis, for giving us this opportunity to go first.

DECLINE OF FEDERAL PARTICIPATION IN COOPERATIVE FIRE PREVENTION PROGRAM

Mr. Chairman, you recall back in 1933, I believe, the first agricultural appropriation bill I handled, forestry being in the agricultural bill, I think this cooperative program, Clarke-McNary appropriation, I have forgotten the exact amount, but I think $1 million and a quarter or million and a half and the State was putting up about $8 million to $10 million.

Now, the States have gotten up to $90 million and the Federal Government has only reached $11 million or $12 million.

Chairman HAYDEN. Personally, I consider this one of the most important programs we have.

Senator RUSSELL. I recall that and I appreciate your statement.

Mr. SHIRLEY. Thank you so much.

I deeply appreciate the opportunity to appear before you.

Chairman HAYDEN. Senator Stennis.

Senator STENNIS. I defer to Senator Russell.

STATEMENT OF H. E. RUARK, DIRECTOR OF THE GEORGIA FOREST COUNCIL, MACON, GA.

FOREST RESEARCH NEEDS IN THE SOUTH

Senator RUSSELL. Mr. Ruark.

Chairman HAYDEN. The next witness will be Mr. H. E. Ruark, whose complete statement will be included in the record.

(The statement follows:)

Mr. Chairman, and members of the Committee, my name is H. E. Ruark. I am Director of the Georgia Forest Research Council with headquarters at Macon, Georgia. The Council is an agency of the State of Georgia. We are responsible for coordinating, developing, implementing, and encouraging forest research in the state. It is a pleasure to appear before your Committee to discuss forest research needs.

By the year 2000, economists assert, America's demand for wood will increase by eighty percent. The South will become the Nation's wood pile, since it must produce one-half of the country's requirements. As a matter of fact, by the end of this century, as much timber as is now cut each year in the entire United States must be harvested from the woodlands of the South. Obviously, her forests must be made more productive.

With the advance of civilization, land is being stripped of its forest cover to make room for the highways, power lines, airports, reservoirs, factories, homes, and shopping centers of a suburbanizing America. Such progress will necessarily bring about a shrinking forest land area from which the increasing needs for woodland raw materials must be met.

Accelerated forestry research is a must if maximum benefits and production from American forests are to be obtained. It is imperative, therefore, that we take the necessary steps now to increase the productivity of the remaining forest land. It is for this reason that I am appearing before you today. I request that the United States Forest Service's budget for Fiscal Year 1968 be increased as follows:

1. Forest tree improvement, Macon Research Center, Macon, Ga	$100,000
2. Forest survey:	
Southeastern Forest Experiment Station, Asheville, N.C	250,000
Southern Forest Experiment Station, New Orleans, La	250,000
Total	600,000

TREE IMPROVEMENT RESEARCH

Since the allocation of more land to forest production is not possible, it stands to reason that increased outputs of raw materials must come from the existing, or even a diminishing forest land inventory. To meet increasing wood requirements, forest lands must be made more productive. The availability of improved growing stock would boost timber production significantly. Tree improvement research is the best weapon in the arsenal of modern science and technology to attain this objective.

Since 1954 tree improvement research has been carried out at Macon, Georgia, by the U.S. Forest Service with the objectives of producing improved strains of southern pines and guiding reforestation efforts in the management of forest tree seed orchards.

During its twelve-year existence the project has established extensive outplantings of plant material resources. In all, 149,306 seedlings have been outplanted at eighteen locations. These plants contain combinations of traits that reflect the quality of their parent trees and the volume yield of wood which they will produce.

The seedlings represent not only a monumental task of experimental design for their outplanting but also offers a tremendous wealth of potential information upon which to evaluate trees with specific traits that are needed for tree breeding.

Major studies included in this project are:

(1) Progeny Testing Seed Orchard Clones.
(2) Racial Variation.
(3) Shortleaf-Slash Pine Hybrids.
(4) Breeding Southern Pines for Desirable Traits.

From these studies researchers have produced the first generation of improved southern pines, and the first improved seed is being produced in state and industrial seed orchards. An expanded research program is needed *NOW* to capitalize on the tremendous backlog of plant material available for breeding the second and third generations of improved trees.

There is a technological lag in tree improvement research—that lag must not be allowed to widen. Instead, it must be overcome with dispatch. Presently understaffed, the Macon Tree Improvement Research Project must have additional support, or an ever-widening gap will erase the opportunities which exist and the means to exploit those opportunities. Now is the opportune time for a bold step forward in tree improvement research at Macon.

Early outplantings which form the foundation for further work are reaching the point now that measurements can yield significant, meaningful data. The potential of this project is tremendous. Small pilot studies are revealing that volume yields of southern pine can be increased by 50%, and in some cases doubled by one generation of breeding.

To the best of its capabilities, a small staff of scientists and technicians carries out the studies listed previously. Much needed work goes undone, as each of the well-trained tree improvement workers does what time, weather, and budget limitations permit.

Needed immediately is $100,000. This increase will provide for the addition of vitally needed scientists and technicians as well as labor and administrative support.

From 1955 until now research scientists were heavily involved in selecting, breeding, progeny testing and in developing the new techniques needed for the breeding program. A larger staff and increased funds are needed now to further refine the breeding program with slash and loblolly pine, to begin new work with longleaf and shortleaf pine, and to begin new work with hybrids of the southern pines. Another vital need of the tree improvement research program is to combine desirable traits of growth, quality, disease and insect resistance into one strain suitable for mass production and outplanting. Competent professional guidance should be available to seed orchard managers to insure maximum cone production, proper handling of high quality seed and cones, suitable storage of improved seed, and appropriate fertilization and irrigation recommendations.

The addition of the professional and technical workers will enable much better utilization of skills. Scientists will be able to spend more time in the analysis, interpretation, and publication of data which have to a great extent been allowed to stagnate—simply because undermanning has not permitted the most effective allocation of time and talents to the tasks at hand.

$100,000 is needed now for tree improvement research.

FOREST SURVEY IN THE SOUTH

The information obtained from the Forest Surveys is in greater demand today than ever before by National, State and local governments, by Area Development Commissions, by forest industries and by private landowners. Up-to-date statistical forest survey data is required for purposes of planning forestry programs, for locating new forest-based industries, for guiding wood procurement and planning programs of existing wood-based industries, for planning major watershed programs, for planning and conducting wildlife and recreation programs, and for many other uses. The results of Forest Survey information are put to a more varied and wider use today than any other published results of Forest Service research.

The dynamic changes which are taking place in the South's timber resource picture reflect the aggregate expansion and growth of the wood-based industries. For example, in 1960 there were no pine veneer and plywood mills operating in the South. By 1965 there were 13 mills producing 821 million square feet annually, which represents an annual drain of 46 million cubic feet. Seven new mills are now under construction and eight additional mills are proposed. This is one of the most dynamic industry expansions in history.

While the plywood industry was experiencing this industrial boom, the pulp and paper industry expansion was just as vigorous. In 1960 there were 76 primary pulp and paper mills in the South that consumed 23 million cords of pulpwood. By 1966 the total number of mills had increased to 85 with an annual consumption of 31 million cords of pulpwood. Presently, nine new mills are under construction or have been announced. In addition to the new mills, practically every mill in the South that was in operation in 1960 has expanded its operations.

Key officials of the pulp and paper industry forecast that this industry in the South will require 75,000,000 cords of pulpwood annually by 1990. Total consumption in 1990 will be almost 2½ times greater than in 1966.

New technology and demand has also caused the lumber industry to expand. Many mills are automated and consequently fewer mills produce larger amounts of lumber. Slabs and edgings that were once burned are converted to marketable chips. Large diesel-powered truck-trailers transport several thousand board feet of lumber hundreds of miles overnight. Fork lift trucks enable the lumberman to move or load large packages of lumber onto trucks or railcars with ease. Quality southern pine lumber is reentering the mid-western and northern markets.

The United States Forest Service Forest Resource Report No. 17, "Timber Trends in the United States," indicates that there will be a sharp increase in sawtimber cut in the South between 1962 to 2000. Unfortunately, the net growth of sawtimber will continue to increase until about 1975 when it will peak and will begin to decline by 1982. Current forest surveys of course will keep forest planners abreast of such situations and measures can be taken to overcome any serious threat to our forest balance.

Current resource information is essential to guide this expansion, encourage systematic development, and prevent serious depletion of timber supplies in localized areas. Generalized, statewide trends indicate just how fast a particular inventory situation can be reversed, how quickly a favorable growth-to-cut balance can be upset, and how inventory depletion can occur. In localized areas of county size these dangers multiply and develop in shorter periods of time.

The present level of appropriations for the Forest Survey in the Southeast with the rising cost of operations has increased the intervals between remeasurements. Unless additional funds are provided, the intervals between surveys for each state will continue to increase. For example, the third forest survey for Georgia was completed in 1961 and the fourth is scheduled to be conducted from 1973 to 1976 . . . an interval of fifteen years.

Remeasurement periods of over eight years are likely to indicate resource trends which are completely erroneous and projections of future timber supplies which are unreliable. Short remeasurement periods of from 4 to 8 years will better identify cycles, reversals, and trends which are essential to the formulation of sound management decisions, and provide the statistical assumptions necessary in the preparation of reliable and realistic projections of the future timber supply.

Needed is $500,000 for the forest survey in the South:

$250,000 for the Southeastern Forest Experiment Station, Asheville, N.C.

$250,000 for the Southern Forest Experiment Station, New Orleans, Louisiana.

Mr. RUARK. Yes, sir.

Mr. Chairman and members of the committee, my name is H. E. Ruark. I am director of the Georgia Forest Research Council with headquarters at Macon, Ga.

The council is an agency of the State of Georgia. We are responsible for coordinating, developing, implementing, and encouraging forest research in the State. It is a pleasure to appear before your committee to discuss forest research needs in the South.

Economists claim there will be a tremendous upsurge in the demand for wood and wood derived products by the year 2000. These same economists also tell us that because of the expanse of forest land and the ideal growing conditions in the South the region must produce one-half of the Nation's wood requirements by the turn of the century.

The South must meet this demand despite the fact that millions of acres of forest land will be stripped of its forest cover to make room for highways, right-of-ways add many other requirements of a rapidly urbanizing nation.

It stands to reason then that the leaders of our Nation must take steps today to assure that America's demand for wood will be met from this diminishing forest surveys so that forestry planners and policymakers will have available current forest facts on which to make decisions of major consequence at the National, State and local levels.

TREE IMPROVEMENT RESEARCH

Accelerating tree improvement research is one means of being sure that the South will fulfill its role of furnishing one-half of the Nation's wood supply. The U.S. Forest Service's tree improvement research project at Macon, Ga. is in its 13th year. During this time an enormous storehouse of tree breeding material has been accrued.

In fact, during these 12-plus years of research a total of 149,006 seedlings are growing in test plantations established by tree improvement researchers.

Nowhere in America is there more advanced material and data for southern pine breeding than at Macon now. Nor does any other place have the quantity of breeding material. If these resources are to be fully exploited, $100,000 must be added to the Forest Service's budget at the Macon location.

The $100,000 requested at this time will provide only for essential scientists, technicians, labor and administrative support that are needed to initiate free breeding programs for producing the second generation of improved southern pines.

The tree improvement research project at Macon is in dire need of being strengthened if forestry is to move forward in the South.

FOREST SURVEY

With the occurrence of rapid changes in technology affecting the growing, harvesting, processing, and manufacturing of forest products it is essential that forest planners and users be aware of the most current changes that are taking place in the forests of the South.

Only through up-to-date information provided by forest surveys can planners effectively develop essential programs. Insufficient or inaccurate information is costly at all levels. Consequently, Congress is asked to appropriate a total of $500,000 additional funds to conduct the forest surveys for the southeastern and southern station areas of the U.S. Forest Service. The cost of current survey data is small compared to the values at stake.

Thank you for allowing me this opportunity to appear.

SUBCOMMITTEE PROCEDURE

Chairman HAYDEN. Any more witness?

Senator RUSSELL. The other statements will be more lengthy and I think Senator Stennis ought to proceed.

STATEMENT OF HON. JOHN STENNIS, A U.S. SENATOR FROM MISSISSIPPI

FOREST TREE SEED RESEARCH, STATE COLLEGE, MISS.

Chairman HAYDEN. Senator Stennis.

Senator STENNIS. If you insist, Mr. Chairman.

Mr. Chairman, I have a very brief statement here myself. I also have a brief statement by two other supporting witnesses. My personal knowledge on this matter is limited but nevertheless I do have some—I have planted some pine seedlings for more than 20 consecutive years.

I discovered it is a practical thing, the need for better planning in planting of these seedlings.

I have found out there are a whole lot of things we didn't know and other things have been given priority. So I have been plugging now for several years for a Tree Research Laboratory that can really carry on comprehensive research in this field.

It is strongly endorsed by Dr. Jemison, who has already been supplied some questions that I couldn't be here to ask at the actual hearing. There is a very modest amount of money involved for the lab, only $290,000.

Frankly, I don't think it is enough but it is being asked for now because that is the way the plans came out.

We already have, down at Mississippi, some of your best scientists working on this very problem, but in a very modest way.

SEED TECHNOLOGY LABORATORY AT MISSISSIPPI STATE UNIVERSITY

We have there, if I may say with modesty, insofar as field plants are concerned, a seed laboratory that has an international reputation. I was surprised to learn myself how high it does rate. I was surprised because I had not otherwise been apprised and I made a special trip up there and went through it.

The Forestry people here found out that was true. In other words, there is an all-around environment there of high-type scientists in this seed improvement field generally, but not yet enough for the forestry research which is required.

Now, we want to get this laboratory. We had this one last fall and the budget was fixed up, cutting back on highway funds and everything else. If they would just stop all of these other things and finish this war and put their concentrated effort on that; I would say let the laboratory wait, but if all of these things are going to ride along, I feel certain this then is of major importance and has been long delayed.

May I take just a very few minutes now for these gentlemen to come up here that are versed in this and say what they think about it?

PREPARED STATEMENT

Chairman HAYDEN. Certainly. We will insert your statement in the hearing record.

(The statement follows:)

As you know, I have for some time had a strong interest in the Forest Service research program in the South. I was pleased when Congress appropriated $20,000 in fiscal year 1966 for planning the Forest Tree Seed Research Laboratory at State College, Mississippi. It is my understanding that the architectural and engineering planning of that Laboratory has now been completed, and construction could be started as soon as funds are appropriated. It will cost $290,000 to build the Laboratory.

An excellent site for that Laboratory has been made available to the Forest Service by Mississippi State University. The site is on the campus of the University close to both a fine forestry school and the University's internationally famous Seed Technology Laboratory. The Seed Technology Laboratory has been in operation since 1950 and has gained recognition as the center of agricultural seed technology research in the United States and in the World. The close association of scientists with common interests will provide an excellent climate for the tree seed research program of the Forest Service and will be conducive to a most productive research program. The establishment of the Forest Service Laboratory at that location has the enthusiastic endorsement and support of Mississippi State University, its College of Forestry, and the Southern Seedmen's Association.

The Forest Service tree seed research program is aimed at developing comprehensive knowledge of most effective methods of collecting, processing, storing, treating, and sowing tree seed to maintain or enhance its capacity to germinate successfully. It will include study of the physiology of seed ripening, durability, dormancy, and germination. It will include study of effective ways to treat seeds to stimulate germination and to repel birds, rodents, and insects. An early step in this research will be the up-dating of the *Woody Plant Seed Manual*, a definitive manual first published by the Forest Service in 1948. I am told demands for an up-to-date version of that manual are increasing steadily.

By making some program adjustments, the Forest Service has made available the services of an excellent scientist to lead its program at State College. This has made possible a good start in the very significant program of research planned. An appropriation increase of $75,000 will be needed to strengthen the work to the point where its objectives can be realized in a reasonable length of time.

I am convinced that the contemplated Forest Service program will be an excellent investment that will yield valuable benefits in improving our forest resources. It is well justified and deserving of our strong support. I urge you to join me in supporting this essential program and the modern facility needed to provide for its most effective accomplishment.

STATEMENT OF JOHN W. SQUIRES, REPRESENTATIVE, SOUTHERN HARDWOOD FOREST RESEARCH GROUP, JACKSON, MISS.

HARDWOOD RESEARCH

Senator STENNIS. If that is in order, I have Mr. Squires here, who, I believe has a very brief statement.

Mr. SQUIRES. That is right.

Chairman HAYDEN. Senator Stennis.

Senator STENNIS. Whom do you speak for?

Mr. SQUIRES. I speak for the Southern Hardwood Forest Research Group, and my name is John W. Squires, from Jackson, Miss.

This group found that hardwood research was not keeping up with the research in pine.

Senator STENNIS. You are talking about another matter different from what I was talking about. You better give background.

Mr. SQUIRES. I want to mention yours when I get through with this group, Senator.

LABORATORY AT STONEVILLE, MISS.

To begin with, the hardwood research was lagging and thanks to the Congress we got enough money to build a fine laboratory at Stoneville, Miss.

Senator Stennis came down and dedicated that building and it is going along fine.

FORESTRY IN THE SOUTH

Forestry contributes a great deal to our Southern States along the Mississippi River. In our State of Mississippi it amounts to $700 million a year income.

In Louisiana it is already up $1 billion. In Tennessee and Arkansas, it is $500 million. A good many industries are involved in the manufacture of wood products.

In the last 3 years in our State we have had 67 new plants built to manufacture wood products with a total investment of over $300 million.

Now, the payoff, though, is the jobs. Those industries have created 10,000 new jobs in our State.

FOREST TREE SEED RESEARCH, STATE COLLEGE, MISS.

So you can see it is very important to us. Now, to get to the Senator's statement about the need for a seed laboratory at State College, that subject is particularly of interest to we in the hardwood end of it. We have found we could get the right seed to germinate properly and planting has been a problem with hardwood.

We think that seed laboratory is certainly needed, as the Senator has said—$290,000—but we think we need $100,000 to operate it once we get it built so it is very important, Senator.

LABORATORY AT STONEVILLE, MISS.

Now, the one subject, getting back to the hardwood, last year the Senator talked to us and we asked for $250,000 at Stoneville Laboratory and we missed it, we got $125,000 and, of course, that helped but we feel we desperately need the other $125,000 to step up and do the research on hardwood that is lagging so badly and is so badly needed particularly in disease and insects and that sort of thing.

FOREST SURVEY

Now, I am a member of the Department of Agriculture Forestry Research Advisory Committee. We met in Madison last year. I want to endorse this item on the need for a forest survey.

That is lagging, particularly at a time when there is more industries going in and on this item the Forest Service needs $500,000, I think that is in order.

Now, Senator, I am finished.

Senator STENNIS. Excuse me, that is the item Mr. Shirley testified about.

Mr. SQUIRES. That is right.

PREPARED STATEMENT

Senator STENNIS. Do you have a prepared statement?

Mr. SQUIRES. I have filed that statement, Senator.

(The statement follows:)

Mr. Chairman and Members of the Subcommittee: Forestry contributes nearly 700 million dollars annually to the economy of Mississippi. It adds almost a billion dollars to Louisiana's income. Arkansas profits to the tune of over half a billion as does Tennessee. Similar returns are being experienced by other states. And this income is increasing. My home state of Mississippi is an example; in the last 3 years, 67 new wood-using industries have been announced along with many expansions of established plants. This represents new capital investment of over 300 million dollars and provides 10 thousand new jobs.

Over the years, the native broad-leaved trees, or hardwoods as they are called, have been the essential raw material for about half this industry. Pine, too, is a vital part of the industry. Research in the southern coastal plain in the '30s and '40s concentrated on improving knowledge about growing and using the southern pines. This work, of course, should be continued. A beginning was made on hardwood research in the late '40s, and in the early '50s, the Southern Hardwood Forest Research Group joined with the U.S. Forest Service to help finance a doubling of the effort at what is now the Southern Hardwoods Laboratory at Stoneville, Mississippi.

Congress has seen fit to gradually increase the financing of the research program in the late '50s and in more recent years. Gentlemen, let me report that your recognition of the need for more knowledge about managing the Nation's vital resources has provided a soundly based research program contributing annually and directly to the improvement of forest management. One of the finest examples of the meaning of this research was observed at a recent south-wide meeting of the Southern Forest Soils Council.

Over a hundred forest managers, primarily from industry, attended a short course led by scientists at the Southern Hardwoods Laboratory where research in the relationships of hardwoods to the many sites on which they occur was translated into readily understood recommendations. Both auditorium and field discussions showed these managers of millions of acres of forest land the immediate applicability of soil-site research. And this example is only one of many.

There are other needs that must be filled if we are to continue our progress in the field of forest research, but today I want to direct your attention to two items for which additional funds are immediately needed. The first is to continue the gradual build-up of the research effort at the Southern Hardwoods Laboratory where $125,000 is needed to accelerate planting, harvesting and insect control research. Already planting and forest management recommendations have been developed that have us well on the way, but knotty problems are demanding a sophistication of research to find more fundamental truths as we intensify forestry practices. This takes much time of talented scientists. For example, development of elementary planting methods for some hardwoods has allowed this intensive forestry measure to come out of its infancy for hardwoods. Now there is demand for knowledge of how to further accelerate growth through fertilization, cultivation, improved planting stock, insect and disease control, even irrigation of tree crops. Each area requires "in-depth" research.

Another of the areas requiring basic reseach is in the physiology of tree seed. We need to more precisely control the germination of acorns, for example, as techniques are developed to reseed rundown forested areas. This research, along with other fundamental seed research, needs to be concentrated in a seed research laboratory now being planned by the Forest Service at State College, Mississippi. We in the hardwood industry, support the construction of this laboratory for which preliminary plans are already prepared by an architect. It is my understanding that at least $290,000 is needed for this construction.

In summary, gentlemen, I strongly recommend, as chairman of the Southern Hardwood Forest Research Group, that you approve increases of $125,000 for research in Southern Hardwoods at the Southern Hardwoods Laboratory and a minimum of $290,000 for construction of a seed research laboratory at State College, Mississippi.

STATEMENT OF CHARLES F. CARLTON, REPRESENTATIVE, SOUTHERN HARDWOOD FORESTRY RESEARCH GROUP, DELTA COUNCIL, AND LOUISIANA FORESTRY ASSOCIATION

FOREST TREE SEED RESEARCH, STATE COLLEGE, MISS.

Senator STENNIS. Mr. Chairman, Mr. Carlton has a statement that he can put in the record if you gentlemen would give him a couple of minutes to mention the high point of it, that would finish the tree seed laboratory group.

Chairman HAYDEN. That may be done.

(The statement follows:)

STATEMENT OF SOUTHERN HARDWOOD FOREST RESEARCH GROUP AND DELTA COUNCIL

RESEARCH ACTIVITIES AND NEEDS FOR SOUTHERN HARDWOODS AT THE SOUTHERN HARDWOODS LABORATORY

Mr. Chairman and Members of the Subcommittee: The goal of the research at the Southern Hardwoods Laboratory, maintained by the U.S. Forest Service at Stoneville, Mississippi, is the development of knowhow to triple the production per acre of the hardwood forest. Seventy million acres of this basic resource furnishes 40 percent of the raw material needed by southern wood-using industries today. The land area base is shrinking with the conversion of some of the best hardwood lands to farming, water impoundments, and other uses. Over a million acres of the lower Mississippi Valley have been cleared in the last four years. Eventually maximum hardwood forest production through improved management will be essential to meet the expanding demands for hardwood.

Active financial support of over 50 industrial and private landowners from throughout the South and from Mississippi State University has greatly aided this work for the past 15 years. Laboratory, greenhouse, nursery and field studies are underway to develop insect and disease controls, improved planting stock, better regeneration techniques, ways to manage developing stands, and harvesting procedures for appropriately inventorying and processing timber. Three experimental forests and experimental areas furnished by cooperators are available to supplement excellent laboratory facilities.

The Forest Service has been able to meet the steadily increasing demands for research as Congress has seen fit to provide funds. Fifteen professionals are now active on approved research projects requiring scientists in soils, pathology, entomology, genetics, physiology, mensuration, wood technology, and silvics. During the last six years, buildings and greenhouses have been erected to allow fundamental studies aimed at solving some of the tougher problems.

This scientific community has the background and supporting facilities and cooperators to move ahead at a better pace. Seventy-seven publications report results of research in the last six years. Some of these papers are aimed at the forest manager who puts their recommendations into immediate use; others provide progress reports along the way to the solution of problems.

Following methods developed by the Laboratory at Stoneville, major landowners have established hardwood plantations of commercial size. A manual written by scientists at the Lab is the only complete treatise available to guide the forest manager as he begins management to improve the production of native southern hardwood forests. These and other contributions already at hand from the research can double the present production of the hardwood forests as the principles they define are put into practice.

Needs for research in silviculture and insects: Significant progress is being made at Stoneville, but there is demand for acceleration of research as markets for quality logs and pulpwood continue upward. To continue development of the research program to an adequate level, an increase of $125,000 is needed for Fiscal Year 1968.

Additional money provided in FY-1967 by Congress allowed research to begin in the swamps of southern Alabama, Mississippi, and Louisiana where the cypress-tupelo forests prevail. Also, improved financing has allowed the employment of a scientist to study nutrient requirements of sweetgum, cottonwood and the oaks to improve planting recommendations.

The strengthening of tree improvement research in southern hardwoods is now necessary. Extensive test plantings of progeny from apparently superior trees of cottonwood and sweetgum must be continued and maintained. New research to improve valuable southern oak species needs to be expanded. An able, experienced scientist has now advanced the work at the Stoneville Laboratory to the point where he must have an associate to move ahead on the scale demanded by the quantity of work. An idea of the meaningfulness of improved strains can be found in cottonwood where it is felt sure the research will soon produce a tree that will uniformly yield a 15 percent greater return than average trees. Plantations of this species are now being established at the rate of about 4,000 acres per year and the rate is expected to increase.

The hardwood forest is pre-eminent as a game habitat. However, herds of deer now threaten regenerating hardwoods. Research has been started in an attempt to provide repellents or alternate food supplies, but it is apparent that a concentrated research effort must be undertaken to solve this and related problems. A scientist with background in animal and plant biology is needed now to work closely with researchers in forest management to determine ways to alleviate or prevent this damage to assure good timber crops while the forest continues to satisfy the ever-increasing demand for game hunting.

A multiple product inventory system coupled with a harvesting procedure which will utilize the quality of round product for its most valuable end use must be developed. Additional assistance is necessary to get at this problem.

Although space will not allow recounting all of the insect research underway at the Laboratory, one of the important areas of research is concerned with the carpenterworm, which bores in living trees without killing them. These tunnels create degrade that amounts to millions of dollars annually. Mill-scale studies have shown that an annual loss of 41 million dollars is sustained in oaks degraded by the boring carpenterworm. Current research is pointing the way toward the solution of this problem. However, additional research is needed to hasten the solution. As the demand for more knowledge about planting and seeding of southern hardwoods builds up, it becomes necessary to accelerate insect protection research for seed and for planting stock. This cannot be done without greater assistance in the scientific staff of the Forest Insect Project at Stoneville.

Tent caterpillars keep tupelo and sweetgum forests defoliated the majority of the growing season. In addition, these insects strip the trees of seed-producing flowers. Growth rates have declined markedly and much mortality is noticed in over three million acres of forest. The majority of this forest is located in southwest Alabama and southern Louisiana. A reduction in growth by 50 percent amounts to a loss of 25 million dollars annually. Early research has tested chemical controls, but damage to fish causes wildlife scientists to oppose chlorinated hydrocarbons. Work toward discovering virus controls should be started, but additional scientific assistance will be required.

An increase in support of the research program at the Southern Hardwoods Laboratory in the amount of $125,000 is essential if the program is to move forward at a rate to yield results in time to balance growth with demands of the growing population and a reduced area suitable for supplying hardwoods. Actually, we are already late in adequately financing the research for this valuable and renewable nature resource and raw material for industry. Benefits will far exceed costs and the Subcommittee's approval is strongly urged.

Needs for research at the Seed Research Project: The Subcommittee's attention is invited to the needs of research at the Seed Research Project at State College, Mississippi. In 1966, the Forest Service established this project for work on the technology and physiology of seeds of eastern tree species. This project is located on the Mississippi State University campus and is under the administration o fthe Southern Forest Experiment Station at New Orleans, Louisiana. The principal objectives of the project are to (1) develop and prove methods of collecting, processing, storing, and testing seeds of important species, and (2) determine means for speeding the germination of these seed. The immediate research will be concentrated on the valuable southern hardwoods because of our great lack of knowledge of these species. Research findings will have nationwide application in forestry and will be especially valuable to the rapidly expanding tree improvement programs. Genetically superior seed is now being produced and its high production costs make improvement in our technology for tree seed imperative. The Seed Technology Laboratory at Mississippi State University is internationally recognized as one of the world's finest agronomic seed research groups. The Forest Service project was located at State College to work cooperatively with the Mississippi State University scientists. The meeting of the project's objectives will require adequate laboratory and supporting facilities. Work is currently conducted in borrowed and rented facilities from various departments of Mississippi State University, but the research effort is greatly limited by this arrangement. Preliminary plans for laboratory construction are completed, and $290,000 is needed for construction in FY 1968.

General: The Southern Hardwood Forest Research Group, representing over 50 industries, is very grateful to the Subcommittee and to the Congress for implementing this important hardwood research program in a manner that has permitted the full and effective utilization of appropriated funds. At the same time, the Group has tried to exercise sound judgment in its requests. The $125,000 is the amount that is urgently needed and that can be efficiently and effectively used in FY–1968 to advance the over-all program of research that is underway in southern hardwoods. In addition, the $290,000 to build a tree seed research laboratory for fundamental studies of both hardwood and softwood seed is recognized as being of great importance and has the strong support of the Group.

Your Subcommittee is urged to recognize that the research program for southern hardwoods must look a long way into the future if progress is to keep up with demands being made on forest crops. The Group would like to point out, also, that there are other important problems in southern hardwoods on which no studies have yet even been started because of insufficient scientists and funds. It is the sincere hope of the members of this Group that the Subcommittee and the Congress will give attention to these problems in future years and that funds will be made available for this work. It is only through the solution of these problems by research and the application of research results on forested acres that this great natural resource can be effectively utilized.

Senator STENNIS. Who do you represent?

Mr. CARLTON. Charles F. Carlton, from Mississippi, forester for a small hardwood timber growing company down there.

I represent the Southern Hardwood Forestry Research Group, Delta Council, and the Louisiana Forestry Association.

If you will permit, I want to first lend the support of these groups to Senator Stennis' much-needed and well-planned laboratory at Mississippi State. The subcommittee's attention is invited to the need of research at the seed research project, State College, Miss.

In 1966, the Forest Service established this project for work on the technology and physiology of seeds of Eastern tree species. This project is located on the Mississippi State University campus and is under the administration of the Southern Forest Experiment Station at New Orleans, La. The principal objectives of the project are (1) to develop and prove methods of collecting, processing, storing, and testing seeds of important species, and (2) determine means of speeding the germination of these seed.

HARDWOOD RESEARCH

As you know, some of our hardwood seeds have such thick hulls on them that the seeds sometimes laid for more than a year before germination and we feel we need to improve this.

The immediate research will be concentrated on the valuable southern hardwoods because of our great lack of knowledge of these species. Research findings will have nationwide application in forestry and will be especially valuable to the rapidly expanding tree improvement programs.

Genetically superior seed is now being produced and its high production costs make improvement in our technology for tree seed imperative.

SEED TECHNOLOGY LABORATORY AT MISSISSIPPI STATE UNIVERSITY

The Seed Technology Laboratory at Mississippi State University is internationally recognized as one of the world's finest agronomic seed research groups. The Forest Service project was located at State College to work cooperatively with the Mississippi State University scientists.

The meeting of the project's objectives will require adequate laboratory and supporting facilities. Work is currently conducted in borrowed and rented facilities from various departments of Mississippi State University, but the research effort is greatly limited by this arrangement. Preliminary plans for laboratory construction are completed, and $290,000 is needed for construction in fiscal year 1968.

BUDGET REQUEST SUPPORT

The Southern Hardwood Research Group, representing over 50 industries, is very grateful to the subcommittee and to the Congress for implementing this important hardwood research program in a manner that has permitted the full and effective utilization of appropriated funds.

At the same time, the group has tried to exercise sound judgment in its requests. The $125,000 is the amount that is urgently needed and that can be efficiently and effectively used in fiscal year 1968 to advance the overall program of research that is underway in southern hardwoods.

In addition, the $290,000 to build a tree seed research laboratory for fundamental studies of both hardwood and softwood seed is recognized as being of great importance and has the strong support of the group.

Your subcommittee is urged to recognize that the research program for southern hardwoods must look a long way into the future if progress is to keep up with demands being made on forest crops.

The group would like to point out, also, that there are other important problems in southern hardwoods on which no studies have yet even been started because of insufficient scientists and funds.

Thank you very much.

VALUABLE HARDWOOD TYPES

Senator **Stennis**. You put all of your statement in the record.

Mr. **Carlton**. The entire statement is in the record.

Senator **Russell**. As I look through your statement I didn't find you mentioned any particular type. You referred to the more valuable types of hardwood. What do you catalog as the most valuable types of hardwood?

Mr. **Carlton**. Senator, some of the concentrated effort is being put in yellow poplar, old type hardwood which dominates the southern scene very common to Georgia.

Cherrybark oak, sweet gum, and genetic studies are being made to find ways and means of reproducing these species more easily and economically and also in this superiority program, in other words, seeds are being gathered from superior trees and being geminated and outplanted.

Senator **Russell**. Do you include walnut oak, any of the old hardwood in use?

Fundamental Studies on Four Types

Mr. **Carlton**. I am sorry to say, Senator, we are so far behind in our hardwood research we are in a position of having to pro rate. While there are 15 or 20 very important species, cherry bark oak, yellow poplar, cottonwood, and sweet gum, four are all we can afford at this time to even begin fundamental studies on.

HARDWOOD USAGE IN PLYWOOD

Senator **Russell**. You are already using a good many of those types in plywood and things of that kind?

Mr. **Carlton**. Yes, sir. As a matter of fact, we are losing ground.

Senator **Russell**. Well, you should know something about them.

Mr. **Carlton**. We do know something, but not enough. I am a field forester and I am sorry to tell you we are flying blind in this field compared to the amount of research that has been done in pine in the area that this Stoneville station will serve where there are at least five research centers doing research on pine, this center at Mississippi is serving a seven-State area.

Senator **Stennis**. For hardwood?

Mr. **Carlton**. Yes.

Senator **Russell**. I am in favor of the work being done. I was interested in what you really thought were the valuable types.

Frankly, I am not in forestry. I am surprised about the poplar hardwood.

Mr. **Carlton**. Hardwood forestry is complex. Some of our hardwoods are softer than some of the soft woods. The soft woods are needlebark or evergreen.

Senator **Russell**. I can see where you need research all right.

Hardwood Importation

Mr. Carlton. I would like to add that this plywood business has boomed to the point that our imported hardwoods are making up the deficit. Our native hardwoods are losing ground.

Senator Russell. They import at a great rate

GEORGIA PACIFIC RAILROAD LAND PURCHASES

Senator Stennis. We know we are on a trail down there because the Georgia Pacific is coming in and buying land right and left. They are wise people.

Senator Russell. They started in Georgia but have spread all the way to the west coast.

Senator Stennis. They are people of vision. Thank you very much, Mr. Chairman.

STATEMENT OF HON. CHARLES H. PERCY, U.S. SENATOR FROM ILLINOIS

Southern Illinois

INTRODUCTION OF WITNESSES

Chairman Hayden. Senator Percy.

Senator Percy. Mr. Chairman, I very much appreciate the opportunity to speak on behalf of an area of our State that I know rather well.

I think I have traveled more miles in this area than any other politician in the last 3 years.

Senator Paul Douglas before me was very deeply interested in southern Illinois. Senator Dirksen feels so strongly about it that he wanted very much to be here this morning, but, as you know, he is in the hospital. He asked me to come and present Dr. William J. Tudor, assistant to the vice president of Southern Illinois University, and Mr. Don Gott, executive director of the American Walnut Manufacturers Association, and Mr. Howard Gatewood, executive vice president of the Fine Hardwoods Association.

AREA POVERTY AND DECLINING POPULATION

Our concern for the welfare of southern Illinois is great; for, even though Illinois is a wealthy State, a vast area of the State is in need of assistance.

In some counties we have as many as a quarter of the population on public welfare. We have had, over a period of many years, a declining population, and many factors have caused people to leave southern Illinois.

They have left mainly because they cannot find employment. We have worked very hard indeed, along with Southern Illinois University, to find out what we can do ourselves to help develop the area.

GEORGE ROGERS CLARK RECREATION WAY

The Shawnee National Forest is one of the Nation's great scenic areas, but unfortunately it is still largely underdeveloped. We feel that the highest priority in southern Illinois is to open up the area to its full tourist potential and the highest priority project is the George Rogers Clark recreation way.

PROJECT BENEFITS

Studies have shown that initially this scenic road would produce direct annual expenditures in a single year of about $8.5 million and that by 1976, the 29 counties of southern Illinois could expand their tourist and recreation business by an annual expenditure by tourists of $123 million.

This would create in southern Illinois 6,000 new jobs, 70 percent of which could be filled with people living in the area. People can stay in their own land rather than crowding up into the major cities.

This is a way to take people off of public aid rolls and put them on private payrolls. The Government expenditure would be very small and modest indeed compared to the money that would be put in by private industry.

DEFICIT FINANCING AND BALANCING OF PRIORITIES

Mr. Chairman, I know that now is not a good time to overly burden an already overburdened budget. Our problems in Vietnam are very great, we face a deficit, and I have not operated in any organization in my life, in business or in education, with a deficit budget. This is my first experience at it, being now in public service.

I don't want to unnecessarily add to that debt. On the other hand, I think it is more than ever important that we establish priorities. Projects that can be begun with a modest amount of Federal funds used as seed money to attract a greater expenditure of private funds should, I believe, receive priority.

I think I can say in all honesty that the projects which Dr. Selyte W. Morris, president of Southern Illinois University, discusses in his prepared statement—and I will put it into the record this morning with your permission—fall into the high-priority category.

PROJECT ECONOMIC POTENTIAL

The private sector of the economy can provide a sound basis for prosperity in southern Illinois if only the Government will lay the foundation with good roadways and recreational potential.

Having traveled almost every road in southern Illinois and then all over the country as well, I think these are some of the worst roads that exist any place in the United States. I don't see how this area, without good roads, can begin to attract the recreational and tourist trade that would otherwise be brought in by the natural beauty of southern Illinois:

Mr. Chairman, in southern Illinois, the establishment of these recreation areas is of paramount importance. I know that Paul

Douglas before me has spoken deeply and strongly about this particular area. He devoted a great many of his years to finding ways to improve the quality of life in the area.

ENGINEERING AND RECREATION SURVEYS

Dr. Morris is requesting $260,000 for an engineering and recreation survey. This figure comes from an intensive private survey that was prepared on behalf of the Shawnee National Forest.

It suggests that $220,000 is needed for engineering surveys and $40,000 for recreation surveys. The estimated total cost of the recreation corridor is $42.5 million, but we need to get started now. I think even in times of budget stress an item of $260,000 for this seed money can be found.

AREA UNIVERSITY AND YOUTH

Before introducing the fine gentlemen that are here from Illinois with me, I should first like to mention that southern Illinois contributes a great deal to the Nation. Last Saturday, at Madison Square Garden, we contributed the National Invitational Champions—Southern Illinois University.

It is a university that has risen by its own bootstraps and has done a magnificent job in many areas. But, we do not want the fine young men and women in the area to grow up and be forced to move to the cities because there is no opportunity for them in southern Illinois. We want to make it a fine place in which to work as well as live.

RECOGNITION OF MR. HUGH O'BRIEN

In closing, I would like to introduce a distinguished guest who was here this weekend because he brought the group of "Guys and Dolls" to the White House Saturday night to entertain the 50 Democratic and Republican Governors. I would like to introduce Mr. Hugh O'Brien, who has been depicting for years on television the famous sheriff, Wyatt Earp, one of our famous characters from the West. Mr. O'Brien is a native of Illinois and was a schoolmate of mine at high school. Before going back to New York he is observing how the Congress of the United States operates. I welcome you, sir, and appreciate your attending this meeting.

STATEMENTS OF E. HOWARD GATEWOOD, EXECUTIVE VICE PRESIDENT, FINE HARDWOODS ASSOCIATION, AND DON GOTT, EXECUTIVE DIRECTOR, AMERICAN WALNUT MANUFACTURERS ASSOCIATION, CHICAGO, ILL.

INTRODUCTION OF WITNESSES

Senator PERCY. May I present now, Mr. Chairman, Dr. Tudor, vice president of Southern Illinois University.

Chairman HAYDEN. Glad to have you, sir.

Mr. TUDOR. It is good to be with you again, Mr. Chairman, and I would like to introduce, first, Mr. Howard Gatewood, who is the executive vice president of the Fine Hardwoods Association, from Chicago, and Mr. Don Gott, who is executive director of the American Walnut Manufacturers Association, also from Chicago.

I will let them speak first and would like to summarize my statement briefly in closing.

HARDWOOD FORESTRY RESEARCH IN EASTERN UNITED STATES

Mr. GATEWOOD. Thank you very much. Good morning, Chairman Hayden and Senator Russell.

I have a statement here which I would like to submit for the record, but, if I may be permitted, I would like to highlight it for a few minutes.

FUNDING INCREASE

My primary purpose in being here is to recommend that you increase Forest Service appropriations for next year and in the years immediately ahead to strengthen the hardwood research work they have underway in Eastern United States.

I must admit that I cannot give you precise long-term cost estimates for this program but am confident that the Forest Service could provide firm estimates. Quite probably the annual long-term costs would fall between $3 and $4 million.

So that the most urgently needed hardwood research can be started immediately, I recommend that $2.3 million be added to the Forest Service budget for next year. This increase should be distributed among existing Forest Service research offices in Eastern United States where work in growing and protecting hardwoods is already in progress.

DEPLETION OF HARDWOOD TREES

When our Nation was first settled we had an abundance of magnificent hardwood trees. Over the ensuing years they were cut for many purposes. Products from some of the hardwoods with attractive grain, beautiful color, excellent machining qualities, and other desirable characteristics have become traditional features of our homes and offices.

MANUFACTURE OF HARDWOOD AND INCOME FROM PRODUCTS

Furniture made of walnut, cherry, maple, pecan, and birch; flooring of oak and maple; and rich paneling of these and other fine hardwoods are examples. We live, work, sleep, and play in environments graced by the warmth and beauty of hardwoods. And many of our necessities are provided by hardwood products, such as news and magazine printing papers, milk cartons, and cardboards used to ship the vast quantities of goods we consume each year.

Thus, timber products made from eastern hardwoods add to the enjoyment and amenities of our everyday life as well as supply the necessities. In doing so, they contribute strongly to our economic well-being.

To illustrate, about $7.5 billion is added annually to our national economy by the manufacture of hardwood forest products, and approximately 5 percent of all payroll employees in manufacturing industries in the United States work in hardwood products industries.

HARDWOOD DEPLETION AND IMPORTATION INCREASE

Because of heavy demands for timber products, as well as losses from wildlife, insects, diseases, and wild animals, our eastern hardwood forests are producing well below their full potential. This is especially true for the grades and species of timber that have been, now are, and will continue to be in heavy demand for high-value uses, such as veneer trees of walnut, cherry, birch, maple, oak, poplar, gum, and pecan.

Less than one-third of our total hardwood sawtimber reserve in the Eastern United States is in the best two grades of logs that meet the requirements of many dependent industries.

In the face of existing and impending shortages, demand for high-grade hardwood timber products has been increasing and is expected to continue this upward trend.

Hardwood lumber production increased slightly in 1966 over 1965. Hardwood plywood consumption was about 13 percent greater in 1966 than in 1965 and more than double the level of a decade ago. Because of shortages in domestic supplies of hardwoods and other factors, hardwood veneer imports in 1965 were 2.6 times greater than in 1955.

INCREASING USE OF HARDWOOD FOR PULP AND PAPER PRODUCTS

Concurrent with the supply-demand situation for high-value hardwoods I have just outlined, there is a strong uptrend in the use of hardwoods for pulp and paper products. This is occurring throughout the East but is especially apparent in the South, the Appalachian region, and the Midwest.

To illustrate, hardwood pulpwood production in 1966 was about 14 percent greater than in 1965. The use of hardwoods for pulp products is expected to quadruple by the year 2000.

Although the demand-supply situation I just described appears quite dark, there are some breaks in the clouds.

HARDWOOD FOREST ACREAGE

To start with, we have 260 million acres of hardwood forests in Eastern United States. This gives us a good basic resource that can be improved. We also have some knowledge from Forest Service research that is guiding improvements now in progress.

RESEARCH REQUISITE

And we are confident that the situation can be greatly improved by strengthening hardwood forestry research program now and in the next few years. My association is not alone in believing that a stronger research program is the most direct route to a permanent improvement in the situation I have described.

For example, at their recent national meetings both the National Forest Products Association and the Hardwood Action Council adopted resolutions urging research aimed at improving hardwood timber growing techniques.

If we are to rebuild our eastern hardwoods quickly and efficiently, while at the same time meeting current demands for timber products, a much greater research program should be started immediately. It should, I feel, serve the needs of all hardwood forest landowners and industries and be concentrated upon:

1. Improving young natural hardwood stands through such techniques as thinning, weeding, pruning, and fertilizing, with special attention to select trees of the prime species.
2. Controlling hardwood growth, especially to improve timber grades.
3. Using agronomic methods to plant select species such as walnut, cherry, birch, pecan, gum, and maple for rapid growth of top-quality trees.
4. Improving genetically, through selection, breeding and propagation, all the prime species.
5. Controlling lethal and degrading insects and diseases.
6. Controlling wildlife and animal damage.
7. Developing economic systems for profitable management of hardwood forests and plantations under intensive culture.

RESEARCH PROGRAM RECOMMENDATION

I recommend that the Forest Service be encouraged to plan and promptly undertake a stronger research program in hardwoods that has the objectives I have just listed. This work should, I feel, be done at locations in Eastern United States selected by the Forest Service.

For example: (1) on walnut at Carbondale, Ill.; (2) cherry at Warren, Pa.; (3) insect and disease control at Hamden, Conn. and Delaware, Ohio; (4) genetics at Rhinelander, Wis.; (5) bottomland and delta hardwoods at Stoneville and Starkville, Miss.; New Orleans, La., Charleston, S.C., Athens, Ga., and other appropriate locations in the South.

PROGRAM FUNDING

I further recommend for your consideration that $2.3 million be added to the Forest Service appropriation bill you are preparing so that they may start immediately the expanded hardwood research program I have outlined.

Our association would like to express our appreciation to you for giving me this opportunity to discuss with you the need for a sharply strengthened hardwood research effort in Eastern United States.

We hope that we may count on your assistance in getting the work underway immediately.

HARDWOOD UTILIZATION LABORATORY, CARBONDALE, ILL.

Senator RUSSELL. I seem to recall 12 or 15 years ago, at the request of Senator Dirksen, we requested some hardwood utilization laboratory activity out in Illinois. Is that still in existence?

Mr. GATEWOOD. It is in Carbondale. I will report on it.

Senator RUSSELL. I remember we had difficulty with it in Congress. At that time I was handling the forestry item in the appropriation bill. That is still functioning.

Mr. GATEWOOD. Very much so.

STATEMENT OF MR. GOTT

Mr. GOTT. Mr. Chairman, may I express my appreciation to appear before you and Senator Russell as I have done the last several years.

With your permission, I have a full statement to file plus figures from the Department of Census.

Chairman HAYDEN. That will be included in the record.

Mr. GOTT. Thank you, Mr. Chairman.

(The statement and statistics follow:)

My name is Donald H. Gott. I am Executive Director and Secretary for the American Walnut Manufacturers' Association with headquarters in Chicago, Illinois.

Over the past few years I have had the privilege and pleasure of appearing before this Subcommittee to seek your help in getting a stronger Forest Service research program in growing walnut and other native hardwood timber. I deeply appreciate these opoprtunities and want to thank you for your generous assistance.

My reason for appearing before you today is to ask for your continuing support of hardwood forestry research programs of the Forest Service, especially with the high-valued grades and species that are either now or are likely to be in short supply. These include such trees as walnut, cherry, birch, gum, ash, maple, pecan, and poplar.

Specifically, I recommend that you add $725,000 to the Forest Service budget you are preparing for immediate strengthening of the research they are doing in growing, protecting and improving prime hardwoods. These funds should be used to accelerate the work already under way at their laboratories in the North Central part of our nation, for example, at Rhinelander, Wisconsin; Carbondale, Illinois and Ames, Iowa.

My colleague, Mr. Gatewood, of the Fine Hardwoods Association, has just given you a statement about the need for a much greater research program in protecting and growing hardwoods. I fully support his statement and recommendation that $2.3 million be added to Forest Service appropriations for next year to strengthen substantially on-going hardwood research. But, rather than repeat this information I will illustrate the over-all situation by reviewing with you our problems in obtaining an adequate supply of walnut timber.

My Association is composed of 24 companies which are engaged in processing black walnut veneer and lumber into a variety of products—paneling, furniture, gunstocks, novelties, and musical instruments. Our members produce more than two-thirds of all walnut veneer made in the United States. The domestic walnut industry, in itself, furnishes employment for many people in Central and Eastern United States as well as providing a lucrative market for walnut tree growers throughout this area. Furthermore, a major segment of our furniture industry depends upon walnut veneer and lumber for its products. These American industries operate over 6,000 plants and employ 200,000 people with an annual payroll of $850 million. They manufacture and ship annually consumer products valued in excess of $2 2/3 billion. It is highly significant that of all our domestic hardwood veneers, walnut makes up 52 per cent of that consumed in the United States.

Since the United States was first settled, walnut has been one of our most treasured and valuable woods. It is held in high esteem by designers and architects for many high-valued uses because of its uniquely beautiful grain, hardness, strength, and durability combined with excellent machining and finishing properties. I am sure you are familiar with these fine characteristics because I have seen walnut desks, chairs, and paneling in congressional offices and buildings here in Washington.

The walnut producing and furniture industries and the people of the United States now are threatened with the loss of this fine wood. Increasing export, in particular, and domestic demands over the past decade have reduced severely our supply of walnut trees. Numerous surveys made by the U.S. Forest Service in the walnut growing states show clearly that the volume, tree size, and grade of walnut timber is declining sharply. Strong, but unsuccessful efforts have been made to curtail exports. You are, I am sure, familiar with this situation. Our domestic industry has instituted sound conservation measures to stretch the walnut supply by reducing the thickness of veneer. In spite of these efforts heavy cutting continues, especially for export. For example, approximately 12.8 million board feet of walnut veneer logs were exported during 1966. This is again another record year—only second to 1965.

So, the outlook is dark for our having a reasonable supply of walnut timber in the years immediately ahead.

The Forest Service research program, undertaken with your good help, offers the first ray of hope we have for improving this situation. I am very enthusiastic about the program and have followed closely its development. Your Committee is to be commended for its understanding of the need for a "crash" research program in growing walnut and can take great pride in providing the funds to start it. The Forest Service, through its office at Carbondale, Illinois has moved aggressively and has underway an excellent research program. With their leadership, Southern Illinois University, several State agricultural experiment stations, State Forestry organizations, industrial interests, and others have joined forces to mount a major walnut research program. My industry is cooperating and participating fully in this work. To illustrate, we have increased our contribution of funds to the program and are participating cooperatively in several specific studies.

The Forest Service research program has both short-term and long-term objectives. These are—

1. To improve the quality and growth rate of natural occurring walnut trees. They have already found that the grade of individual trees can be improved by pruning and that the growth rate can be accelerated sharply by removing competing trees and vegetation plus proper fertilization. Application of these research results will help us grow better walnut trees faster and extend the present supply of timber.

2. To increase the total supply of walnut timber by planting. Research in progress has already given us some good guides for establishing successful walnut *plantations*. For example, clean cultivation or elimination of weeds and grasses with chemicals is necessary to obtain good survival and fast growth of the planted trees. Forest Service research now underway in soils, planting methods, fertilization, irrigation, and genetics will, I am convinced, help us build up a supply of walnut timber for the use and enjoyment of our future generations.

To summarize quickly, the outlook for a continuing supply of walnut timber in the immediate future is dark. The same dismal outlook is beginning to appear for top-grades of many other prime hardwood species such as cherry, birch, maple, ash, gum, pecan, and poplar. But research in progress now and that which Mr. Gatewood and I recommend will help us overcome these problems. The appropriations you have made in the past years for research in walnut and other hardwoods have given us the springboard for excellent and promising programs. I am confident that the Forest Service can, with your assistance, administer and execute an even larger and more effective hardwood research program throughout eastern United States.

Thus, I strongly recommend that you increase the Forest Service budget for the hardwood research program Mr. Gatewood outlined. The specific increase of $725,000 for work in North Central United States which I have discussed would not be an addition to the program he recommended. Rather it would be a very important and vital part of this total eastern hardwood research program.

I want to thank you again for this opportunity to appear before you and for your very excellent assistance over the past years.

U.S. export of walnut logs

[Quantity in thousand board feet; value in dollars]

	MBF	Value
January 1967:		
Austria	5	10,650
Canada	112	125,224
France	44	81,587
Germany, West	446	806,554
Israel	4	5,000
Italy	450	564,647
Japan	277	343,099
Switzerland	91	138,366
United Kingdom	6	3,327
Total	1,435	2,078,454
Average price		1,448
January 1966:		
Total	1,437	2,012,915
Average price		1,401
January to December 1966:		
Total	12,743	17,044,156
Average price		1,338

Source: Prepared by Forest Products Division, Business and Defense Services Administration, U.S Department of Commerce, from reports of the Bureau of the Census.

WALNUT RESEARCH CENTERS, CARBONDALE, ILL.; RHINELANDER, WIS.; AND AMES, IOWA

Mr. Gott. Through your generosity I think perhaps I may answer Senator Russell's query that the funds which you have so generously given in the past were to establish a going Walnut Research Center at Carbondale, Ill., for which we are most grateful and the reason that I am here this morning is, if Mr. Gatewood's request is honored, to latch on to approximately $725,000 of his requested appropriations simply to accelerate the vital programs that are underway on walnut; namely, the Rhinelander, Wis., Ames, Iowa, as well as Carbondale, Ill.

EXPORTATION OF WALNUT EXCESSIVE TO ANNUAL GROWTH

We have rather a dark future ahead of us in walnut which is rather paradoxical that we work like brothers with the U.S. Forest Service development improvement programs which will speed the growth, which will permit planting black walnut in plantations, which will produce a better wood perhaps 40 to 50 years instead of 60 to 80 to 90 years, but when exports of our raw material in the form of logs go out of this country at the rate of 1 million board feet a month with an annual growth rate of approximately 20 million board feet per year, we need this extra remuneration to accelerate the programs that we believe are successful and are underway.

INDUSTRY CONSERVATION EFFORTS

We have tried as an industry to do our part in conserving black walnut by reducing our standard veneer thickness from one twenty-eighth of an inch nominal to one thirty-sixth of an inch dry thickness.

We have been offered 40 councils of the National Boy Scouts of America to encourage and plant hardwoods with emphasis on walnut in the walnut growing States as part of their conservation programs.

RESEARCH FUNDING REQUISITE

So, to sum it up, I just wish to express my appreciation, past and present, and if Mr. Gatewood does receive some, I would like a part of it.

Thank you.

STATEMENT OF WILLIAM J. TUDOR, ASSISTANT TO THE VICE PRESIDENT, SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE AND CARBONDALE, ILL.

Chairman HAYDEN. All right, Mr. Tudor. Your statement will be included in full in the record.

Chairman Hayden, members of the Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies: I am William J. Tudor, Assistant to the Vice President at Southern Illinois University, Edwardsville and Carbondale, Illinois.

It is a privilege and a pleasure to appear before this Subcommittee again. I have presented testimony to you several times in recent years supporting a stronger Forest Service research program. The many courtesies you have shown me on these occasions are greatly appreciated.

My purpose in appearing before you today is to express my sincere thanks for the increased appropriations you have made available to the Forest Service in past years so that forestry research of vital important to Illinois and elsewhere in the Nation could be strengthened. We at Southern Illinois University have an especially keen interest in forestry research conducted by the Forest Service unit of the North Central Forest Experiment Station located on our campus. My main purpose, however, is to give you a brief report on the excellent progress being made by this Carbondale research unit of the Forest Service with funds that you appropriated the past two years. These increases included $150,000 in Fiscal Year 1966 to strengthen research to improve the quality and supply of valuable black walnut timber throughout the East, and $690,000 in Fiscal Year 1967 for construction of a Forestry Sciences Laboratory on the Southern Illinois University campus, needed to effectively conduct the aggressive research program underway. I hasten to point out that I am not here to ask for more funds this year. As you will see from my statement we are making excellent progress with the current funds.

Research at Carbondale is being continued to find out how to better manage hardwood stands, improve the processing of hardwood lumber, and find new markets for the hardwood resource. The results of the timber growing research to date have been published as a Timber Management Guide for hardwood forest managers and is in wide use. This guide will be revised as new information becomes available. Results of studies to find new uses for hardwoods have been published. The emphasis in utilization research has now been placed on finding out how to improve efficiency in hardwood processing, such as in drying, cut up, machining and fastening. Special attention is being given to finding out how to make the best possible use of the low-grade trees which should be cut to improve the quality of the hardwood stands. As a corollary to the timber management and utilization research, marketing studies are being made to find new outlets for hardwoods so that this resource can make increasingly greater contributions to the economies of the areas where they are produced.

Substantial progress is being made on the Forest Service's walnut research program with wholehearted cooperation and support in the form of research fund, facilities, and services from Southern Illinois University, the American Walnut Manufacturers Association, many industrial companies, and other interested groups. Studies and research investigations are being conducted following various lines of attack involving forest genetics, soil-moisture-growth relationships, nursery and planting techniques including fertilization and weed control, and cultural practices for improving quality and growth of natural-occurring walnut trees now in our forests.

During the past two years, for example, walnut seedlings have been produced from 75 different selected groups of black walnut located throughout the range of the species. This spring the seedlings in this "provenance study" will be outplanted in several states. Results will indicate the best sources of walnut seed for planting in areas with widely varying soil and climatic conditions.

Genetics studies have been initiated to determine relationships in stem straightness and form between parent trees and their offspring, which may lead to improved planting stock. Several species of walnut including Carpathian and Californian walnut, butternut, and various strains of American black walnut are being collected for our breeding program in search for hybrids with outstanding growth, quality, and form characteristics.

The effects of specific quantities of water on growth of young walnut trees are being studied. For this, elaborate installations have been installed with special trenching systems, water meters, plastic rain shields, and highly sensitive equipment that emits neutrons into the soil to measure moisture content. When the basic water-growth relationships have been determined, irrigation procedures will be developed on a practical basis to increase early growth and production of this valuable timber species.

Several nursery studies have been installed to develop optimum methods and seasonal schedules for planting walnut, and to determine soil factors that influence development of desirable fibrous roots on walnut seedlings. Results will soon provide prescriptions for producing the best seedlings possible, and for planting walnut to obtain the best survival and fastest early growth. Many more examples of progress could be told.

Major effort also was spent in putting research results to work An outstanding example of this was the successful Black Walnut Workshop cooperatively conducted in August, 1966, by the Forest Service, the American Walnut Manufacturers Association, and Southern Illinois University. Some 225 forestry and extension specialists attended the Workshop from 26 states and Canada. They spent three days listening to papers by researchers and industrialists, and discussing and examining the most effective and up-to-date methods and techniques available for growing and harvesting black walnut timber. The proceedings of the Workshop were published in a research bulletin entitled "Black Walnut Culture." This Workshop greatly stimulated interest in improved culture and production of black walnut timber throughout the East. The publication has been very widely distributed, and additional requests for copies are still received daily. Thus the latest results from this important walnut research program that you financed are being put to prompt use in all walnut-growing areas of the country.

Laboratory facilities of the Forest Service at Carbondale are being improved, and this will contribute to more effective future research. A very desirable campus site has been provided by Southern Illinois University, at no cost to the Government, for the Forest Service's new Forestry Sciences Laboratory. Plans for this modern Laboratory are completed, and construction will be started this spring. The irrigation system on the nearby Walnut Research Farm has been installed, and the new headhouse-greenhouse facility is under roof and will soon be activated. These new modern research facilities will accelerate progress on this important cooperative walnut research program and will make possible additional vitally needed investigations that previously could not be undertaken. The funds which you have appropriated for Forest Service walnut research work and required facilities at Carbondale, Illinois, have made possible this excellent and most productive program. I sincerely thank you for your interest and assistance.

I also want to briefly testify in support of the very important Hardwood Forestry Research Program described by Mr. Donald Gott of the American Walnut Manufacturers Association and Mr. Howard Gatewood of the Fine Hardwoods Association. We at Southern Illinois University fully recognize the importance of the hardwood forest products industry in the economy of Illinois and the Midwest. If these industries are to continue making their substantial contributions to employment, the economy, and the well-being of our people, we must promptly develop and undertake an adequate research program aimed at increasing future supplies and improving the quality of our high-grade hardwood timber resources of other species as well as walnut.

Our supply of high-grade hardwood timber has been declining, and our forests are producing much less than their full capacity, especially of the quality species and grades in great demand such as veneer trees of walnut, cherry, birch, gum, and white oak. Furthermore, demands for hardwood timber are expected to increase 250 per cent by the end of the century.

The research program of the Forest Service conducted at Carbondale with the help of Southern Illinois University and other cooperators is now contributing to these research needs. This work should be intensified and expanded as a part of a coordinated, balanced Hardwood Forestry Research Program for improving quality hardwood resources throughout the Eastern states. Studies at Carbondale on soil-moisture-growth relationships, nursery and planting practices, tree improvement through genetics, and intensive cultural practices for increased production of prime walnut timber should be speeded up and expanded to include additional high-valued midwestern hardwood species. Important additional research also should be initiated on control of insects and diseases that hamper establishment, growth, and use of walnut and other prime quality timber.

Based on past experience, I am certain that the Forest Service would vigorously move ahead on this vitally needed research program whenever funds can be made available. I can assure you that Southern Illinois University will assist the Forest Service in every way we can on such an important assignment.

I sincerely appreciate your granting me this opportunity to appear before you again, and the recognition you have given our needs in the past. I know you will give full consideration to the needs for additional hardwood forestry research, and I hope this important program can be developed and activated soon.

Thank you.

CARBONDALE RESEARCH PROGRAM

Mr. TUDOR. Senator Hayden, you may remember a few years ago I appeared before your committee and indicated I was not there to ask for more money. I am doing the same thing this year, I want to report on funds allocated to the Carbondale research program and will answer, I think, with my statement, some of the questions I think Senator Russell has raised.

We have been fortunately very successful, I think, with your program at Carbondale. It is moving along fine, and you will find in my statement some details of what is going on here and I hope you find it interesting because I know of your long interest in what we are trying to accomplish.

SEMINAR WORKSHOP

We feel we had one of the finest seminars held in the old wood industry last August and the U.S. Forest Service, American Walnut Manufacturers Association, and Southern Illinois University combined to put on a woodshop of 3 days.

We had 25 forestry and extension specialists from 26 States and Canada attending this workshop. The results of the early activities of the Walnut research were presented there. These are moving along well.

LABORATORY BUILDING CONSTRUCTION

The building that you allocated funds for last year is moving along. We hope to break ground. The university has given the site to the Forest Service through a lease arrangement and this is at no cost to the Government. We will hopefully have the laboratory in operation in about a year's time. So we are moving along very well.

Southern Illinois

I wish to support Mr. Gott and Mr. Gatewood in their interests and concerns. I also want to support my own president, Dr. Morris, in his statement.

I have spent many hours working on the project that he discusses in his statement and I feel they are very necessary and very important. We certainly appreciate Senator Percy being with us this morning and his fine contributions to helping build this part of the State of Illinois.

Thank you very much.

ABSENCE OF AREA INDUSTRY TO UTILIZE RESEARCH FINDINGS

Senator Russell. Dr. Tudor, has there been any development of any industry in that area to utilize the findings of this research?

Mr. Tudor. Yes, we have developed some. This has not come out as well as we would hope. We one time hoped we would get some pulp plants in that area using the hardwoods. These have not come into southern Illinois because the program at that point was at such a stage they were not developing new sources of paper, and so we have had to wait until we got caught up, so to speak.

Small Wood Using Industry and Employment

We do have a number of small wood using industries making a variety of products and this I think is helping considerable with the problems of unemployment in that area. As you know, we have made considerable progress in southern Illinois in a number of the counties that were listed as high unemployment counties.

Senator Russell. That is what I was really getting at because I recall the testimony was to the effect you had these vast resources of hardwood and a very high incidence of unemployment and you wanted to do research to match the two together and eliminate the unemployment.

Mr. Tudor. Yes; and it has worked and we are very proud of what has been accomplished.

Senator Russell. I would like to congratulate you.

Mr. Tudor. It is through the help of people like you it has been done.

Thank you, Senator.

Mr. Percy. Thank you, Mr. Chairman and Senator Russell.

STATEMENT OF DR. DELYTE W. MORRIS, PRESIDENT, SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE AND CARBONDALE, ILL.

Senator Hayden. The statement of Dr. Delyte W. Morris, president of Southern Illinois University, will be included in the record.

(The statement follows:)

Chairman Hayden, members of the Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies, I am Delyte W. Morris, President of Southern Illinois University, Edwardsville and Carbondale, Illinois.

It is my purpose in this statement to support the continued development of a series of key projects of the U.S. Forest Service in the Shawnee National Forest. It is important that funds be appropriated for fiscal year 1966 to insure the continued progressive development of this area in southern Illinois. Southern Illinois University and I, personally, have had great interest in the recent activities and purposeful developments in the Shawnee National Forest. We have devoted considerable of our limited resources, mostly in terms of manpower, using the skills of our highly trained technicians to assist the Forest Service in planning and carrying forward these important projects.

Many reasons can be set forth as justification for the development of Forest Services facilities in southern Illinois. Please let me summarize what to me are some of the more important ones. First, this area is located near the center of population of the United States. Approximately forty million (40,000,000) people live within one day's drive of this area, now that we are developing our system of interstate highways. With adequate facilities for tourist and recreation use, large numbers of people, especially in the middle and lower income groups, will be able to have available to them excellent outdoor recreational opportunities. As evidence of this, we have the fact that the existing facilities are being used extensively.

Second, southern Illinois has made great strides in the past twenty years in improving its social-economic level. While much still remains to be done, one of the important potential factors is the improvement of the economy through the expansion of the outdoor recreation and tourist industries. We are convinced that the investment in these projects will pay real dividends in the form of reduced public aid expenditures and increased income from taxes.

Third, the State of Illinois as well as the U.S. Forest Service has recognized the importance of the developments in the Shawnee National Forest. In a study released in February, 1966, jointly by the Department of Business and Economic Development and Southern Illinois University entitled "The Future of Tourism and Recreation in Southern Illinois" high priority is given to the U.S. Forest Service developments in southern Illinois. This study was made by Checchi and Company under contract with the Department of Business and Economic Development of the State of Illinois and the Economic Development Administration of the U.S. Department of Commerce. The report indicated that the Shawnee National Forest in 1964 had an estimated attendance of 789,200, and an estimated total man days of recreation of 394,600 with only 110 acres of water surface.

In the State plan for "Outdoor Recreation in Illinois" prepared jointly by the Illinois Departments of Conservation and Business and Economic Development, the following statement is prepared:

"United States Forest Service holdings total 211,554 acres in the Shawnee National Forest, which occupies portions of the most rugged and scenic portions of Illinois. A combination of rock outcroppings, steep hillsides and extensive woodlands make this one of the state's outstanding recreational resources, both in terms of existing and potential use. Existing facilities include 225 camping units and 281 picnic sites. Swimming, boating, hiking, hunting, and fishing facilities are also provided.

"Although the Shawnee National Forest adds a large measure to the total supply of recreation land and features some of the best scenery, its recreation potential is not adequately realized in current use. Access for potential users from the East St. Louis metropolitan area and for other users is relatively difficult and distances to other urban areas of the state are great. Recreational development is expected to continue since the Forest Service estimates that by 1970 it will increase its land holdings by 50,000 acres, and additional facilities including 163 camping and 228 picnic spaces will be provided.

"As a federal project, the Shawnee National Forest preserves for public use some of the most scenic lands in Illinois. Its significance to the statewide supply will remain limited to its facilities for serving vacationers and nearby weekend visitors, and for the benefit of its large area for hunting."

From this we can see that general recognition is given to the importance of the development of this area. Now, let me turn to some of the specific projects:

1. *Lake of Egypt Recreation Area, $250,000.*—A start has been made on the development of this important recreation area. In fiscal year 1966 1700 acres of land were purchased with Land and Water Conservation funds. During fiscal year 1967 (the current year), 4.2 miles of entrance roads, 42 camping units, 31 picnic sites, and associated facilities have been established. It is now im-

portant to move ahead with this project and the $250,000 is needed to cover construction of a beach, bathhouse, water and sewage system, and additional camp sites.

2. *George Rogers Clark Recreation Way, $260,000.*—This important, high-priority project has reached a stage where engineering and recreation surveys prior to the final design and construction are now needed. Many professional people are of the opinion that the development of this project, along with the activities to be associated with it, holds the key to making southern Illinois a major tourist and outdoor recreation area.

3. *Week's Law Funds for Land Purchase, $500,000.*—Certain lands vital to several projects lie outside proclaimed national forest boundaries, and are therefore not eligible for purchase from Land and Water Conservation Funds.

Established costs are as follows:

a. Kinkaid Lake	$100,000
b. Little Cache Lake	50,000
c. George Rogers Clark Recreation Way	100,000
d. Tower Rock Recreation Way	50,000

In addition, land not eligible for Land and Water Conservation Funds but with a high priority to the several projects in the Shawnee National Forest are estimated to need $200,000. These lands are associated with recreation projects, providing public access to present national forest lands, for our key tracts needed to fill in gaps, and present ownership by the U.S. Forest Service.

Thank you for granting me this opportunity to present a statement on behalf of the U.S. Forest Service. I can assure you that Southern Illinois University plans to continue its close cooperation with the Forest Service in the development of these projects vital to Mid-America.

STATEMENT OF J. WALTER MYERS, JR., EXECUTIVE DIRECTOR, FOREST FARMERS ASSOCIATION

INTRODUCTION OF WITNESS

Senator RUSSELL. Mr. Chairman, we have here this morning the Honorable Walter Myers. He has appeared before the committee, and is one of the best men on forestry problems in the country. He has done a great deal to get the forest farmers in increasing number in recent years in organizations where they can advise their needs and wishes.

Mr. Myers, we will be glad to hear you.

Is Mr. Walker going to make a statement?

Mr. MYERS. He has a brief statement.

Senator RUSSELL. It may not be possible for me to remain throughout your statements because of other important and pressing demands.

Mr. MYERS. I certainly understand.

Senator RUSSELL. I have read your statement.

Mr. MYERS. Thank you, Mr. Chairman and members of the committee, my name is J. Walter Myers, Jr., and I am executive director of the Forest Farmers Association.

ORGANIZATION OF SOUTHERN TIMBERLAND OWNERS

It is a pleasure to appear before this committee again as a representative of our association. The Forest Farmers Association, as you may know, is an organization of timberland owners—primarily small owners—in 15 Southern States. Headquarters for our association is Atlanta, Ga.

FOREST RESEARCH PROGRAM

This committee has, over the years, continued to demonstrate its support and interest for maintaining a strong program of Federal research in forestry, and this has been most gratifying.

The committee can take great pride in the Federal Government's outstanding forest research program, and the important role which it has played in developing and maintaining that program. Meanwhile, the committee is, I am sure, aware of the outstanding support which private timberland owners, wood-using industries, and the States have extended the Federal Government in promoting forest research activities, particularly at the local level. Such cooperative participation is both logical and desirable.

SOUTHERN FOREST RESEARCH AND FOREST SERVICE BUDGET REQUEST

In recent months, representatives of the Forest Farmers Association have carefully reviewed the status of forest research activities in the South with a number of key individuals and groups, representing both public and private interests. We have also reviewed the 1968 fiscal year budget estimate, and we have been pleased to note certain increases for research, both for program activities and construction.

It is our understanding that this increase totals $2,580,000 nationwide. The Forest Farmers Association concurs in the desirability of this increase and is very hopeful that this committee will recommend that it be retained.

RESEARCH FACILITY CONSTRUCTION

Our group particularly wishes to endorse funds in the budget for planning construction of research facilities at Franklin, N.C. ($57-000); the Raleigh-Durham, N.C., Research Triangle complex ($95,000); and the Institute of Forest Genetics at Gulfport, Miss. ($50,000).

In addition, our group strongly endorses the $1.3 million in the budget for construction of a second wing at the U.S. Forest Products Laboratory at Madison, Wis., to house wood chemistry research activities.

ADDITIONAL FUNDING RECOMMENDATION

Our association is also hopeful that the committee will recommend additional funds for fiscal year 1968 to further strengthen forest research programs and for construction of other much-needed research facilities.

Research activities must be maintained at a high level if we are to meet the sharply rising demands for timber and other forest-related resources. The Forest Farmers Association feels such increases can be justified on the basis of investments which will pay rich dividends in the future.

CONSTRUCTION REQUISITE

The committee's consideration to providing construction funds for the following much-needed research facilities, not included in the budget, is invited: a forest range management laboratory at Fort

Myers, Fla. ($220,000); a forest tree seed laboratory at Starkville, Miss. ($290,000); and a wildlife and silviculture laboratory at Nacogdoches, Tex. ($335,000).

Planning funds for the Fort Myers, Fla., laboratory were provided in the 1965 fiscal year budget, and funds for planning the Starkville, Miss., and Nacogdoches, Tex., laboratories were included in the 1966 and 1967 fiscal year budgets, respectively.

These facilities are all urgently needed and the work must be done at the local level to provide truly significant data. No construction funds for these facilities were included in the original 1968 fiscal year budget.

Drafting of Architectural Plans

The committee's consideration is also invited to providing funds for drafting architectural plans for a much-needed engineering laboratory at Auburn, Ala., on the Auburn University campus ($35,000) and a forest science laboratory on the Virginia Polytechnic Institute campus, Blacksburg, Va. ($52,000).

FUNDS REQUISITE

Our association's review of research program activities, meanwhile, indicates that an increase of $1,625,000, spread over six Southern States and including $5,000 for South-wide strengthening of the forest survey, is clearly indicated if minimum forest research needs are to be met in fiscal year 1968.

Association Recommendation

Certain of these funds are included in the present budget estimate; however, it is not possible at this time to determine what funds might be available for the South. Therefore, the following breakdown shows nearly the total need estimated by our group:

THE FOREST SURVEY

The forest survey is a top-priority item. The survey provides invaluable State-by-State forest research inventories on a current basis. The survey provides the basis for all forest planning, public and private, nationally and locally. A great need exists to strengthen this program, and especially in the South with its fast-growing timber and the increasing demands on its forest resources.

A minimum annual increase of $500,000 is needed in the South, alone, beginning in fiscal year 1968, to achieve the objective of State resurveys on an 8-year cycle, which the Forest Service recommends.

The 1968 fiscal year budget estimate provides an increase for the forest survey, nationwide, and the South would likely receive a portion of these funds but not in the order of the $500,000 needed. A more detailed statement on the forest survey will be submitted for inclusion in the record.

(The statement follows:)

NEED FOR ADDITIONAL FOREST SURVEY FUNDS

No other information derived from U.S. Forest Service research is in greater demand than the findings of the Forest Survey. Both, private forest interests—landowners and industry, and public agencies wholeheartedly concur in the strong need for accurate and up-to-date Survey information. It provides the basis for all forest policy and program planning. The reason is simple: the Forest Survey provides the only complete forest resource statistics available, locally and nationwide.

In order that timber yield and consumption rates can be related to future requirements, trends must be determined periodically. The Survey does this. Moreover, the Survey provides the only basis on which the required planning for forest resource protection, management and utilization can be developed with any degree of accuracy. It also provides detailed information for other important uses such as: determining timber-growing and timber supply potential of various areas; developing feasibility studies for the location of new forest-based industries; planning for major watershed programs; surveys of wildlife and recreation potentials; and numerous other uses.

The Forest Farmers Association feels that Forest Survey data is so valuable that complete state resurveys should be accomplished on an eight-year cycle in the South. A satisfactory alternative might be complete resurveys every ten years with partial resurveys every five years, using recently developed U.S. Forest Service techniques. The cost would be comparable. Such frequencies are felt necessary in view of the rapidly expanding economy and the greatly stepped up demands on the South's forest resources. The South, today, is producing almost two-thirds of the Nation's pulpwood (63% in 1965), and a very substantial volume of sawtimber and other forest products. Current pulpwood production is up from approximately 50% in the late 1940's and the early 1950's. Resurveys in other sections of the country may not be necessary on this same frequency due to less intensive demand and slower growth rates.

The eight-year resurvey goal for Southern states is based on recommendations by the U.S. Forest Service. Present funding for the Southeastern Forest Experiment Station and the Southern Forest Experiment Station is wholly insufficient, however, to meet this objective. Sharply rising costs will require lengthening the resurvey frequency significantly, if present accuracy standards are to be maintained. The alternative would be a sharp reduction in the number of sampling plots, which would increase the possible error beyond an acceptable level. Neither of these alternatives is satisfactory in the view of the Forest Farmers Association.

The answer seems clear. Additional funds should be provided in the budget for the Forest Survey so the necessary job can be done. A more intensive and up-to-date state resurvey program is indicated, if Southern forests are to keep pace with expanding demands. The approximately 26,000,000 acres of fast-growing Pacific Northwest forests are going to do well to supply the timber needs of California and the western states in the years ahead. The rest of the Nation's timber requirement are to come increasingly from the South.

An eight-year resurvey program with an acceptable sampling error and the availability of primary county data should be the minimum acceptable standards for the southern states. To accomplish this goal an additional annual appropriation of $500,000 would be required beginning in fiscal year 1968.

This amount would be split equally between the Southern and Southeastern Forest Experiment Stations, with each receiving an additional $250,000. The Forest Survey is fundamental to the continued wise use of America's renewable natural resources. It should be supported at a level in keeping with its importance.

FOREST ENGINEERING RESEARCH

Mr. MYERS. The changing economic picture has added great impetus to mechanization in harvesting and marketing of forest products. Mechanization on large acreages can normally be accomplished without unusual difficulty due to the size of the tracts and volume of the timber involved.

A great need exists, however, to develop efficient and economical systems for havesting and transporting timber crops from small acreages. A minimum of $100,000 is urgently needed to strengthen and expand this work, centered at Auburn, Ala., on the Auburn University campus.

INSECT INVESTIGATION AND CONTROL RESEARCH

A minimum of $200,000 is urgently needed to keep pace with insect research and control, centered primarily in the States of Florida and Louisiana.

A substantial portion of these funds would be used to strengthen research on control of insects attacking pine cones and seed, with project headquarters at Olustee, Fla. The remainder would be used for strengthening and expanding bark beetle research activities at Alexandria, La.

TREE IMPROVEMENT RESEARCH

To meet increasing demands for wood, our forest lands must be made more productive. The availability of improved growing stock would boost timber production significantly.

$175,000 is needed to finance and expand more fully the research program now underway at Macon, Ga. A portion of this money would also go to strengthen and expand research activities aimed at developing improved strains of pines for the naval stores industry, which work is centered at Olustee, Fla.

FOREST MANAGEMENT AND SILVICULTURE STUDIES

Increasing demand for wood means that southern timberland owners must learn more about managing crops of timber for bigger and better yields. A minimum of $375,000 is needed for strengthening this work in Florida, Mississippi, and Virginia.

The program in Mississippi involves research activities in insect and disease investigation and control, as well as bottomland hardwood silviculture, and is centered at Starkville, Miss.

FOREST TREE SEED RESEARCH

A minimum of $100,000 is needed for program strengthening and additional staffing of the new forest seed research project at Starkville, Miss., with initial attention to hardwood seed research.

PRODUCTION ECONOMICS RESEARCH

A minimum of $100,000 is needed to strengthen research in economic evaluations, particularly in alternative land uses involving forestry. This work is centered at New Orleans, La.

WILDLIFE HABITAT MANAGEMENT STUDIES

One hundred thousand dollars is needed to strengthen the existing program in the Appalachian area on the ecology and economics of managing Appalachian forests for increased game production. This work is centered at Blacksburg, Va.

NAVAL STORES PRODUCTION

Seventy-five thousand dollars is needed to expand the existing program of naval stores production research, with particular emphasis on cutting production costs. Production costs have become a major problem for the naval stores industry. This work is centered at Olustee, Fla.

The committee's consideration to recommending additional funds to meet these minimum needs will be appreciated. I thank you for your consideration in hearing me.

Chairman HAYDEN. Thank you for your appearance.

Mr. MYERS. Thank you.

STATEMENT OF DR. LAURENCE C. WALKER, DEAN, SCHOOL OF FORESTRY, STEPHEN F. AUSTIN STATE COLLEGE, NACOGDOCHES, TEX.

CAMPUS HABITAT AND SILVICULTURE LABORATORY FOR U.S. FOREST SERVICE

Chairman HAYDEN. The next witness is Dr. Laurence C. Walker, dean, School of Forestry, Stephen F. Austin State College, Nacogdoches, Tex.

Dr. WALKER. Mr. Chairman, I am dean of Forestry, Austin State College, Nacogdoches, Tex.

I am sorry Senator Russell left because I learned how a forestry school should be operated from engineers at the University of Georgia and then returned to Texas as dean of the school there which is the State's forestry school.

My interest this morning is in support of a U.S. Forest Service Wildlife Habitat and Silviculture Laboratory on the campus. The cost is $335,000. The plans have been drawn with funds provided for the current fiscal year, so we feel we are ready to go.

COLLEGE PRESENT FACILITY INADEQUATE

The Forest Service there is now housed in a World War II Army barracks just as our school of forestry is, with both of these structures scheduled to be torn down in 1968 to make room for a new forestry school building.

Since 1945, when the U.S. Forest Service established its program at Nacogdoches, the Federal Government has received free utilities, janitorial services, and space.

STATE LEASE ON LAND FOR CONSTRUCTION SITE

Last year our State leased to the Federal Government for 99 years 1½ acres of land in the SFA Forestry Center, so that their new laboratory building for which the plans have been drawn would be adjacent to our facilities.

COLLEGE GROWTH AND FOREST SERVICE FOR MIDSOUTH AREA

Our college is one of the fastest growing in the Nation. It had less than 2,000 students in 1959 and has 7,000 now and we expect 8,000 in the fall. As a result we are tremendously short on space.

The work of the U.S. Forest Service at Nacogdoches involves the Midsouth. It is the live habitat and silviculture program for the States involved in that area.

INTEGRATED MANAGEMENT OF TIMBER AND GAME

The program deals with the integrated management of timber and game and with all of the emphasis on outdoor recreation today we would like to think this East Texas outdoor recreation is essentially game and game management. The Forest Service program at Nacogdoches happily is cooperative with the school of forestry, with the Texas Forest Service, the U.S. Bureau of Sport Fisheries and Wildlife, and they, too, would be housed in the new laboratory building, the Texas Parks and Wildlife Research program, and with similar organizations in Arkansas, Louisiana, and private industry.

UTILIZATION OF RESEARCH FINDINGS

I might add that the work of this group is used, the results are used in the management of four national forests in our State and many others in the Midsouth.

Members of the Forest Service there, on a leased-time arrangement with the Federal Government, supply teaching and research for our own faculty.

I appreciate the opportunity to speak in support of this program for the U.S. Forest Service at Nacogdoches, Tex.

Thank you, sir.

PREPARED STATEMENT

Chairman HAYDEN. Thank you. Your prepared statement will be included in the record.

(The statement follows:)

I would like to recommend the Committee's consideration of additional appropriations for construction of the U.S. Forest Service's Wildlife Habitat and Silviculture Laboratory on the Stephen F. Austin State College campus at Nacogdoches, Texas.

The laboratory is the regional headquarters for all wildlife habitat research at the U.S. Forest Service's Southern Forest Experiment Station, an area that includes 108 million acres of commercial forests in the midsouth. Whether deer, squirrel, turkey, quail, and other game will be scarce or abundant depends on how these forests are managed. Research at Nacogdoches is designed to furnish sound scientific knowledge of ecological relations between game, habitat, and timber, and to develop guidelines for practical management that is consistent with other uses.

Urgently needed at Nacogdoches—for Fiscal Year 1968—is a new federal laboratory building. Architectural and planning funds amounting to $25,000 were appropriated by the last Congress. These plans are in the final stages of preparation and will be completed before June 1, 1967—in ample time to award a construction contract at the beginning of Fiscal Year 1968.

The College has, for over 20 years, provided *gratis* to the federal government all facilities, utilities, and custodial services—a considerable obligation upon funds also needed for instruction. The state-owned World War II barracks now occupied by the researchers is scheduled to be torn down in 1968 to make room for construction of additional and much needed forestry laboratories and classrooms for graduate and undergraduate instruction at the State's most rapidly expanding college.

The cost of the proposed laboratory is approximately $335,000. The State of Texas has leased 1½ acres for 99 years in the FSA Forestry Center to the U.S. Forest Service on which to locate the building.

The commercial forests of the mid-South yield raw materials for a multimillion dollar timber industry. Whether game can likewise be included in the "millionaire" class depends, essentially, on ascertaining facts and then informing timberland owners of scientifically tested techniques for managing the natural resources of the Nation's woodlands. Both timber and game can be grown on the same acreage, but one may thrive at the expense of the other unless sound conservation practices are understood and applied. At present, broad generalizations may be made of the interrelations of timber and game, but they are inadequate for these dynamic times of strong competition for forest land use.

Forage quality and wildlife nutrition is a phase of research that has long been neglected throughout the South. Information about energy and digestibility values of wildlife foods is basic for understanding why wildlife thrive or do poorly in various habitats. Research would tell which plants, or combinations of plants, are inherently capable of furnishing essential nutrient constituents for animal diets. Techniques for diagnosing deficiency conditions of wildlife and its environment, and how to improve animal vigor and productiveness, would be sought.

I would like to mention, too, that U.S. Forest Service research at Nacogdoches is cooperative with Stephen F. Austin State College; Texas Parks and Wildlife Department; Texas A & M University; Arkansas Game and Fish Commission; Louisiana Wildlife and Fisheries Commission; Louisiana State University; the U.S. Fish and Wildlife Service; and private industry. Thus, the new laboratory building not only will expedite U.S. Forest Service research, but will also strengthen a team of scientists and organizations vitally interested in the economic and recreation potential of the South's wildlife and forests.

The work is also important locally; federal scientists regularly teach courses in the State's School of Forestry and direct graduate and undergraduate student research projects. Thus, the U.S. Forest Service is an integral part of the college program.

The productivity of this group over the years, attested to by industry and other government agencies, commends the use of federal funds for this cause.

I appreciate the opportunity to appear before this committee and ask that this statement be included in the records of your hearings.

STATEMENT OF MRS. ALBERT D. LASKER

Senator BIBLE. Chairman Hayden, Mrs. Albert D. Lasker had planned to be present this morning. However, when she learned that she could not remain this weekend, she asked me to present her statement for the record. I am glad to ask that it be included.

Chairman HAYDEN. It will be printed at this point.

(The statement follows:)

TESTIMONY OF MRS. ALBERT D. LASKER BEFORE U.S. SENATE SUBCOMMITTEE ON APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR

Chairman Hayden and members of the Subcommittee on Appropriations, thank you for granting me this opportunity to discuss with you a matter of concern to us all—a *more* beautiful national capital. Of course, it is already beautiful, but our aim should be to make it a *model* not only for this country but for the world!

You will recall that Pericles and the Athenians are remembered, not for their great wars, but for the Parthenon and for their beautiful city with its architecture, and the greatest sculpture ever known. Now, *we* have an unusual opportunity here in the United States. Never has any head of state—*except* President Johnson—ever called for the enhancement of the natural beauty of a *whole* *country.* Napoleon III of France got Hausman to redesign and rebuild the boulevards of Paris. Louis XIV built Versailles. However, never have we heard that they, or anyone else in history, urged more beauty for *all* their cities and highways throughout a *whole* nation, until President and Mrs. Johnson took up the enhancement of our environment, in *this* country.

Mrs. Johnson felt that one of the ways in which she could make a contribution to this was by forming the First Lady's Committee for a More Beautiful National Capital, as every great effort needs a model which will inspire others.

I am the President of the Society for a More Beautiful National Capital, a nonprofit corporation formed in 1965, to complement and supplement the work of the First Lady's Committee. The Society was formed to receive "seed" money from citizens and organizations, and to give encouragement to help make Washington the most beautiful city in the world! However, today I appear before you as an individual citizen. I have been interested in more beautiful cities for a long time, since I was a small child in the middle West. I have contributed toward more trees and flowers for New York City's gray midtown streets, and I have made some contributions to Washington's plantings. However, what any one citizen or group can do is infinitesimally *small* compared with *this* city's needs, and the *national* needs, and we can only hope to spark this effort.

I am here to ask your careful consideration of the budget for the National Park Service for fiscal 1968, particularly in relation to the Washington metropolitan area. I do this out of the knowledge that the Park Service needs more funds to meet its obligations properly in the *maintenance* of the public parks and lands that it is responsible for in the District of Columbia.

There is no organization anywhere—government or private—whose mission and performance I admire more than the Park Service's. I know of no organization of government that brings more joy or pleasure to our people. Nothing serves more to lift one's spirit than driving or walking in one of its great parks, or the *joy* of seeing the cherry blossoms in full bloom at the Tidal Basin here.

The National Park Service, as you well know, is responsible for innumerable small triangles and small parks, as well as larger parks and highway segments in the Washington Area. Park Service officials are demonstrating, through planning and development, what can be done to inspire the 16 millions of people who come to Washington from all over the world, every year, to visit the center of our Government. Most of these people come from all parts of the United States, but *many thousands* come from all parts of the earth. What we do well here gives pleasure and inspiration to them.

The Society for a More Beautiful National Capital is interested in the development of large concepts that will assure improvement in the public parks and lands of the city, as well as the improvement in plantings of highways, school playgrounds and housing developments. Projects, such as the development of the Mall west of the Capitol with more plantings, fountains and lighting, are examples of what we are advocating. Others are the lighting of our public buildings and monuments; the increase in landscaping of parks and triangles with flowering trees, flowering shrubs and bulbs to give recreation and pleasure to our people; for instance the planting of flowering trees on Columbia Island in the area of the George Washington Memorial Parkway, a vast grove of dogwoods which later in spring would *rival* the beauty of the cherry blossoms at the Tidal Basin.

We also advocate the planting and the provision of playground equipment for the District schools and for the public housing projects in the area. More fountains, and swimming pools, which, in winter, could be converted into skating rinks, should be provided for recreation, and to give children activity during the hot mid-summer. We have a convertible swimming pool skating rink in Central Park in New York.

The 27 major entrances to Washington should all be beautifully landscaped and planted so that people will know when they are entering the Nation's Capital by the beauty of its entrances.

Another major need which should be met is the provision of trained horticulturalists and gardeners. The Park Service should have a National School of Horticulture and a National Garden on 600 acres of its land near Washington. This could be a major tourist attraction and a center for gardeners and scholars in the field of horticulture. Throughout the nation, gardening is one of the professions in the most short supply. Nowhere are adequate numbers being trained with high standards of excellence. Without this, the quality of our

City parks and gardens will never be maintained with highest standards, and in the future, our efforts will gradually die out. The school for gardeners at Kew Garden is one reason England's cities and parks and gardens are outstanding in the world.

Such a great school, park and garden, once developed, could probably pay for its upkeep by the number of visitors it would attract. It should include flowers, plants and trees of every variety, resulting in a garden and a park of great beauty in design and top maintenance. The development of a National School and Garden of Horticulture will serve to inspire, teach and enlighten many millions of people each year. The scarcity of skilled gardeners is working against our ability to supply outstanding park supervisors and gardeners for this city, and for the major cities across the U.S.

I feel that every American and the citizens of other nations of the world should be able to regard our Capital as a living expression of the highest ideal of beauty in a city. It should be a great setting for our democratic way of life and our government.

The city's parks serve to provide an opportunity for spiritual and physical enjoyment to all who live and visit here. They provide places where children and grown-ups can exercise and play.

The First Lady's Committee, composed of many inspired, dedicated and hard-working people, has been a catalytic agent in many efforts to beautify Washington. Many of the efforts here are being copied throughout the country. It is important that what we do here set an example—one in which all Americans can take deep pride. Among the things which have been done by the Park Service, some by other agencies, some with private help are:

The landscaping of 80 small parks or triangles by the Park Service;

The planting of East Pennsylvania Avenue with magnolias and the planting of Pennsylvania Avenue between Pershing Square and the Capitol with azaleas and some cherries;

Landscaping and planting of dogwoods at the Post Office Building;

Cherry tree planting on Ohio Drive, Hains Point, with 1800 cherries, weeping cherries and pines;

Re-landscaping of Lafayette Park, for which a private individual has given funds;

Cherry tree plantings on Rhode Island Avenue;

Planting of crepe myrtle trees for over one mile on Dalecarlia Drive;

Start of planting work on MacArthur Boulevard;

Planting of 210,000 daffodils in Rock Creek Parkway;

Plantings on M Street;

Re-landscaping and developing of Watts Branch Park;

The construction of Buchanan School Playground and Community Center. Tree and shrub planting at other schools, as well as 16 school playgrounds supplied with new, gay equipment from the Mexican Government;

Plans for landscaping and plantings at Capper Housing Project;

Streets and highways planted include New York Avenue, the Southwest Freeway; plantings of about 15 miles on the Beltway done by the State of Maryland;

Plantings at the plaza of the Pennsylvania Railroad Station, and others.

However, there are many difficulties about the preservation and protection of the efforts so far achieved—again the lack of skilled gardeners, the need for production of plants and equipment, and the *lack of sufficient maintenance money*. We need to *correct* these deficits so that the beautification program *will not slow down*. Remember that cities throughout the country are patterning their efforts after Washington's example, and many states and cities are *slow starters*.

The providing of proper maintenance funds for the Park Service is vital. The Park Service simply cannot stretch its budget to do the kind of job needed to be done. As more parks are improved, more plantings are completed and the beauty of the city is further increased, the problem will become more compounded. There is danger of losing the gains made over the past two years. The Park Service itself, seeing the need to achieve excellence in standards of park maintenance, has established three levels—Class A, Class B and Class C. Last year funds available permitted the achievement of the Class A standard in only *six* parks. This spring, the Park Service has the capability of extending

Class A maintenance to 33 parks. Ultimately, it is planned that a Class A level of maintenance will be achieved in approximately 299 parks—this out of a total of over 750. Included are the 80 parks landscaped since the beginning of the beautification program and other scheduled for improvement between now and the coming fiscal year.

As a practical matter, the Park Service recognizes that it cannot achieve a Class A maintenance level in all parks for some time to come. It does believe that it must achieve this goal in the parks which have been improved under the beautification program. About 400 acres are involved. About $5,300 per acre per year is available now for park maintenance. Based on experience to date, it will cost about $11,500 per acre annually to maintain this acreage at a Class A level. This has generated the need for an additional $2.5 million in the Park Service's maintenance appropriation.

I urge that you consider the appropriation of this additional amount for this and the Park Service's succeeding budgets. This is a relatively small sum when one considers the joy flowers, flowering trees and shrubs, lighting and other improvements will give the 2 million men, women and children who *live* in Washington and the 16 million who come here every year.

A clean, colorful environment—with ample playgrounds and parks for recreation and rest—places to occupy young and old in healthy, outdoor activity—can do much to avoid many of the social problems, miseries and disturbances which threaten us in big cities every summer. The young and old need places to go for exercise, play, and refreshment—and to leave crowded home environments.

I also urge that you consider a fund of $360,000 to make a superb detailed plan for a National Horticulture School and Garden so that later this project may go forward to provide the teaching and instruction necessary for the enhancement of the environment of our country.

Thank you for the sympathy and great aid in understanding human needs, which this Committee has given to the National Park Service, and for hearing me. Thank you.

STATEMENT OF GORDON GRAY, CHAIRMAN, THE NATIONAL TRUST FOR HISTORIC PRESERVATION

Program for Preservation of Additional Historic Sites and Properties

Chairman Hayden. The next witness will be Mr. Gordon Gray.

Mr. Gray. Mr. Chairman, my name is Gordon Gray. I appear in my capacity as chairman of the National Trust for Historic Preservation and speak on behalf of our trustees and 11,600 members.

The 89th Congress by the passage of Public Law 89-665 established a program for the preservation of additional historic sites and properties throughout the Nation, and authorize new programs and the enlargement of existing programs on behalf of the Federal Government.

FEDERAL, PRIVATE AGENCY, AND INDIVIDUAL PROGRAM PARTICIPATION

In its preamble, this legislation provides that the Federal Government, private agencies, and individuals should play a vital role and that the Federal Government should give maximum encouragement to agencies and individuals undertaking preservation by private means.

NATIONAL TRUST FOR HISTORIC PRESERVATION PROGRAM EXPANSION

It further recognizes the necessity for the National Trust for Historic Preservation in the United States to expand and accelerate its historic preservation programs and activities.

Representation of Nongovernmental Participants

Throughout the process of enactment, it was frequently evident that the National Trust was felt to be the organization best prepared to represent the nongovernmental participants in a national program for historic preservation.

TRUST CHARTER

This leadership position was initially established in the congressional charter of the National Trust, Public Law 408, 81st Congress, "An Act * * * to facilitate public participation in the preservation of sites, buildings, and objects of national significance or interest * * *."

TRUST ACTIVITIES

This responsibility for public participation was further strengthened when in 1953 the Trust's charter was amended by Congress permitting it to assume activities previously conducted by the National Council for Historic Sites and Buildings. These were:

1. mobilizing sentiment and opinion;
2. diffusing knowledge concerning the need for such preservation and the appropriate methods and techniques;
3. examination, appraisal, and support of specific projects; and
4. conducting research and surveys on matters relating to the preservation and use of historic sites.

Presidential Expressions of Interest in Trust

In more recent years the growing concern for our tangible heritage and the environment, both natural and manmade, led President Johnson to express his interest and take note of the National Trust on two occasions.

In his message on "Natural Beauty of Our Country," presented to the Congress February 8, 1965, he said:

> In almost every part of the country citizens are rallying to save landmarks of beauty and history. The Government must also do its share to assist these local efforts which have an important national purpose. We will encourage and support the National Trust for Historic Preservation in the United States, chartered by Congress in 1949. I shall propose legislation to authorize supplementary grants to help local authorities acquire, develop, and manage private properties for such purposes.

Later, in the President's message on "Preserving Our Natural Heritage," presented to Congress February 23, 1966, he suggested methods:

> Historic Preservation is the goal of citizens groups in every part of the country. To help preserve buildings and sites of historic significance, I will recommend a program of matching grants to States and to the National Trust for Historic Preservation.

Congressional Enactments

In late 1965, techniques to meet the growing needs were recommended by the Special Committee on Historic Preservation, and the legislative base for a more effective national program was laid with the enactment of several laws by the 89th Congress, especially Public

Law 89–665, the Historic Preservation Act with which we are concerned here.

Title I of this act authorizes the Secretary of the Interior to establish a program of matching grants to the National Trust for Historic Preservation in the United States for the purpose of carrying out its responsibilities. Of the $2,323,000 requested by the National Park Service in the 1968 fiscal year budget for "preservation of historic properties," $1,750,000 is for grant-in-aid to the National Trust on a matching basis.

TRUST ADOPTION OF PLANS FOR ACTIVITY ENLARGEMENT

In recognition of the leadership obligation and trust responsibility, the trustees of the National Trust have adopted plans for enlarged activities in three areas of activity, proven by experience to be of the greatest value in assisting private individuals and organizations. These are: (*a*) service programs; (*b*) National Trust properties; and (*c*) a preservation emergency fund. These will supplement the ongoing programs of the Trust.

SERVICE PROGRAMS

A national program of preservation will involve citizens and organizations in every State. These persons and organizations must inform themselves on the many technical aspects of restoration and preservation projects. There must be a source to which participating citizens and organizations can turn to go in from the experience of others as well as to learn the newest techniques in the field generally.

Accordingly, the Trust will conduct an expanded service program furnishing experts and consultants qualified to recommend solutions to involved and difficult questions related to architecture, history, construction, or local organization. To the largest possible audience, the Trust will make available a wide variety of publications pertinent to restoration and preservation activities. Educational films, slides, and other audiovisual materials will also be available.

The additional service programs planned to meet the accelerated need in the coming year will cost approximately $430,000 and will include such new activities as a Government liaison office at an approximate cost of $50,000. The primary objective of this office will be establishment of direct and clear communication between governmental agencies at all levels and private agencies and organizations conducting preservation programs effected by programs of these related governmental agencies.

NATIONAL TRUST PROPERTIES

To insure permanent preservation, the Trust has accepted certain outstanding properties. While the Trust often receives some accompanying financial assistance for the long-range care and operation of property it accepts, the level of this assistance is generally inadequate.

In fulfilling its leadership obligation, the Trust must conduct its stewardship of properties with exemplary effectiveness. The Trust must set standards for preservationists across the Nation. It must perfect existing techniques, and develop new, in research, restoration and rehabilitation, interpretation, and contemporary use in community life. It is necessary that the Trust act to upgrade properties presently held and to respond affirmatively to the opportunities for further property acceptance in circumstances where Trust ownership is indicated.

The rehabilitation and total restoration of all National Trust properties (Belle Grove, Middletown, Va.; Casa Amesti, Monterey, Calif.; Decatur House, Washington, D.C.; Lyndhurst, Tarrytown, N.Y.; Oatlands, Leesburg, Va.; Pope-Leighey House, Mount Vernon, Va.; Shadows-on-the-Teche, New Iberia, La.; Wilson House, Washington, D.C.; and Woodlawn Plantation, Mount Vernon, Va.) to include significant furnishing has been estimated to cost approximately $687,000. Operating and maintenance funds necessary for exemplary ownership will cost an additional $150,000 in the coming year. The owners of 59 properties have expressed interest in conveying to the National Trust by gift, bequest, or sale of their properties. Many of these are notable, and included in the list are several national registered historic landmarks. If ownership by the Trust of any of these properties becomes necessary to insure preservation, the funds required for this portion of the National Trust program would grow in proportion to the financial requirements of the properties concerned.

PRESERVATION EMERGENCY FUND

Frequently, change in urban areas necessitates quick action on the part of community leaders if the preservation of a significant property is to be accomplished. To forestall irrevocable loss, the Trust proposes to create a fund to help provide responsible civic leaders with the necessary moneys for options or other expedients to make possible appropriate preservation efforts.

The emergency aspects of this type of need are difficult to meet through the normal process of philanthropy. Time gained by such immediate assistance would in most circumstances give the community leadership an opportunity to seek and secure permanent funding.

PRIVATE AGENCY REQUESTS FOR PROGRAM ASSISTANCE

Since the enactment of Public Law 89–665 the National Trust has received innumerable inquiries from agencies or organizations seeking assistance under the new program. To name only a few, they are such private organizations as Historic Alexandria Foundation; Historic Annapolis, Inc.; Girl Scout Council of Savannah, Ga., Inc.; Friends of Clara Barton, Inc.; as well as from the County of Los Angeles Department of Arboreta and Botanic Gardens.

FUNDS DISTRIBUTION CAPABILITY

It is impossible to estimate the exact need or to predict recipients because of the emergency nature of this program. However, it is estimated that in fiscal year 1968 the Trust could distribute a large portion of the grant-in-aid funds made available to it to organizations and agencies qualified under the terms of the Historic Preservation Act on a matching basis.

TRUST FINANCIAL STATEMENT

Recent history indicates that the National Trust will be able to meet the financial obligation of matching its grant-in-aid funds. While the Historic Preservation Act was under consideration by the Interior and Insular Affairs Committee, we provided Chairman Aspinall with financial information as follows:

During the 5-year period ending June 30, 1966, the National Trust received from all sources $5,222,160. Donations made up the major part of this sum with only a small portion attributable to admissions or other types of miscellaneous income. This total has been disbursed or assigned in the following manner: endowments, $2,452,966; capital needs, $634,524; and operational purposes, $2,134,670. During this same period the assets of the Trust, excluding the value of historic properties, grew from $3,690,340 to $5,751,550.

It is noteworthy that the assets figure does not include the value of nine properties owned by the National Trust. These properties which in total are significant have been acquired by the Trust with restrictions that they be maintained and operated for specific preservation purposes and cannot be sold. Hence, there are no determinable market values and a determination of intrinsic historical or cultural values is not believed feasible.

Recently we provided the Secretary of the Interior through the Director of the National Park Service similar information based on the audited financial reports of the fiscal period ending June 30, 1966. He was further advised that the National Trust is presently engaged in a fundraising effort. In the past 20 months payments of $427,258 and pledges or statements of intent of $945,983 have been received. This effort has been intensified with preliminary presentations to major foundations, two of which have made beginning gifts. An immediate next step will be a campaign to reach major private donors.

Current experience enables us to forecast that in fiscal 1968 the growing membership which now totals 11,600 will contribute more than $200,000; than income from endowments will exceed $240,000; and that special gifts will be sufficient for the remainder of our financial obligation under the matching requirements.

SECRETARY OF INTERIOR APPROVAL OF PROGRAMS

The Secretary of the Interior before making matching grants-in-aid to the National Trust will approve the programs to be undertaken and require compliance with such regulations and procedures as may be established by him. By this means, the Federal Government will be assured of satisfactory performance by the National Trust in the use of Federal moneys.

REPORTING OF TRUST ACTIVITIES

I should also like to point out the obligation of the Trust to keep the Committees on Interior and Insular Affairs informed of National Trust activities; participation by the Secretary of the Interior, the Attorney General, and the Director of the National Gallery as ex-officio trustees of the National Trust; and, finally, the provision in the congressional charter for the United States of America to be the recipient of all National Trust assets in the event of its dissolution.

Mr. Chairman, this completes my prepared statement. I appreciate very much the opportunity to appear before the committee in support of the appropriation request for "preservation of historic properties." I shall be pleased to try to answer any questions the committee might have with respect to the National Trust for Historic Preservation and the program it proposes to carry out with the grant-in-aid funds.

TRUST FINANCING SOURCE

Chairman HAYDEN. What is the source of the financing for National Trust?

Mr. GRAY. Up until this time it has been entirely private. We have certain headquarters endowment and membership contributions and then we are raising funds, we are just heading into a fundraising campaign, Mr. Chairman, to foundations, from foundations, individuals and others, and you will find in the prepared statement the sources of the funds and their increases over the last few years.

FUNDS AVAILABILITY

Chairman HAYDEN. What are the amount of funds now available to your Trust?

Mr. GRAY. Well, our Trust has, during the period ending last June received from all sources $5,222,000. These have been incomes from endowments, and grants, and as I say, membership income from our more than 11,600 members.

1968 TRUST FINANCING

Chairman HAYDEN. How much other than the $1,750,000 appropriated is expected to be accumulated in the year 1968?

Mr. GRAY. Well, we will expect in fiscal year 1968 from our membership, membership contributions, more than $200,000, income from endowments will exceed $240,000, and we will raise the remainder of the matching funds required from foundations and other major gifts.

We are embarked on that program now.

Of course, sirs, to the extent that we are not able to match this figure, then the Secretary of the Interior would not release it.

That is one of his requirements.

MATCHING OF APPROPRIATED FUNDS AND GRANT PURPOSES

Chairman HAYDEN. Can you match the $1,750,000?

Mr. GRAY. I am reasonably confident we will.

Chairman HAYDEN. For what purposes is it proposed that the $1,750,000 will be used?

Mr. GRAY. That amount will be used in making grants on a matching basis to local groups who are trying to save historic sites and structures in their own communities.

Some of this money would be used for other National Trust purposes and services and education, but the primary amount of it would go back to local communities and States.

Chairman HAYDEN. Could you indicate the amount to be expended for each of these, or do you have the figure here?

Mr. GRAY. I would say the larger portion of the $1,750,000 will go for those purposes.

PROPERTIES ON WHICH FUNDS WILL BE EXPENDED

Chairman HAYDEN. Please list the properties on which the funds will be expended.

Mr. GRAY. I do not have them in this statement but I would be pleased to furnish a list. The point is, Mr. Chairman, that aside from our own National Trust properties, of which there are nine, and we will furnish the committee information about this, this is a new program and we wish to make sure that these various applications, which we receive for matching grants from local groups, represent worthy causes.

Chairman HAYDEN. I guess under the circumstances you can't quite answer the question.

Mr. GRAY. It would be very difficult to do it. We have had, already, before the money has been appropriated, innumerable inquiries, and from all over the country, but we simply could not give you an accurate list. I will say that the request will far exceed the amount of money available.

Now, some of the requests are not going to be worthy requests. We would not honor them.

Chairman HAYDEN. Will these properties be owned by the National Trust?

Mr. GRAY. No, sir; most of these will be owned by local groups like the Historic Alexander Foundation, Historic Annapolis, Friends of Clara Barton. We have a request, for example, from the County of Los Angeles Department of Arboretum and Botanic Gardens. Whether its a worthy request, I don't know.

Chairman HAYDEN. Thank you for your statement.

Mr. GRAY. Thank you.

STATEMENT OF JOSEPH M. POLLARD, LOS ANGELES COUNTY WATERSHED COMMISSION

PURPOSE OF COMMISSION

Chairman HAYDEN. The next witness will be Mr. Joseph M. Pollard.

Mr. POLLARD. The Los Angeles County Watershed Commission is a citizens' advisory group created by the County Board of Supervisors to study, advise and recommend methods and means for the prevention and suppression of forest fires, the preservation of watersheds, and the control and conservation of floodwaters within the mountainous watersheds of Los Angeles County.

FOREST FIRE MENACE

Repeated forest fires in the Los Angeles County watershed and the territory within the boundaries of the Angeles National Forest constitute a constant menace to the citizens of this county. Because of the peculiar characteristics of the climate and the topography of this region, the forest fires are extmerely devastating. Long periods of drought, hot dessert winds and low humidity characterize the climate of the mountainous areas of Los Angeles County, and the rugged terrain makes accessibility for firefighting units extremely difficult.

Adding to the problem is the fact that Los Angeles County's population continues to rise sharply each year, resulting in increased demands for recreational use of the forest areas. As a consequence, this accelerated usage of forest areas has been a prime factor in heightening the hazard of forest fires.

During the calendar year of 1966, there was a total of 38 forest fires in the Angeles National Forest, 37 of which were man caused. A total of 3,032 acres of valuable watershed was destroyed by these fires in spite of the heroic efforts of firefighting units of various levels of government, namely, the Los Angeles County Department of Forester and Fire Warden and various city fire departments.

COMPREHENSIVE WATERSHED FIRE PROTECTION PLAN

Because of the growing concern of county government in this area of responsibility, the board of supervisors, in cooperation with the Federal Government, has developed a comprehensive watershed fire protection plan for the front country of the watersheds of Los Angeles County. This is a 10-year plan which commenced in 1962 at a total cost of $5,238,950.

Accordingly, Congress acted in 1962 to adopt a base plan for the U.S. Forest Service for the purpose of protecting and managing National forests, and it was the intent that this plan was to be fully implemented within a 10-year period. The total annual need during this 10-year period for the protection and management of the Angeles National Forest amounts to $2,045,707.

LAG IN FEDERAL APPROPRIATIONS

Officials of local government in Los Angeles County are showing growing concern over the fact that there is a frightening lag in Federal appropriations to meet the needs of this base plan. In the previous 2 years, there remained a deficiency of appropriations totaling $2,328,592, and during fiscal year 1967 there was an added deficiency of $1,157,360. This brings the total deficiency of Federal funds available to implement the 1962 base plan approved by Congress to $3,485,952 for the past 3 fiscal years.

By comparison, the property taxpayers of Los Angeles County have contributed a total of $19,643,839 as the county government's share of the cost of protecting and managing forest areas. A survey of comparable expenditures by the U.S. Forest Service for the same period indicates a total of $24,145,410. This represents expenditures for an 11-year period ending June 30, 1966.

In addition to the appropriations for personnel, preattack planning, fuel treatment, equipment and supplies covered in the base plan, there is a critical need for added appropriations for structural needs and fire roads to provide better fire control.

RECOMMENDATIONS TO COMMITTEE AND CONGRESS

In order to provide more effective means of prevention and suppression of fires in the Angeles National Forest, the Los Angeles County Watershed Commission, therefore, urgently petitions your committee and the Congress to—

1. Increase the appropriation of funds in the 1967–68 fiscal year budget for fire protection and maintenance in the Angeles National Forest by a minimum of $3,485,952 in order to bring the 10-year plan up to date according to the needs established under the U.S. Forest Service.
2. Appropriate the necessary funds to continue the program for national forests.
3. Appropriate the necessary funds to provide for structural improvements within all of the national forests of the United States, including fire protection facilities and fire personnel quarters.

Chairman HAYDEN. There will be printed in the record your second statement as a representative of the Watershed Fire Council of Southern California in which are outlined fire protection need for the national forests of southern California.

(The statement follows:)

FIRE PROTECTION NEEDS OF THE FOUR SOUTHERN CALIFORNIA NATIONAL FORESTS FOR THE FISCAL YEAR OF 1967–68

The Watershed Fire Council of Southern California is a citizens' advisory group composed of appointed and elected citizens who represent twelve million people residing in eight counties of this region. The Council was organized in 1954 for the purpose of planning a concerted program in cooperation with Federal, State, County and City agencies for the preservation of the watersheds of this region and for the prevention of forest fires therein.

Four national forests—the Angeles, Cleveland, Los Padres, and San Bernardino National Forest—are situated in this region where forest fires are most prevalent. Weather and atmospheric conditions, which characterize Southern California, are the major contributing factors to the high rate of fire incidence in forest areas, resulting in the loss of valuable watershed year after year. The combination of long periods of drought, hot desert winds, and low humidity pose a year-round threat to the health, safety and welfare of the citizens residing within these areas as well as the tremendous property destruction resulting therefrom.

Each year since 1954, the Watershed Fire Council has presented to Congress a program explaining the need for increased funds for fire protection in these four national forests as set forth in a Ten-Year Comprehensive Fire Protection Plan.

Since 1956, there have been increases in appropriations for fire control; however, these have not been adequate to keep up with the expanding nature of the fire problem and the increased cost to the Fire Agencies to do business. This condition is reflected by the intolerable rate of loss to life and property during this ten-year period. Loss of life to wildfire in the four Southern California National Forests exceeded all the rest of the National Forests in the United States combined.

The following items show where the Southern California deficiencies are most critical:

1. Maintenance, operating and equipping the fire control organization requires an additional $4,173,308 annually.
2. Fuel treatment portion of above program needs to be increased by about $664,000 annually.
3. Building programs for adequate housing and equipment storage need an additional annual average of $820,145 over the next five years.
4. Road and trail construction will require an additional annual average of $4,948,167 to meet the fire control needs.

During the calendar year of 1966, there have been a total of 278 fires within the borders of the four national forests, 217 of which were man-caused. The total acreage burned of these forest fires amounted to 104,849 acres.

Congress has allowed certain additional funds for improving fire protection in Southern California, but our carefully developed program to provide adequate protection has fallen far behind the stated minimum need of $2,375,000 annually as designated in the fire protection plan. The fire control appropriations for the four Southern California national forests indicate that a total of $3,191,143 for manpower and equipment was available for the fiscal year of 1967. Computed on the formula of the 1960 Base Fire Plan, the total needs for manpower and equipment, less the contributions of State cooperative funds, amounted to $7,364,451.

Thus, there exists the $4,173,308 deficiency in appropriations for manpower and equipment in the fire control appropriations available for these four Southern California national forests as of January 1, 1967.

The ever-expanding population rise, residential developments into forest and wildland areas, and continually increasing recreational use of the national forests of Southern California have further complicated the fire problems. The possibility of great loss of life and enormous destruction of property has increased to such a point that major corrective steps must be taken immediately if a holocaust is to be prevented in Southern California.

Accordingly, we urgently petition this Committee and the Congress to—

1. Increase the appropriation of funds in the 1967–68 fiscal year budget for fire protection and maintenance of the four Southern California national forests by a minimum of $12,630,554 in order to bring the ten-year plan up to date according to the needs established under the United States Forest Service.
2. Appropriate the necessary funds to continue the program for national forests.
3. Appropriate the necessary funds to provide for structural improvements within all of the national forests of the United States, including fire protection facilities and fire personnel quarters.

STATEMENT OF LOUIS S. CLAPPER, CHIEF OF CONSERVATION EDUCATION, THE NATIONAL WILDLIFE FEDERATION

Purpose of the Federation

Chairman Hayden. The next witness will be Mr. Louis S. Clapper of the National Wildlife Federation.

Mr. Clapper. Mr. Chairman, I am Louis S. Clapper, chief of conservation education for the National Wildlife Federation which has its headquarters here in Washington, D.C. Ours is a nonprofit organization which seeks to attain conservation goals through educational means. The federation has affiliates in 49 States. These affiliates, in turn, are made up of local groups and individuals who, when combined with associated members and other supporters of the National Wildlife Federation, number an estimated 2 million persons.

I appreciate and welcome the invitation to appear here today. I shall touch on only a few items proposed for the Department of the Interior and related agencies.

Department of the Interior

BUREAU OF OUTDOOR RECREATION

We hope the subcommittee will see fit to allow the full $142 million requested to be allocated from the land and water conservation fund, split $74,225,000 for the Federal agencies and $65 million for the States, with the balance for administration. We particularly are encouraged that the request includes $3 million in acquisition funds for the new endangered species program administered by the Bureau of Sport Fisheries and Wildlife. This program was delayed until authorization could be approved by the Congress, as it was last year, and it badly needs to get underway. In passing, I should say that we are hopeful that the Congress allows the $300,000 increase proposed for operating this new endangered species program.

Conservationists have been interested in the plan for the Federal agencies to be advanced $32 million from the fund. As we understand it, this money would be used to tie up lands at new units of the National Park System before prices escalate any higher and we certainly agree that some approach of this sort must be made. For example, we are told that it is urgent that acquisition be expedited on the new Indiana Dunes National Lakeshore to prevent damage or loss of some of the finest resources. I might add that we are hopeful that the Congress also soon will further alleviate this problem by supplementing the fund with receipts from natural resource sources.

BUREAU OF SPORT FISHERIES AND WILDLIFE

The national Wildlife Federation is grateful that $7.5 million is being recommended for the underfinanced waterfowl wetlands acquisition program. We are confident that these funds, together with the duck stamp receipts, will be put to good and effective use. I might add in passing that we hope this accelerated wetlands acquisition program can be extended for another 8 years before repayment begins, as proposed in separate legislation.

There are several other comments we should like to make:

We hope the level of the individual cooperative wildlife research units can be increased to that of the cooperative fisheries units. In fact, we believe that all of these units should be at the same financial level of about $40,000. Attaining this uniformity would cost about $450,000 extra for 23 units. In this connection, we reiterate our appeal of last year—that a new wildlife unit at Washington State University be funded. According to all information we can develop, a unit at this fine institution is fully justified.

We join others who are asking that a minimum of $450,000 be set aside for the Bureau to increase its research effort on the so-called lesser migratory birds such as doves, rails, woodcock, snipes, and so forth. These species are a Federal responsibility, just as waterfowl are, and the effort thus far has been almost nonexistent. If funded, this work will be coordinated with the States.

We are dismayed that the anadromous and Great Lakes fisheries program, only newly begun, is being cut by $1 million. According to our advice, the Bureau of Sport Fisheries and Wildlife and the Bureau of Commercial Fisheries each can spend $2.5 million wisely, or $5 million in all for the program.

OTHER INTERIOR AGENCIES

Without going into detail, we feel that the budget proposals for the National Park Service, Bureau of Land Management, and Bureau of Commercial Fisheries are modest enough in view of their great responsibilities for public resources. We particularly are pleased at the progress BLM is achieving in the classification of land for retention and multiple-use management. We believe that recreation should be a full partner with other uses and must be adequately funded.

DEPARTMENT OF AGRICULTURE

FOREST SERVICE

We are pleased at the emphasis placed on recreation and public use in the Forest Service budget. We hope the $3,389,000 increase—to a total of $34,528,000—will be granted along with the $1,480,000 additional proposed—of $6 million—for water resources recreation. The continually increasing public demands for recreational facilities must be met by the Forest Service, along with other resource agencies. Many new opportunities are becoming available, especially with relation to Corps of Engineers and Bureau of Reclamation reservoirs.

It also is important that a new wilderness recreation research effort be initiated at the Intermountain Forest and Range Experiment Station at Missoula, Mont. We are pleased that $75,000 is proposed for this activity even though $300,000 per year is needed.

We hope that ample funds can be provided for the uniquely valuable wildlife wetlands management plan for the Chippewa National Forest in Minnesota. Our people there advise that $300,000 can be utilized effectively for this project. This is a wonderful program, one fully meriting all of the support the committee may see fit to give.

We especially are intrigued by a new device the Forest Service is using, a "riffle-sifter," to clean fish spawning beds. This promises to boost the production of fish and we hope the program can be encouraged.

And, we hope that $57,000 can be allowed for construction planning at the Cowetta hydrologic station in Georgia, a fine facility suitable for expanded forest watershed research work.

Finally, we support requests by wildlife and conservation groups for increases of funds for the Forest Service wildlife habitat research program. Mr. C. R. Gutermuth, vice president of the Wildlife Management Institute, who could not appear here today, has authorized me to speak jointly on this for his organization.

Nationwide there are everincreasing demands from hunters, fisherman, and nature enthusiasts for increased wildlife. The Forest Service is the Federal agency responsible for research on the management and improvement of wildlife habitat on forests, grasslands, and other wild land areas. Such research is conducted cooperatively with the various State wildlife agencies, the Fish and Wildlife Service, universities, and private groups. This team approach has stretched the research dollar, resulting in the development of procedures for improvement and management of habitat which point the way to great advances that can be made in the field.

NEED FOR RESEARCH

There is an especial need to start research on the breeding and selection of shrubs and other food and cover plants of value for game. This would be westernwide in scope and findings would also be of value for livestock range improvement, erosion control, plantings for recreation areas and roadside beautification. Additional knowledge is urgently needed by public land managers and private holders to carry out the most effective management and manipulation of wildlife habitat in harmony with other uses.

The present research effort of 27 full-time scientists in the Forest Service is totally inadequate to meet the habitat problems on our wild lands that comprise over half the total area of our country. In our past annual conventions, the delegates have adopted resolutions urging full funding for a continued and expanded research effort. In fiscal 1967, Congress appropriated $912,000 for wildlife habitat research and no increase is proposed for fiscal 1968. We recommend as a bare minimum an increase of $700,000 to strengthen or start needed research by the Forest Service at their project locations in the Pacific Coast States, the Intermountain and Rocky Mountain regions, the Ozarks, and the Southeastern States.

Thank you for the opportunity of making these remarks.

STATEMENT OF RICHARD C. WOLFF, VICE PRESIDENT OF THE GARCIA CORP., TEANECK, N.J.

INADEQUACY OF REQUEST FOR FEDERAL MARINE GAME FISH RESEARCH

Chairman HAYDEN. The next witness will be Mr. Richard C. Wolff.

Mr. WOLFF. Mr. Chairman and members of the subcommittee: I am Richard C. Wolff, vice president of the Garcia Corp., the largest fishing tackle concern in the United States, with headquarters in Teaneck, N.J.

I am also a director of the Outdoor Writers Association of America, whose 1,400 members are located throughout the Nation's 50 States.

For the past 5 years I have directed your attention to the administration's inadequate budget request to conduct Federal marine game fish research projects on the broad and comprehensive scale presently needed.

Today, there are more than 8,300,000 salt water fishermen distributed along the Atlantic, gulf, and Pacific coasts, who spend approximately $800 million annually in pursuit of their favorite outdoor recreation. In 1966, salt water anglers are estimated to have landed 1.4 billion pounds of edible fishes, which is approximately 70 percent of the total edible catch of finned fishes by U.S. commercial fishing vessels.

Salt water fishermen of all ages and both sexes enjoyed 95,837,000 days of fishing in 1965. In traveling more than 4 billion miles in the same year, salt water fishermen spent more than $85 million for transportation, $136 million for boats, equipment, and licenses, and an additional $236 million for bait, guides, and other angling expenses.

Sportfishing, as evidenced in the 1965 National Survey of Hunting and Fishing, continues to be one of the Nation's fastest growing outdoor recreational activities. In terms of dollars spent, salt water fishing is more than twice as important as commercial fishing. While the Nation's population continues to be urbanized into little more than 1 percent of the total land mass, we are experiencing a "blacklash" in which growing numbers are turning to outdoor recreation such as fishing in order to rediscover our great natural resources.

The decline, disappearance, and immediate threat to many popular game fish species along our coasts not only will disrupt the growth of salt water angling, but also infer serious economic consequences in coastal communities of some 21 States.

The present requested budget of $895,000 is intended to accommodate the entire Federal program in research facilities at Sandy Hook, N.J., Narragansett, R.I., and Tiburon, Calif. This sum is approximately one-third the amount envisaged by Congress in 1959, when it established the annual requirements of the Federal research program. It is also $307,303 less than what is needed to conduct vital research in order to forestall threats to important game fishes on both coasts. Under the present budget request, expansion of the research program will not be permitted.

We are confronted with the fact that actually little is known of the fish and invertebrate life of the Continental Shelf. Intensive study of this area will help in correcting the present decline of such important game fish species as fluke, weakfish, drum, bluefish, spot, croaker, and others.

Marine biologists also are alarmed by the great pressures being placed on oceanic species like the tunas and billfishes by commercial longliners. It is reported that some 60 foreign commercial fishing vessels are operating in the coastal waters of southern California, extending miles of longlines that are responsible for taking thousands of large fish in this important fishery. Eastern Pacific longlining has been increasing in the past 10 years—the total number of hooks jumping from 164,000 in 1956 to 50 million in 1963, and the marlin catch from 600 in 1956 to over 200,000 in 1963.

URGENTLY NEEDED RESEARCH PROJECTS

In addition to the Department of Interior's reported budget of $895,000 for Federal marine research projects—which is little more than the amount allocated last year and which was increased only after Congress reexamined the Department's original small request—I direct your attention to three urgently needed projects.

These are:

1. $100,000 for a pilot study of the Atlantic coastal estuarine zone, which provides the largest portion of yield of the sea resources. This estuarine zone is the key to fish and wildlife productivity along the Atlantic coast and also is the source of nutrients for the Continental Shelf. Some 65 percent of fish inhabit estuarine areas for all or part of their lives.
2. $100,000 to conduct study programs of big game fishes of the Continental Shelf, and to accelerate tagging programs, life histories, analyses of catches, and systematic collection of data on the effects of longlining and purse seining on big game fish.
3. $107,303 for the first year of a 6-year study on marlin and sailfishes in Pacific coastal waters to determine trends in fish populations

and changes and effects of increased foreign fishing on Eastern Pacific billfishes.

IMPORTANCE OF KNOWLEDGE OF ATLANTIC ESTUARINE ENVIRONMENT

Referring back to the first of the three additional research projects I recommended, the importance of gaining additional knowledge of the Atlantic estuarine environment is based on the fact that these areas where salt and fresh water meet serve as spawning grounds and as nurseries for migratory fish. Generally speaking, man's activities along the seacoast are harmful to fish and wildlife resources.

Damage is greatest where the population is heaviest, and here the estuarine zone is subjected to industrial and domestic pollution, garbage dumping, filling, and cutting up for residential lots and industrial sites. Much of the damage has resulted from poor plannng; from the present lack of understanding; and absence of priciples that, it is expected, will be derived from the proposed concentrated study of estuarine areas.

PROPOSED RESEARCH PROGRAM

The proposed research program also will develop additional basic information on fish and wildlife needs required for orderly planning of land use; a methodology for restoring badly damaged areas; and a system for increasing the productivity of remaining estuarine land.

The research plan suggested by the Sandy Hook Marine Laboratory includes the establishment of three experimental stations and a demonstration estuarine area of approximately 100 acres. These study centers will, if possible, be situated in existing Federal wildlife refuges along the Atlantic coast. At these centers, the effects of disruptive activity such as dredging, filling, channeling, and pollution, will be measured precisely.

Before a full-scale program can be undertaken, a 1-year feasibility study should be conducted to determine the kinds and extent of estuarine damage and to locate the three experimental stations. The pilot investigation will include a study of present water quality, hydrographic characteristics, and fauna and flora at proposed sites. It also will include a review of existing data on survival requirements of estuarine fish species and an assessment of costs and benefits for estuarine conservation activities.

This planning and feasibility pilot project can be accomplished in 1 year with the following budget:

Scientific personnel	$ 43,000
Supporting personnel	30,000
Engineering services	5,000
Equipment	8,000
Operating expenses	14,000
Total	100,000

OFFSHORE LONGLINING BY FOREIGN AND DOMESTIC COMMERCIAL FISHERMEN

The second recommended research project deals with a problem of great concern to sport fishermen in the waters of the Continental Shelf. Offshore longlining by foreign and domestic commercial fishermen after big oceanic fishes has increased dramatically in recent years. Because little is known about the effects of this accelerated fishing activity, steps should be taken to measure present tuna and billfish populations to determine what conservation problems exist and what steps must be taken to conserve this angling resource.

To date inadequate funding has held this area of marine research to an almost token level. To offset this, I recommend that tagging programs be expanded and accelerated as a step to defining stocks, determining migrations, and assessing any exploitation. In addition, life history studies of these great sea fishes must be made, as well as systemized data collection involving commercial and sportfishing catches.

A 1-year study to accomplish the above objectives can be completed using three biologists and the help of supporting personnel. The actual costs involved include:

Scientific personnel	$ 30,000
Supporting personnel	25,000
Operating expenses	45,000
Total	100,000

STRIPED MARLIN AND SAILFISH

The third project involves the striped marlin and sailfish located off the coast of southern California and Mexico. Both are areas widely regarded for these important game fishes whose presence contributes substantially to the local economy.

In recent years, heavy fishing for the striped marlin by foreign commercial vessels has been carried on in locations believed to be important spawning centers. Since little is known about Eastern Pacific billfishes, research data must be accumulated in order to undertake sound conservation practices.

Under supervision of the Tiburon Marine Laboratory, oceanic researchers will seek to detetrmine distribution, abundance, and general life history of the Pacific striped marlin and sailfish, as well as to evaluate the effects of commercial and sportfishing on these species over a 6-year period.

The studies, to be conducted in the laboratory and on the high seas, will record and plot catches of billfishes, establish migratory patterns through tagging, conduct life history studies to locate spawning areas, establish spawning seasons, and finally examine the sport and commercial billfish catches for seasonal and annual variations in size, age, and sex.

The studies, aiming at developing specific recommendations for conserving these valuable fish, require an allocation for the fiscal year 1968 of $107,303 to be divided as follows:

Personnel	$32,703
Equipment, including plankton samplers, nets, longlining gear, laboratory, field biological equipment, and vehicles	12,600
Travel	5,000
Boat charters and tagging	47,000
Total	$107,303

Cost of Additional Research Projects

In requesting Congress to include these three additional and vital research projects at a cost of $307,303, the total budget for marine sportfishing research will total $1,202,303 and still be less than half that contemplated when the authorizing legislation was passed in 1959. I hope Congress also takes into consideration that in the fiscal year 1965 Federal excise taxes amounted to nearly $28 million on the sale of fishing tackle.

Finally, the expenditures of nearly $800 million by salt water sports fishermen in 1965 seem to justify a research expenditure of $1,202,303 in order to help insure that this great sport enjoyed by young and old will continue to grow in the years ahead.

Gradual Reduction of Fish

Senator McGee. What is the greatest pressure, commercial fishing or pollution?

Mr. Wolff. Well, since pollution has existed since almost—well, it is hard to say what the effect would be, however, the commercial industry has gradually declined in the past years because of the gradual reduction of these fish.

It is questionable whether it is economically feasible to catch fish commercially at least on the scale they were catching them. The commercial industry right now is catching a harvest of edible fish about equal to that of the sport fishing.

Now commercial, they get menhaden, which are reduced to oil and so forth, things other than sport fish, but there is a definite shortage of fish, both commercially and sport fishing, so we need help in both directions.

Senator McGee. Thank you.

Chairman Hayden. Thank you.

Mr. Wolff. Thank you.

STATEMENT OF ROBERT P. BLEDSOE, EXECUTIVE SECRETARY, WYOMING WOOL GROWERS ASSOCIATION, CASPER, WYO.

INTRODUCTION OF WITNESS

Chairman Hayden. Mr. Bledsoe, Wyoming Wool Growers Association.

Senator McGee. Let me suggest, Mr Chairman, that Bob Bledsoe is first of all a citizen of the State of Wyoming and executive secretary of the Wyoming Wool Growers Association, and he is speaking here for the national group, since their interests are identical.

I just want to point out that this committee each year devotes some of its concern to the problems we have out there; namely, predatory animals that affect our sheep industry and that a year ago we cut some of this back rather sharply.

As a consequence, in the past year, the activities of the predators have shot upward, and the losses are very measurable both in the State itself as well as nationally. We are very hopeful that because of the concern of this group, the woolgrowers, that we may be able to help them a little more this year.

SHEEP DESTROYED BY PREDATORY ANIMALS

Mr. Bledsoe. Thank you, Senator Hayden and Senator McGee.

My name is Robert Bledsoe, and I am speaking on behalf of the National Wool Growers Association and the Wyoming Wool Growers Association. The National Wool Growers Association membership consists of 20 affiliated State and area producer organizations where approximately 75 percent of the Nation's sheep, lambs, and wool are produced.

Wyoming is an affiliate of the National Wool Growers Association, and ranks second among our States as a producer of wool and lamb.

Representing the Natinal Wool Growers Association and the Wyoming Wool Growers Association, I want to thank you for this opportunity to discuss with you one of the domestic sheep industry's major problems—the increasing number of sheep destroyed by predatory animals.

Sheep and lamb losses from predators have increased substantially during the past year.

For example, in my State, the Wyoming and U.S. Departments of Agriculture have reported losses of sheep and lambs in Wyoming from predators for the years 1965 and 1966. The following table indicating the number of sheep and lambs killed by the various kinds of predators, should prove most interesting to members of this committee.

(The table follows:)

Sheep losses in Wyoming by predators

	1965 head	Value of sheep	1966 head	Value of sheep
Coyotes	66,900	$944,100	82,200	$1,156,200
Bobcats	11,900	192,700	9,100	144,900
Dogs	5,500	66,000	9,200	113,200
Bear	4,800	60,800	6,800	83,500
Eagles	7,200	121,200	8,800	144,600
Others	3,000	42,600	2,300	39,800
Total	99,300	$1,427,400	118,400	$1,682,300

INCREASE IN DEPREDATION CAUSED BY COYOTES

Mr. Bledsoe. In computing the value of the sheep and lambs killed, the Department used the annual average prices—1965, lambs $17.10 per head; sheep, $7.40 per head; 1966, lambs $17.32 per head; sheep $7.52 per head.

In reviewing the above table we find an increase in the number of sheep killed by each class of predators, from 1965 to 1966, except by bobcats. The most alarming increase in depredation was caused by coyotes. A total of 15,300 more head of sheep were killed by coyotes in 1966 as compared to 1965. The monetary loss increased by $212,100. The total loss of sheep and lambs to predators increased from 1965 to 1966 by $254,900, and 83 percent of this was caused by coyotes.

I am sure it is rather obvious to the members of the committee why sheepmen are requesting more adequate control of this cunning and bloodthirsty predator.

I am sure the increased losses experienced in Wyoming are typical of the other Western range sheep-producing States. In fact, Floyd Myers Marsh, president, California Wool Growers Association, reports that depredation losses from predators have increased rapidly throughout California the past year and when the State department of agriculture was contacted, he was informed that complaint calls on predator depredations during 1966 were up between 5 and 10 percent over the previous year.

Texas, the Nation's largest sheep and wool producing State, reports increased sheep losses from predators during the past year.

BETTER CONTROL OF PREDATORY ANIMALS NEEDED

From the sheep loss figures, it is rather obvious that more and better control of predatory animals is needed if the sheep industry is to survive. The present level of control is now allowing sharp increases in predator numbers. Therefore, we strongly urge that the full $350,000 cut from the predatory control budget 2 years ago be restored, along with an additional $500,000; and furthermore, that these funds be directed toward the field or control level where they are urgently needed and can best be utilized.

RECOMMENDATIONS

We are fully cognizant and appreciative of the fact that the U.S. Congress last year restored $200,000 of the $350,000 cut of 2 years ago; however, it is rather apparent from the increased sheep losses just cited, that either it was not enough money or the money was spent at the least effective control level of the program. Therefore, we respectfully request the following:

1. That Congress appropriate adequate funds for the work of the predator control program for the Bureau of Sports Fisheries and Wildlife.
2. That the Bureau of Sports Fisheries and Wildlife initiate immediately a concentrated campaign and effort to control predators. The effort must be made at the trapper level, out in the field where the damage is being done. We feel that it is imperative that the increased appropriation be specifically earmarked by Congress to be used for predator control at the trapper level.
3. A dire effort must be put forth to control coyotes in their breeding areas, especially national forests and Indian lands. Actually, the effort to control coyotes is futile unless it is also done at their breeding areas or at the source of supply.

COOPERATIVE FUNDS

Sheepmen are not asking for the Federal Government to bear the full financial responsibility of an adequate predatory animal control program. They have heavily taxed themselves for control funds.

For example, in Wyoming, the Wyoming Wool Growers Association asked the State legislature to raise the maximum on the sheep mill levy from 20 mills to 35 mills to finance the predatory control program.

In Idaho, the 1967 legislature just enacted a law to raise the sheep mill levy to 50 mills for predator and disease control work.

The Federal Government contributes roughly around 30 percent of the total expenditure used in the cooperatively financed predator control program, yet the Federal Government owns 50 percent of the land in the 11 Western States.

PREDATORS AND WILDLIFE POPULATIONS

Many people, including stockmen, are interested in big game and concerned with such predators as coyotes, eagles, lions, and bobcats. They know these animals are killers of big game. Statistics show that where predatory animal populations are high, severe losses of wildlife occur.

For example, the Bureau of Land Management in Wyoming recently released the following statement in a report that was made in connection with the antelope population in Wyoming—"The wildlife population of Wyoming was considered to be increasing or static until 1962, with a decline noted in 1963 and 1964. It is interesting to note that these last years were periods of rapid decreases in effectiveness of predatory animal efforts * * *." In other words, when the confirmed coyote and bobcat kills declined, the antelope population likewise decreased.

A recent South Dakota publication points out that in that State, the hunter harvested only 2,000 antelope from 1911 to 1944—33 seasons. During this time, the seasons were repeatedly closed and the antelope population seemed doomed. A good hard look was then taken at the predator situation and efforts which followed resulted in sharp predator reductions. As a result, in the next 12 years, 46,000 pronghorns were legally harvested.

> What was happening to the hunter's share of antelope?

The same report goes on to say:

> The U.S. Department of Agriculture reported coyotes in one winter on Montana's National Bison Range destroyed all but 17 of a herd of 60 antelope, and also credited coyotes and bobcats on the Wind Cave National Park with killing over half the antelope.

That's the balance of nature you hear so much about.

Big game is not the only wildlife that falls victim to predators. Upland birds and waterfowl make choice morsels for coyotes and foxes.

In Utah, the Goshen Valley Wildlife Federal claims that predatory animals are eliminating the bird population. Their president, in a recent article said:

> We will spend thousands of dollars to equip our fieldman to catch the man who illegally steals one bird and then waste thousands of birds each year because we cannot worry ourselves with the predator "poacher" who is busy destroying our birds each day and night.

PREDATORS CAUSE SHEEP TO BE HERDED

Many sheepmen in Wyoming and other range States have found that in order to cut down on labor costs, manage their range for more production, to get a higher lambing percentage, heavier lamb weaving weights and more clean wool per ewe, it is necessary to run their sheep flock under fence.

It is virtually impossible to secure competent qualified herds. The older men are fast fading from the picture, and younger men are not interested in becoming sheepherders.

Cost of production in the sheep business has increased tremendously during recent years, and in order for the sheepman to survive he must attempt to cut costs of production and at the same time increase the production per unit.

Fencing of range has been one of the tools of management which has proven beneficial in cutting costs of production and at the same time increasing the production.

STUDY MADE BY UNIVERSITY OF WYOMING

A study made by the University of Wyoming reveals that when sheep are run under a fenced operation, the grazing capacity of the range is improved by at least 20 percent, as opposed to a herded operation.

To quote from the University of Wyoming publication, "Fencing Versus Herding of Range Sheep," by W. P. Roberts, Jr., June 1961:

> When sheep cease to be herded they are allowed to shift for themselves, finding their own bedgrounds and coming to water when they desire. They will spread out and cover a pasture thoroughly, getting into and grazing, spots that a herded sheep would never find.

This, and the reduction in grass breakage from not having a band of sheep travel over it, account for a considerable increase in available forage.

However, if the coyotes and other predators continue to increase and, consequently, the increased number of sheep lost, as has been the case in recent years, because of the lack of an adequate control program, then the fenced-sheep operation cannot survive.

RABIES CARRIED BY PREDATORS

Have you ever seen a person bitten by a rabid dog? If a person happens to have been bitten by a dog and is later discovered to be rabid, an all-points bulletin goes out over the country in a concentrated effort to find this person in the short time before this disease becomes fatal.

Rabies is transmitted from wild animals, such as foxes, bobcats, and coyotes, to domestic livestock and dogs by salvia deposited in bite wounds and is transmitted by dogs to humans in the same way.

An active predator control program is necessary not only to keep the disease in check but also to have a staff readily available to move in on an area should an epidemic or outbreak of rabies occur.

Rabies infection in certain wild animals appears to be increasing rapidly. The National Pest Control Association in their "Technical

Release," dated February 27, 1967, report the incidence of rabies in the United States for the period of 1953–65.

In 1965 the incidence in wild animals totaled 3,257 compared to 1,476 in 1953. The report indicates the incidences in wild animals in 1965 as follows: foxes, 1,038; skunks, 1,582; bats, 48.4; raccoons, 99; other animals, 54.

Many States report an increase in 1966 over 1965 of the number of animals tested for rabies. For example, the department of health in the State of Texas showed a 15-percent increase in 1966 over 1965.

Animals tested for rabies (other than dogs and cats) include the fox, skunk, and various small varmints. As a result of rabid animal bites, over 900 people were given serum shots by the State department of health in Texas.

This trend of increasing rabid animals is alarming and all necessary measures should be taken to curtail the increase and to control rabies. A number of instances have occurred where entire families have had the shots administered because of rabid animal bites.

CONCLUSIONS AND RECOMMENDATIONS

Present losses due to predators are now costing the sheep industry approximately $40 million annually. This is unnecessary waste. Furthermore, these losses are increasing, which indicates a sharp increase in predator numbers under the present program.

If this increase is allowed to continue due to an inadequately financed program, and the lack of the Department of Interior to accept its responsibility in adequately controlling predators, the very existence of the sheep industry of this country is in jeopardy.

We strongly recommend the following to this distinguished committee:

Increase the appropriation for predatory animal control $650,000 over last year's appropriation.

Specifically earmark the increased appropriation to be used only at the trapper or field level. Predators are not reduced from behind a desk at the administrative level.

Request that the research program for new methods of taking predators to be greatly accelerated.

Sheep numbers in the United States are at an alltime low. One of the major reasons is because predators have put a lot of sheepmen out of business.

We sincerely solicit your help in reviving the industry, by providing an adequate predator control program.

LOSSES IN WYOMING

I would like to submit for your consideration a picture that appeared in our monthly publication of the Wyoming Growers that individually points out the losses experienced in our State in 1965. You will notice that the title of the caption on these pictures is "Coyotes destroy over $1 million worth of sheep in Wyoming annually plus untold numbers of wildlife."

Chairman HAYDEN. Are coyotes the principal predator?

Mr. BLEDSOE. Yes, they are in our State. We are losing quite a few from eagles, but the primary predator is coyotes in the State of Wyoming.

STATEMENT OF VERNON J. SMITH, CALIFORNIA WILDLIFE FEDERATION

FOREST SERVICE WILDLIFE HABITAT RESEARCH PROGRAM IN CALIFORNIA

Chairman HAYDEN. The next witness is Mr. Vernon J. Smith, California Wildlife Federation, San Francisco, Calif.

Mr. SMITH. Thank you, Mr. Chairman.

I am Vernon J. Smith, representing the California Wildlife Federation, a sportsman-conservation organization of 100,000-plus members. We are also the State affiliate of the National Wildlife Federation and represent the broad spectrum of outdoor use from hunters, fishermen, boaters, skindivers, varmint callers, four-wheel drive enthusiasts, trailhound owners, and archers to those who just enjoy and appreciate esthetically the flora and fauna provided by our land.

I am most privileged to have the opportunity to appear before this committee and make a plea for strengthening the increasingly important Forest Service wildlife habitat research program in California. Our State rangs fourth in the Nation in hunting license sales of nearly 650,000, first in fishing license sales with over 1½ million, and esthetic values of our State's wildlife is appreciated by untold numbers of nature lovers. It is recognized the health and productivity of our wildlife depend upon good habitat. The strong competition and varying needs for the use of our wildlands dictate that we must manage these lands to their full potential. To achieve this will require new knowledge, knowledge which can be gained through research and will benefit all related outdoor interests. An effort must be made to keep pace with our complete society, the population increases and the rising demand for recreation space. The recognition that more people with the shorter workweek relates directly to increased pressure on our "out of doors," indicates we must avail ourselves of every opportunity to bring this lagging research area up to a par with other environmental requirements. This, it would seem, is the responsibility of the U.S. Forest Service, and it is the opinion of my organization the present research budget of only $50,000 is not adequate. It just cannot get the job done.

Besides the single major study, currently, of bitterbrush improvement in northeastern California, the people I represent would like to see additional studies of: 1. chaparral management for wildlife; 2. increased emphasis on quail and other small game habitat; 3. nongame habitat, song birds, etc.; 4. fish habitat research.

RECOMMENDATIONS

The California Wildlife Federation respectively requests this budget be increased to $175,000 annually. Funding at this level would, we understand, permit the start of much needed research on our most pressing problems. We believe, by all indications, the need for the increase is urgent. Time is not on our side in trying to adequately provide for the increasing demand for wildlife in California.

Our federation further supports the request by the Western Association of Game and Fish Commissioners that the research branch of the Forest Service assume responsibility for coordinating all available information on wildlife habitat in the western area. The advantages of having the data available, and in one place for its ultimate use, is essential in realizing the ultimate potential of the program. This would require establishing an office of wildlife habitat information coordinator.

Information available to our organization indicates this would require an additional $75,000. Such an office would assist directly to improve wildlife habitat management practices in California and throughout the West. The value received for the dollar invested in this program indicates the greatest possible dividends.

Again, for this opportunity to appear before your committee, thank you.

STATEMENT OF NORMAN F. SMITH, CHIEF OF THE RECREATION RESOURCE PLANNING DIVISION, MICHIGAN DEPARTMENT OF CONSERVATION

OPPOSITION TO BUDGET RECOMMENDATION RE ALLOCATION OF APPROPRIATION FOR LAND AND WATER CONSERVATION FLOOD

Chairman HAYDEN. Norman F. Smith, Michigan Department of Conservation.

Mr. SMITH. Thank you, Mr. Chairman.

I am Norman F. Smith, chief of the Recreation Resource Planning Division of the Michigan Department of Conservation. Among the responsibilities of this division are the preparation of the statewide plan for outdoor recreation and the administration of the land and water conservation fund. I am representing the director of the Michigan Department of Conservation, and wish to speak in opposition to the President's budget recommendation wherein the total advance appropriation of $32 million to the land and water conservation fund is to be allocated to Federal agencies to accelerate land acquisition.

REASONS FOR RECOMMENDATION

Reasons given for this recommended action apparently are:

1. The large unexpended balance presently in the State's allocations indicate a lack of need;
2. The States are spending too much on development and not enough on land acquisition; and
3. The price of land which the Federal agencies wish to buy is escalating rapidly, and therefore the Federal agencies need additional funds.

Our position is that these are not valid reasons for changing the basic allocation formula at this time.

BACKGROUND OF THE ACT

The land and water conservation fund was a direct outgrowth of recommendations made by the Outdoor Recreation Resources Review Commission. The Commission and the legislative history of the act pointed to the States and local units of government as playing a most vital role in meeting recreation needs of today's and tomorrow's urban populations. The ORRRC findings indicated that the greatest shortages in recreation areas and facilities and hence the greatest needs were in and near urban areas where the responsibility rested logically with State and local governments. This fact was recognized in the 40 percent Federal–60 percent State-local division of the fund as provided in section 4(a) of the act. This need has also been stressed by the Bureau of Outdoor Recreation; and by the President who has challenged us to meet the needs of urban populations.

Section 4(a) of the act also gives the President the authority, during the first 5 years, to vary this 40–60 ratio by 15 percent either way "to meet, as nearly as may be, the current relative needs of the States and the Federal Government." There is no basis at present to assume that these relative needs have changed. The apparent large balance in the fund allotment available to the States but unused is not a reflection of the need, but rather the result of a normal lag in gearing up to a new program. This lag has not been entirely at State and local levels.

PROGRAM STATUS IN MICHIGAN

The history of the program in Michigan is perhaps typical of this gearing up process. As in most States, it was necessary to obtain funds and personnel after the passage of the act in September 1964, in order to prepare a State outdoor recreation plan and to administer the land and water conservation fund program. In Michigan we held numerous meetings and conferences with local communities; we promoted and sold the program through news releases, radio, and television; we prepared and distributed detailed guidelines for local participation in the program, an developed forms and proceures. The preliminary State plan required 1 year to prepare and was approved by the Bureau in January 1966. Thus we have been operating under the program a little over 1 year.

Local communities, which share equally in the fund in Michigan, were likewise faced with delays in applying for funds. Just as the Federal Government required the States to have comprehensive plans, many States, including Michigan, required local governmental units to have, or be in the process of preparing, similar long-range community plans. This requirement for both State and local level planning is as it should be and the ultimate results will bear this out, but it has taken time and delayed applications.

While some communities had financial resources with which to match Federal funds, many were not ready to take advantage of the program. But the prospect of assistance which the fund offered spurred many to provide funding sources through special appropriations, bond issues, or tax millage. These have taken time, frequently requiring a vote of the people at a regular election. Our first local applications were accepted in June 1966, and submitted to BOR. The first local project was funded 5 months later.

As of February 1, 1967, Michigan had submitted a total of 55 State and local applications requesting $3,712,000 or 75 percent of our total allotment. Yet the Bureau has funded only 13 for $795,000, or 16 percent. This latter figure is the one which is being used as an indication of our progress and needs.

This is no criticism of the Bureau of Outdoor Recreation which has a tremendous job to do. But this low percentage of projects funded to date certainly in no way reflects the State's needs.

The program is new. Like Michigan, most States have been in it a little over 1 year, and it is just now beginning to accelerate. The slow start, and the gradual acceleration were obviously anticipated by the writers of the act for they wisely provided in section 4(b) for the advance appropriation to start with the third full fiscal year of the fund, about the time the program would really gain momentum. This is the point we have reached, and the full allotments to State and local governments is needed now and will be in the future.

Under the stimulus of the act and its requirements for long-range planning, the Michigan Department of Conservation has developed a program which projects expenditures of $377 million over the next 10 years. Of this, $44 million are foreseeable from various Federal sources and $54 million from State sources, leaving a deficiency of $278 million. We are now making strong efforts to develop State financing, and have proposed increases in certain fees and allocations which would raise $77 million. There should be no illusions about the size of the contribution of the Federal land and water conservation fund. We foresee, at present levels, only $32 million from this source in the next 10 years. But it is a crucial $32 million. It is seed money, and any reduction in the amount of seed, will reduce the outdoor recreation harvest far in excess of the amounts withdrawn.

ACQUISITION VERSUS DEVELOPMENT

We believe that the use of a high proportion of funds for development of land already in local public ownership is warranted at this time, particularly in or near urban centers, where the need for use and facilities is critical. In Michigan, 90 percent of the funds requested for State projects have been for land acquisition, mostly in the southern urban region. Conversely, 64 percent of our local projects have been for development.

However, we feel we have been justified in approving a higher proportion of local development projects for several reasons:

1. Many communities had the land, and before the local officials could convince the voters that they should acquire more they had to put this land to use first.
2. Local racial and teenage unrest is attributed in some degree to lack of "things to do." Ball diamonds, swimming pools, and skating rinks offer outlets for energy that weeds and bare ground do not. Buy now and play later won't keep today's kids out of trouble.
3. In response to the gentle prodding of the Bureau of Outdoor Recreation to submit applications as soon as possible to begin to use the fund, we accepted and submitted development projects which were qualified and in conformance with the State plan.
4. It can also be noted that the Secretary of the Interior requested expenditures from the land and water fund for development of several

bicycle trails near metropolitan centers. The city of Detroit already owned land suitable for this purpose and was able to qualify for one of these development projects.

We are making a gradual shift in the emphasis on development projects at local levels. Both the States and the Bureau of Outdoor Recreation have it within their authorities to bring about this change. However, it should be remembered that there is a backlog of critical development need just as there is a land need, and in many instances the development should receive higher priority at this time. Satisfying the immediate need for development and use will pave the way for further acquisition.

LAND COSTS

Cited specifically in the President's budget message was the matter of rapidly rising land prices in Federal acquisition areas. This situation is no less true in the State and local programs; and in fact, land prices in the metropolitan areas and urbanizing fringes, which are the normal province of State or local action rather than Federal, are perhaps the highest to be found. We can cite numerous cases in Michigan. For example:

The State has been involved in negotiations for Lake Michigan frontage for park purposes which have gone from $5 per foot in 1948, to $15 in 1951, to $70 in 1966.

In the short course of 2 years water frontage similar to some which the State purchased in 1964 at $20 to $35 a front foot today sells for $60 to $100 a foot.

In Oakland County, in the Detroit metropolitan fringe, with no sewers or water service, 97 acres of land sold in August 1966 for $2,750 per acre, and was resold in February 1967, 6 months later, for $3,750 per acre. Fifteen acres sold in May 1966 for $6,500 per acre and was resold in March 1967 for $11,000 per acre.

A parcel which was available to the State in our Van Buren State Park in 1960 for $60,000 was sold in December of 1966 to a corporate buyer for a figure in excess of $325,000.

In this same park, a piece of land priced at $19,000 and optioned for 1 year by the State in 1964 but not purchased for lack of funds rose in price and was sold to a private purchaser in 1966 for $35,000.

Even our northern Michigan "wild lands" which could be purchased for $10 an acre right after World War II, and $25 an acre in 1960 are now $75 to $100 per acre.

The list is long and serves only to bolster the point that we are all caught in the same land cost spiral which favors no area or segment of government.

Two other points. The dollar invested by the Federal Government in State and local programs under the land and water fund buys twice as much recreation value as the dollar invested in a Federal project, because each Federal dollar is matched by another when used at State or local levels. There is no matching at the Federal level.

The States and local governmental units are authorized under the act to develop recreation areas as well as to acquire land. Since the Federal agencies can only acquire land, it seems only reasonable that the State share be maintained at a higher level in order to accomplish this dual purpose. And, development costs, like land costs have also gone up.

SUMMARY

1. The land and water conservation fund program is in its infancy, and there is no basis to assume that the relative needs of the States and the Federal Government have changed in the short time of its operation. It is much too early to consider changes in the basic 40–60 formula.

2. The Land and Water Conservation Fund Act and its legislative history clearly give the States and local units of government the major role in meeting recreation needs. Loss of funds will remove part of the stimulus needed to back State and local programs, which received their initial momentum on the basis of fund participation.

3. The needs and interest of the States and local units should not be measured by the amount of money in funded projects but rather by the total amount represented by applications which have been submitted.

4. Spiraling land prices affect the State and local programs as well as the Federal programs.

We, therefore, strongly recommend that the 40 percent Federal, 60 percent State ratio be maintained and that the $32 million advance appropriation be allotted accordingly. The establishment of the formula for sharing of Federal funds with the States and their local units of government, and the assignment of State government of a pivotal role in the total program gave this law great vitality. The program is working. We are moving forward in good faith, and sincerely hope that the Congress will continue this cooperative Federal-State-local government program in the pattern which it so wisely established.

SUMMARY OF STATEMENT

My name is Norman F. Smith and I am chief of the Recreation Resource Planning Division of the Michigan Department of Conservation. Our functions are to prepare a plan for outdoor recreation and the administration of the land and water conservation fund.

I am here representing the director's department and I wish to speak in connection with the President's budget recommendation wherein the total advance appropriation of $32 million to the land and water conservation fund is to be allocated to Federal agencies to accelerate land acquisition. We do not favor this allocation. The reasons given for this recommendation are apparently there is a large unexpended balance in the State's allocation, that the States are spending too much on development projects as against land acquisition and that the price of land which the Federal agencies have to acquire has gone up greatly and, therefore, the Federal agencies need the additional funds.

REASONS FOR RECOMMENDATION NOT VALID

Our position is that these are not valid reasons at this time for changing the basic 40 percent Federal, 60 percent State and local allocation of the funds.

The Outdoor Recreation Resources Review Commission indicates the greatest shortages in land areas for outdoor recreation were in and near the urban area and responsibility was therefore given to the States and local units of government to work in and near those areas to meet this need. This fact was recognized in the 40 percent Federal, 60 percent State and local division of funds in section 6 of the act. The need has also been stressed by Bureau of Outdoor Recreation and the President himself has challenged us to meet the needs of urban population. The President does have the authority to vary this ratio in the first 5 years of the act to meet as nearly as may be the current relative needs of the States and the Federal Government. We do not believe there is a basis at the present time to assume these relative needs have changed.

The apparent large balance of the fund allotment available to the States but unused is not a reflection of the needs but rather the result of a normal lag in the setting up of a new program.

HISTORY OF MICHIGAN PROGRAM

The history of the Michigan program may be typical of what the other States are facing. It has taken us a year to get our plan completed, a preliminary plan, and submit it to the Bureau and therefore we have just been in the program along with other States for about a year now.

Local communities share equally in the fund in Michigan, were likewise faced with delays. Many of them had to set up new staffs, new offices, they had to go to the voters to get funds, they have been delayed in their planning and this has just taken time in getting the program going.

As of February 1, Michigan had submitted a total of 55 State and local projects which represented 75 percent of our total allotments. The Bureau of Outdoor Recreation, on the other hand, has been able to fund only 13 percent or 16 percent of these projects as of February 1. I am happy to say this is moving faster at the present time. The program is new. Like Michigan, most States have been in it a little over a year. It is just now beginning to accelerate. A slow start and gradual acceleration were obviously anticipated by the writers of the act where they wisely provided in section 4(b) that the advance appropriations should start with the third full fiscal year of the fund about the time the program would really gain momentum.

Chairman HAYDEN. When was the first fiscal year.

Mr. SMITH. 1965.

FULL ALLOTMENT TO STATE AND LOCAL GOVERNMENTS IS NEEDED

This is the point we have reached now. We are in the third fiscal year. The full allotment to State and local governments is needed and will be in the future. In regard to development versus acquisition we believe the use of a high proportion of the funds for development of land already in local public ownership is warranted at this time, particularly in the near urban centers where the need for use of facilities is critical.

Many communities already had the land and therefore the local officials could convince the voters they could acquire more land, they had to put what they already had to use.

Further than that, many local, racial, and teenage unrest problems have been attributed in some degree to lack of things to do. Ball diamonds, swimming pools, and skating rinks offer outlets for energy whereas weeds and bare grounds do not, therefore some development was needed.

RAPIDLY RISING LAND COSTS

The President specifically cited in his budget message the rapidly rising land costs in Federal areas required more Federal money to meet these costs to buy the necessary lands. Our position is that the situation is no less true in the State and local programs and in fact land prices in the metropolitan areas and urbanizing fringes which are the normal province of State and local action rather than Federal, are perhaps the highest to be found.

There are many examples which I could cite but I won't do this as far as land prices are concerned.

Chairman HAYDEN. I understand you recommend transfer of funds from Federal expenditures to the other programs?

RECOMMENDATION

Mr. SMITH. We recommend the balance of 40 percent Federal 60 percent local be maintained in the allocation of the $32 million advance appropriation.

Our program is working and we are moving forward in good faith and we hope Congress will continue the cooperative Federal-State-local program in the pattern which so wisely has been established.

Chairman HAYDEN. Let me ask you how much money would be transferred?

Mr. SMITH. We would take the $32 million allocation which is the advance appropriation which was to go entirely for Federal projects and would split this 40 percent Federal and 60 percent State on the original format.

Chairman HAYDEN. Thank you, sir.

Mr. SMITH. Thank you.

STATEMENT OF KENNETH J. SMITHEE, PUBLIC AFFAIRS OFFICER, NATIONAL RECREATION AND PARK ASSOCIATION

PREPARED STATEMENT

Chairman HAYDEN. The next witness will be Mr. Kenneth J. Smithee, public affairs officer of the National Recreation and Park Association.

Mr. SMITHEE. Thank you, Mr. Chairman. I have a prepared statement.

Chairman HAYDEN. It will be made a part of the record.

(The statement follows:)

Honorable Chairman and Members of the Subcommittee, my name is Kenneth Smithee and I am Public Affairs Officer of the National Recreation and Park Association. This organization came into being on January 1, 1966, after six national recreation and park organizations merged into a single organization to serve the people of the United States in their pursuit of better park and recreation lands and facilities, and to help provide more wholesome and meaningful leisure time activities for the American people. The six organizations that now comprise the National Recreation and Park Association formerly were the National Recreation Association, American Institute of Park Executives, American Recreation Society, National Conference on State Parks, National Association of State Park Directors, and the American Association for Zoological Parks and Aquariums.

Laurance S. Rockefeller is President of this organization and its Board of Trustees is made up of distinguished lay and professional leaders from all parts of the Nation. Over 600 outstanding parks and recreation leaders serve on its various national and district advisory committees. More than 2,000 national, state and local parks and recreation agencies, both public and private, are service affiliates of the Association and over 7,000 indiivduals, professional and lay, are members.

BUREAU OF OUTDOOR RECREATION

(Land and Water Conservation Fund)

The National Recreation and Park Association which strongly endorsed and has supported the Land and Water Conservation Fund since its inception, wishes to reemphasize its continuing support for this key assistance program.

However, if this program is to be effective for a prolonged period of time it must provide enough matching funds to acquire and develop critically needed park and recreation areas at the city, county and state levels, as well as at the federal level.

While escalation of land prices is a serious problem in acquiring national parks, recreation areas, forests and game refuges, it should be remembered that escalation is even more of a problem for state and local governments attempting to acquire critically needed sites in and near the metropolitan areas where land costs have been skyrocketing due to residential, commercial and industrial developments.

Many local governments throughout the country have indicated that receipt of Land and Water Conservation Funds would enable them to establish parks and recreation systems or to expand existing systems.

Reports from the Association's eight district offices continue to show that information about the Land and Water Conservation Fund and other federal assistance programs is one of the most prevalent requests. This is due in great part to the shortage of local funds. Thus, cities and counties seek other sources of financial assistance to stretch their local tax dollars.

While we understand the importance of meeting federal acquisition emergencies, we hope the Secretary of the Interior, in exercising the discretion authorized in the Land and Water Conservation Fund Act, will hastily act in increasing the amount of monies for local and state emergencies as he has done for the federal needs.

Overall, we believe that excellent progress has been made by this program since its initial appropriation a little more than two years ago. One of the most important projects authorized under this program is the cooperative arrangement entered into with the National Association of Counties that provides for the publication of 10 guide books on developing parks and recreation programs and for 30 workshops on this subject to be held throughout the country. We believe the positive effects of this grass roots program will last for many years.

We wish to strongly emphasize that other methods of funding the Land and Water Conservation Fund program must be found in order to provide the monies necessary to acquire and develop critically needed park and recreation areas before such sites are irrevocably lost to other uses. Thus, we are in complete sympathy with, and support the objectives of, S-531 (Kuchel), HR-5320 (Dingell), HR-4501 (Morton) and HR-3395 (Saylor).

We respectfully urge this honorable subcommittee to approve the administration's 1968 fiscal year budget request of $142,000,000.

NATIONAL FOUNDATION ON THE ARTS AND HUMANITIES

The National Recreation and Park Association strongly endorsed and supported the provisions of the Congressional Acts creating the Foundation on the

Arts and Humanities, and it has given full support to this program since it was started.

The Association has been kept informed of the excellent work being done by the Foundation, and has benefited directly from the services of the Foundation Staff on several occasions. For example, Mr. Charles C. Mark, Director, State and Community Operations, National Foundation on the Arts and Humanities, has given invaluable advice and guidance to the Association in its efforts to develop the cultural functions of park and recreation agencies throughout America.

It is deeply gratifying to the Association to have the Federal Government not only create an atmosphere conducive to the arts, but, to render tangible evidence of its support. The National Foundation on the Arts and Humanities is creating a favorable atmosphere for the Arts and Humanities, and is making it possible for the arts to move forward on a broad front in such a way that all Americans will find it possible to continue to make substantial progress in all the states and in thousands of communities.

In view of the major tangible accomplishments of the Foundation under the leadership of Roger L. Stevens, during the fiscal year 1967, the Association respectfully urges this honorable subcommittee to approve the administration's total budget request of $15,350,000 for the fiscal year 1968.

NATIONAL PARK SERVICE

The National Recreation and Park Association wishes to affirm its complete support for the administration's 1968 fiscal year budget request of $131,235,000 for the National Park Service.

While this figure represents an increase of $11,018,000 over last year's appropriation, $8,000,000 of this amount is to be used to liquidate obligations incurred under the previous program level. In addition, by deducting the $2.3 million requested to implement the Historic Preservation Act, the total amount sought is only one million dollars higher than last year's total budget. To keep the total budget request at this low figure, it has been necessary to reduce the construction budget by $3,879,000, compared to the 1967 level.

We believe the National Park Service Budget is a frugal budget representing an earnest and sincere attempt to hold the budget request to a minimal level.

The $2.3 million requested to implement the Historic Preservation Program is clearly a start—but only a start—toward preserving historic sites and structures which are of local, state and national significance. However, unless this start is made now, valuable historic properties, which can never be replaced once desecrated, will continue to be lost.

In summary we believe this budget request is inadequate but if approved in its entirety will permit the proven programs of the National Park Service to continue at an acceptable level.

BUREAU OF LAND MANAGEMENT

One of Americas greatest resources is the 465 million acres of public domain of which 178 million acres are located in the eleven western states.

The key hope of providing outdoor recreation opportunities for many of our nation's citizens is dependent upon the identification of public domain areas which have recreation potential and the programmed development of such areas.

To date B.L.M., in an aggressive program, has inventoried 4,300 local, state and national public domain areas with significant recreation potential. Five million acres serving urban centers have tentatively been selected as sites for intensified recreation developments.

However, in order to effectively and fully utilize the vast recreation potential of B.L.M. lands it is mandatory that a long range comprehensive planning program be undertaken which will: (1) determine existing and projected demands and (2) determine where capital improvements should be placed in order that maximum use of such facilities will be obtained. These two steps will insure that public monies budgeted for recreational projects will be wisely spent. B.L.M. simply does not presently have the capabilities to do these studies. The expertise required for the planning and development of specific areas can be obtained by contract with the National Park Service and other federal agencies.

One of the foremost problems in the implementing of a meaningful long range construction program on B.L.M. lands is that of providing adequate funds for this purpose. Last year only $800,000 was approved for construction purposes on B.L.M. lands. Compare this if you will to the recent park bond issue of $17 million approved by Fairfax County voters.

Our main purpose in testifying for the B.L.M. budget today is to re-emphasize to this honorable subcommittee the fact that we have a natural resource with unlimited recreation potential for both present and future citizens. We believe the time to develop this resource is now, but an effective planning and development program can only be started and continued if adequate funds are budgeted.

Now that the decision has been made for the Bureau not only to dispose of lands but also to administer lands with recreation potential, we respectfully urge this subcommittee to give the Bureau the tools to do the job and thus approve the administration's 1968 fiscal year budget request.

In summary, we wish to thank the Committee individually and collectively for permitting us to explain our views on these important and far-reaching national programs.

FRUGAL BUDGET REQUEST

Mr. Smithee. The National Park Service, we feel, has submitted a very frugal budget this year, only $1 million increase over last year and $2.3 million of the total increase is for implementing the Historic Preservation Act, which Mr. Gray talked about earlier; we are in complete sympathy with that.

STATEMENT OF STEWART M. BRANDBORG, EXECUTIVE DIRECTOR, THE WILDERNESS SOCIETY

SUPPORT OF DEPARTMENT OF INTERIOR AND FOREST SERVICE PROGRAMS

Chairman Hayden. Thank you. The next witness will be Mr. Stewart M. Brandborg, executive director, the Wilderness Society.

Mr. Brandborg. Thank you, Mr. Chairman. I have a prepared statement which I submit for the record. Then I would like to summarize it.

Chairman Hayden. Your statement will be made a part of the record.

(The statement follows:)

Mr. Chairman, I am Stewart M. Brandborg, Executive Director of The Wilderness Society, a national conservation organization with headquarters at 729 Fifteenth Street, N.W., in Washington, D.C. Supported by its 36,000 individual members, The Wilderness Society endeavors, through educational means, to perpetuate our nation's wilderness resource for the use and enjoyment of present and future generations. One of the Society's primary efforts now is directed toward encouraging the establishment of an adequate National Wilderness Preservation System under the provisions of the Wilderness Act of 1964.

I am here today to speak on behalf of those programs of the Department of the Interior and the Forest Service which we view as deserving of special attention and strong funding support. These include programs for the acquisition of key tracts of wild land including inholdings within Wilderness Areas, National Parks, habitat of endangered wildlife, and efforts to assure adequate protection and maintenance of Wilderness Areas. Also very important is the financing of trail construction work, and research to furnish the public land agencies with guidelines for providing for the best possible public recreational use of Wilderness Areas without damage to the fragile soil and unique plant and animal life of the areas themselves.

NATIONAL PARK SERVICE

The National Park Service, faced with the prospect of having to administer ten more Park System units—some 240 now—in fiscal 1968 than in fiscal 1967 with approximately the same amount of money as was provided for this purpose in the fiscal 1967 budget, wisely has chosen to devote more of its available funds to the management and protection of the parks with smaller allocations for construction. The Wilderness Society is pleased to see this awareness of the need to protect the natural values of the great National Parks and Monuments reflected in the Service's budget, and we hope that the decrease in the Service's construction funds request indicates a trend toward Park Service encouragement of private investment in tourist-accommodation facilities outside of the parks, where, in most instances, such facilities belong.

In this connection, we support the Park Service's joint planning efforts, now under way with the Forest Service and the Bureau of Outdoor Recreation in the regions surrounding Mount Rainier and Grand Teton National Parks. This essential regional planning program should be fully financed and expanded to enable the federal land management agencies to comply with a heavy schedule of wilderness reviews and to respond to the growing demand for a variety of outdoor recreation opportunities in a manner that will meet public needs without destroying the basic resources upon which this recreation is based. Such regional planning will be especially helpful in placing proposals for the establishment of new Wilderness Areas in proper perspective. When such proposals are considered by the agencies and the Congress, they should be viewed against a background of full information regarding opportunities for both facility-oriented mass recreation and the harvest of timber and other commodities from other lands in the same region.

The Wilderness Society recognizes the need for road construction within National Parks to bring visitors to important points of interest by private automobile, but suggests that a parkways, roads, and trails budget totaling $38 million which contains little more than one million dollars for trail repair and construction may be out of balance. Visitors to National Parks should be encouraged to leave their automobiles in parking lots outside of or immediately within the boundaries of National Parks, thus freeing themselves from the distractions of coping with auto traffic and allowing their attention to be given to the natural wonders around them. While the use of shuttle buses, "minitrains", and perhaps, in certain instances, monorail trains and aerial trams can offer this kind of "leave the driving to us" relaxation to park visitors, those truly interested in becoming acquainted with the parks will explore them on horseback or, better yet, on foot. For these people—a growing segment of the park visitor population—basic networks of sensitively located, well maintained trails within the parks are needed. The agency's fiscal 1968 budget request for only enough money to repair or construct a total of 100 miles of trail seems wholly inadequate in view of the need for such work. To place this figure in perspective, there are 653 miles of trail in Great Smoky Mountains National Park alone.

With respect to the Park Service's road and parkway construction fund requests, we support in particular the two million dollars requested for further work on the Foothills Parkway, which parallels the northwestern boundary of Great Smoky Mountains National Park in Tennessee. We see this scenic road as a safety valve for the motorists who otherwise would place excessive pressure on the necessarily-limited road system within the Great Smokies Park itself. We recognize the need for the request for $400,000 to resurface the existing road between the Smokies Park headquarters and Elkmont Junction within the Park. However, we respectfully request that this Subcommittee recommend against the Service's request for $1,200,000 to build another 2½ miles of new road within the Park along the north shore of Fontana Lake (identifiable in the budget as the "Bryson City road"). I submit herewith photographic evidence, in these articles reprinted from the Society's magazine, THE LIVING WILDERNESS, of the destruction of scenic values this so-called "Transmountain road" has already caused. Such degradation of the natural values of a National Park should not be allowed to continue when an alternative routing of this road could alleviate such damage—an alternative conservationists in North Carolina are encouraging the Park Service to consider.

Approval of this particular agency road construction funds request would allow the completion of this controversial road from Noland Creek to Forney Creek within the Park. It would devastate an area, now roadless, which is qualified under the Wilderness Act of 1964 for inclusion in the National Wilderness Preservation System. We believe the "Transmountain road" project should be held in abeyance until such time as the Congress decides which portions of the Great Smokies Park shall be designated as wilderness.

We are hopeful that the $2 million requested for road construction within Canyonlands National Park and the $630,000 requested for a "south rim road" in Canyon de Chelly National Monument will be expended in such a way as to avoid conflict with scenic and wild land resources and potential Wilderness Areas within these Park System units.

One other construction need deserves special attention: the necessity to install a salt water barrier in Canal 111 at Highway 1 northeast of Everglades National Park before the earth plug in this canal is removed by the Army Corps of Engineers. This barrier must be constructed to keep salt water from spilling out of the Park and into the unique and productive fresh water environment of the National Park.

Moving to the Park Service's land acquisition budget, we note that this agency's request from the Land and Water Conservation Fund for fiscal year 1968 is $48,225,000, and that much of this would be used to acquire land within newly authorized National Park System areas such as Delaware Water Gap National Recreation Area, Fire Island, National Seashore, Assateague Island National Seashore, and Indiana Dunes National Lakeshore. This emphasis on the prompt acquisition of lands in recently authorized areas is sound in view of rising land prices in these areas. Acquisition at Indiana Dunes should begin as soon as possible, at the full $6,500,000 level recommended by the Administration. It is The Wilderness Society's feeling, however, that the allocation of less than ten percent of the Park Service's land acquisition budget to the purchase of inholdings within existing Park System units is conservative. It is extremely important that private inholdings within National Park System areas be acquired without delay and that funds be scheduled for this purpose until the job is done. Private inholdings in Lassen Volcanic National Park, Sequoia and Kings Canyon National Parks, and Olympic National Park recently have been brought to our attention as priority acquisition needs.

In line with our support for National Park Service efforts directed toward the implementation of the Wilderness Act, we urge that the full amount requested by the Park Service for its master planning and natural history and natural science studies programs be granted by the Congress. The research done by the Service's natural history and natural science specialists will help its planners locate future park developments on the basis of ecological studies to show where they will do the least harm to the park's natural values. This work may further reinforce proposals to save major portions of the parks and monuments as undeveloped wilderness.

FOREST SERVICE

Passage of the Wilderness Act in 1964 placed important new responsibilities on the Forest Service. The nucleus of that system, composed of 9.1 million acres in 54 areas, was established within the National Forests. If the Forest Service is to redeem its responsibilities under the Act, it must mark the boundaries, provide the kind of management that will channel and disperse visitors use, clean up after thoughtless visitors, provide the public information that will enhance public appreciation of the wild land values, and prepare long-range management plans to insure that the wilderness resource will continue to be maintained for the use and enjoyment of future generations.

The Forest Service must also study and report as to the suitability or unsuitability of the 34 National Forest Primitive Areas for inclusion in the System. This is to be done no later than September 3, 1974; in the meantime, its Primitive Areas must be managed so as to maintain their primitive character.

Recreation use has been increasing rapidly during recent years on all public lands, but it has increased even more rapidly in Wildernesses. This is an indication of the growing public appreciation and need for Wilderness.

Meeting these important responsibilities will require funds and personnel. The F.Y. 1967 budget request for the Forest Service asked for a sum of $1,500,000 ". . . to pay for the initial work of planning, making studies, posting boundaries, and providing information as required by the new law." The Service stated that "This level of financing is less than 30 percent of what is estimated as needed to do the job to desirable standards, but is related to reaching that level in three steps rather than all in one year." This money was allotted, and the Forest Service is making excellent progress. It is, however, important that this work be accelerated to reach a satisfactory level by F.Y. 1969.

Wildernesses, as the Subcommittee knows, are more than recreation areas. They are important guideposts by which land managers can gauge the management activities on other lands. To biologists, botanists, ornithologists, ecologists, and other scientists, wilderness stands as a laboratory, a control plot, for measuring the behavior of plants and animals free of human intervention. From such observations will come advancement in medical science, sources of new foods to cultivate and commercial products useful to man.

While recreation is an important use of Wilderness, it must not be allowed to destroy the fragile wilderness resource. We must provide and maintain opportunities for dispersed types of recreation such as hiking, camping, hunting, fishing, and sightseeing outside these areas. While developed sites such as picnic areas, campgrounds, and winter sports sites will occupy only a tiny fraction of the area within our National Forests, they serve as a focal point from which the vast majority of Americans will enjoy these outdoor recreation pursuits.

The Forest Service now has, and maintains, over 7,500 camp and picnic grounds—an operating "plant" of tremendous size and value. A steadily mounting amount of use, over-use, and mis-use has caused them to devote a greater and greater percentage of their recreation appropriations to the maintenance, clean-up, and administration of these important facilities. The number of new sites they can construct is decreasing. This places an even greater visitation load on existing sites which accelerates their deterioration, requiring even more maintenance, clean-up and administration. A vicious cycle ensues.

The situation is made even more difficult by the need for modern sanitation systems to prevent pollution of our lakes and streams by the growing crowds of visitors. Quality installations are needed on new areas to meet public health requirements. Existing sanitation installations which are no longer adequate under today's heavy use must be modernized. In many areas where human use and occupancy has mushroomed, water purification systems are now mandatory where springs or wells were once considered safe.

The Wilderness Society urges that Congress recognize these important public needs and provide the Forest Service with the funds and manpower to meet them.

The Wilderness Society also urges that Forest Service programs of forest and wild-land recreation research—both biological and sociological—be strengthened and expanded. Specifically, we urge the estabishment of a strong research program in the ecology and use of western Wilderness Areas, and we request that the recreation research program in the Boundary Waters Canoe Area be strengthened to meet the Area's rapidly increasing use pressures and their consequences.

One of the most critical problems in the entire area of resource protection and use is the need for a sound understanding of wilderness ecology—not only the forces of nature and their phenomena, but also the impacts of man in and near the wilderness. Wilderness Areas are living, ever changing, plant and animal communities. Animals move about. Trees die. Seeds sprout. There is constant change, and man contributes to this change. With inadequate understanding, the very reason or purpose a Wilderness Area has been set aside can be destroyed. Because of improved forest fire protection, for the past several decades, large forest fires and their tremendous ecological force occur much less often today. What does this means in terms of the plant and animal community? White pine blister rust, an introduced disease from Europe, probably has entirely different impacts upon American ecosystems. What are they and what can be done about them? The wilderness visitor himself and his pack animals have changed the wilderness. Western Wilderness Areas are mountainous and geologically youthful. Soils and the plants upon them are usually thin and fragile. A basic question is, How can we best use and enjoy wilderness without destructive impact upon its natural character?

The Forest Service has an able and experienced research organization that can get to the heart of these and related problems effectively and efficiently. For western Wilderness, research is needed (1) on the basic ecology of the principal wilderness plant and animal species and associations, (2) to understand and develop methods to minimize the impacts of human use, (3) to find ways to maintain wilderness plant cover compatible with the wilderness concept, and (4) to develop techniques to maintain a proper balance of wildlife, particularly the elk and deer, with the environment. Ecological research also should be emphasized at the Boundary Waters Canoe Area, but under much different circumstances in this land of forests and lakes with a different climate, different soils, and different use.

A western wilderness research program should have a base of $300,000 and the Boundary Waters program should be strengthened at least $100,000 to field a team of ecological and social scientists to develop the knowledge which will guide the completion and maintenance of America's National Wilderness Preservation System.

Development and management of wildlife and its habitat on the National Forests has not kept pace with other resource developments. This, we are sure, is a result of inadequate funding. Some of the National Forests in the Lake States and in the Mississippi Valley, for example, can be economically developed for increased waterfowl production to offset the loss of aquatic types through private land drainage.

The wetland development survey recently completed on the Chippewa National Forest shows what results can be expected.

National Forest lands and waters, in a number of instances, support the remnant populations of rare and endangered species. With these lands already in public ownership, more attention needs to be given to protection of habitat to help safeguard these endangered species.

FOREST SERVICE LAND ACQUISITION

The Land and Water Conservation Fund Act budget, as presented to the Congress, includes proposed acquisitions by the Forest Service of about 120,000 acres at an estimated cost of about $18 million. This program includes a large variety of lands to serve the varied needs of the American public for general outdoor recreation use such as camping, hiking, fishing, skiing, swimming, horseback riding, and for the enjoyment and protection of wilderness environments. It provides for acquiring lands for addition to the scenic Eleven Point River to Missouri, the George Rogers Clark Recreation Way in Illinois, the Mount Rogers National Recreation Area in Virginia, the Spruce Knob-Seneca Rocks National Recreation Area in West Virginia, Whiskeytown-Shasta-Trinity National Recreation Area in California, Kinzua Reservoir in Pennsylvania, and the Big Sea Water Recreation Way in Michigan. These are but a few of the key project areas.

The Wilderness Society, of course, has a primary concern with the advancement of wilderness concepts and programs. It is vitally interested in seeing that the Wilderness System, as envisioned by the Wilderness Act, be established as rapidly as is practical. A major concern of conservationists is that there be acquisition as quickly as possible of inholdings within national forest Wilderness Areas and Primitive Areas. It is very important that whenever properties within these units become available the Forest Service be in a position to acquire them without delay. The alternative will be further increased prices, the threat of subdivision for summer homes, and other possible uses adverse to the wilderness environment and in conflict with the policy set by Congress in the Wilderness Act.

Notable progress has been made in several of the wilderness areas under the current year's budget. The largest resort in the Selway-Bitterroot Wilderness Area has been purchased by the Forest Service. Negotiations are substantially complete for other private ownerships within the Selway-Bitterroot Wilderness Area and other Wilderness and Primitive Areas. This progress needs to be continued. It can be continued through the 1967–68 appropriations requested for the Forest Service but at less than the desired rate.

The budget under consideration includes funds necessary to acquire only 2,285 acres within or immediately adjacent to National Forest Wilderness or Primitive Areas, in California, Idaho, Montana, Oregon and Washington. The Society recognizes the need for accelerating this effort through holding acquisitions in nearly 10 additional Wilderness Areas and Primitive Areas. These purchases would require an increase of $1 million in appropriations to permit the purchase of about 2,000 acres of National Forest wilderness lands. We would strongly support such increases.

As a companion to the needs for land purchases, there is an urgent need for an acceleration of the land exchange program of the Forest Service. Many of the larger industrial owners of lands within wilderness and primitive areas are not willing to sell but are willing to exchange. In the past, such exchanges have been delayed due to inadequate appropriations for land appraisal and negotiation work. The Wilderness Society supports the $416,000 increase in the budget request for land exchanges as a significant contribution to the acquisition of inholdings in both Primitive Areas and Wilderness Areas.

BUREAU OF SPORT FISHERIES AND WILDLIFE

In addition to voicing our support of the Fiscal Year 1968 budget for the Bureau of Sport Fisheries and Wildlife as proposed by the Administration, we would like to respectfully request that provision be made by the Congress to extend the Wetlands Loan Act for an additional eight years. Through June of 1966, the Bureau has been able to acquire only one third of the prairie wetlands it hoped to preserve under the accelerated program which began in 1961. The Society specifically urges approval of the proposed sixth annual appropriation under this program of $7,500,000, which is $1,500,000 over the 1967 program.

In order to permit the Bureau to conduct the necessary field studies and master planning required to meet the deadlines for wildlife refuge wilderness reviews specified in the 1964 Wilderness Act the Society urges that the full amount requested by the Bureau for its "Management and Investigations of Resources—Wildlife Refuges" and "Construction—Wildlife Facilities" line items be approved. Monies for Wilderness Act implementation studies, for natural area inventories, and for refuge recreational planning are included in these two budget items.

The Bureau's present endangered species program consists of the propagation installation of the Patuxent Wildlife Research Center and four field stations. The location of the field stations and species under study are as follows: Delray Beach, Florida—Everglade kite and other species in the southeast; Hilo, Hawaii—dark-rumped petrel, Laysan Hawaiian duck, and other species in this State; Ojai, California—California condor; and Rapid City, South Dakota—black-footed ferret.

The budget estimates for F.Y. 1968 include an increase of $195,000 for the purpose of initiating a comprehensive regional endangered wildlife preservation program to provide coordination of operational programs with Federal, State, and private agencies, and $105,000 to meet immediate needs of propagation studies underway at Patuxent. These increases are supported by The Wilderness Society, as would be the funding of additional endangered species—preservation activities including the following:

1. Construction of the endangered species laboratory at Patuxent to provide the facility required for conducting the fundamental studies of avian and mammalian biology, nutrition, physiology, pathology and behavior	$650,000
2. Construction of a visitor center to handle people attracted to the propagation center because of the increasing publicity and interest in the program	200,000
3. Erection of permanent type propagation exclosures	300,000
4. Expansion of field studies in the Southwest (Attwater's prairie chicken, red wolf, Mexican duck, etc.); Southwest (ivory-billed woodpecker, brown pelican, dusky seaside sparrow, etc.); and Hawaii (to cover endangered species on the island of Kauai and the Hawaiian island of the Leeward Island group)	100,000

The President's budget for fiscal year 1968 contains an item of $3 million for acquisition of land needed for conserving, protecting, restoring, and propagating selected species of wildlife threatened with extinction. This allocation from the Land Water Conservation Fund is strongly supported by The Wilderness Society. The areas involved are:

1. Lands in Monroe County, Florida, totaling 1,854 acres, for preservation of habitat for key deer. The existing refuge contains 834 acres of Federal land plus private lands controlled by leases subject to termination on 90-day notice. The additional area of 1,854 acres is estimated to be the least habitat that will assure survival of this species in the wild.
2. Lands in Prince Georges County, Maryland, comprising 253 acres to be added to the Patuxent Wildlife Research Center, where detailed research on all endangered species can be carried out.
3. Lands in Wahkiakum County, Washington, for preservation of habitat for the Columbia white-tailed deer. Intensive agricultural development is rapidly destroying the good habitat within the acceptable area range. An area of about 2,000 acres in the Columbia River Valley has been selected, with funds for 970 acres included in the F.Y. 1968 budget.

The Wilderness Society supports efforts to give new direction to the Bureau's wildlife services program—away from massive, unselective, predator and rodent control programs and toward limited, selective, animal control combined with sound training and educational efforts. The Bureau's control methods research program needs include: (1) continued search for selective, lethal agents to be used in the control of commensal and field rodents ($100,000) and (2) expansion of research on predator-prey relationships to gain information on the golden eagle and coyote and their prey species ($100,000).

We urge the provision of the funds required to permit the Bureau to proceed with these important projects.

BUREAU OF OUTDOOR RECREATION

The Wilderness Society has noted with interest and appreciation the fact that the Bureau of Outdoor Recreation is participating in a positive and constructive way in Interior Department decision-making relating to wilderness preservation. Its "special area studies" group has been especially helpful and effective in this regard, through its compilation of basic data on scenic river preservation opportunities and recreational trail needs nationwide. It is also in a position to assist the wilderness agencies and the Office of the Secretary of the Interior in their formulation of sound Wilderness Area proposals, especially for National Park System and National Wildlife Refuge System units.

The regional offices of this Bureau are making important contributions to the record at local, administrative public hearings on agency wilderness proposals through presentation of statements relating the wilderness proposals to the regional outdoor recreation picture. Such presentations often point up opportunities for the development of facility-oriented recreation elsewhere in the same region as the proposed wilderness units, thus making possible statutory protection of the Wilderness Areas.

The special area studies group has been assigned by the President the task of inventorying all islands in the United States over ten acres in size, to find unspoiled islands in time to provide public protection for them. In view of the imminent development of relatively inexpensive processes for the conversion of sea water to drinking water, which would bring about profitable commercial resort development of offshore islands, and in view of the increased availability of helicopter transportation to formerly inaccessible terrain, The Wilderness Society supports this farsighted program and urges its adequate funding.

We also are aware of the important contributions to conservation being made by the President's Council and the Citizens' Advisory Committee on Recreation and Natural Beauty and their staffs, and express the hope that these programs will receive the $100,000 requested for their operation.

With respect to the administration by BOR of the Land and Water Conservation Fund Act, we note that all of the States now have prepared statewide comprehensive outdoor recreation plans acceptable to the Secretary of the Interior and that all States are actively sharing in the matching grants program. We have some misgivings concerning the use of Land and Water Conservation Fund monies for the construction of facility-oriented recreation developments such as golf courses and swimming pools, when sponsors of the Fund Act had in mind the use of the Fund for more conservation-related projects such as the acquisition of key tracts of wild land and other open spaces easily accessible to urban dwellers and the use of such tracts for hiking, horseback riding, nature study and other resource-based activities. We are hopeful that the Bureau may be able to encourage State recreation planners to utilize their Land and Water Conservation Fund money to achieve long-range conservation goals.

We urge approval of the suggested allocation of $74,225,000 from the Fund for Federal land acquisition projects, which we have discussed in detail earlier in our statement in connection with the budgets of the National Park Service, the Forest Service, and the Bureau of Sport Fisheries and Wildlife.

We support the allocation of $5 million to the Bureau of Outdoor Recreation itself under this program. This money would be allocated to the three land management agencies just mentioned as new parks and other recreational areas are authorized by the Congress, to enable the agencies to proceed with the verification of property lines, mapping, development of ownership data, appraisals, and the purchase of key tracts of land, and would avoid the present complicated procedure of "reprogramming" funds within the agencies to begin work on newly authorized areas.

We understand that, should legislation to establish a Redwood National Park receive Congressional and Presidential approval during fiscal year 1968, a supplemental appropriation for this purpose will be sought using the authority contained in the Fund Act for an advance from the general fund of the Treasury.

BUREAU OF LAND MANAGEMENT

The Wilderness Society supports good land management on all units of the public lands. We urge that funds be provided for well-planned commodity and recreation development of the public lands administered by the Bureau of Land Management. These lands, representing the largest public ownerships in the nation with an undeveloped recreational potential, are located adjacent to or within 60 miles of every national park, national monument, national recreation area, and most national forest areas in the eleven western states and Alaska. They can and should be used to provide outdoor recreation for the American people to take development pressure off the national parks, national monuments, and national forest back country.

The Department of the Interior estimates that 44 million visitors will use these lands annually by 1972. These visitors will come whether provisions are made for them or not. If they come without provision, we can anticipate land abuse, stream pollution, unsightly trash, wildfires, and health hazards from the lack of sanitation facilities. The Administration's request for $1,100,000 is a very modest request, particularly so when it is known that on June 30, 1966, there was only one developed recreation site for every 4.5 million public land acres. At least another $1,000,000 put into recreation facilities on the public lands now would be that much added insurance that four years hence this veritable avalanche of visitors—and the land they use—will be adequately cared for.

We also are intensely interested in the administration of the Classification and Multiple Use Act. We think the Department of the Interior and the Bureau of Land Management have made excellent progress. We are pleased to learn that the Bureau's work plans for fiscal year 1968 will give special attention to the preservation of sites with values as wild land. We believe it is absolutely essential that the full request of $4,658,000 for land classification and mineral examination be retained.

The scars of erosion do not fit with our—or anyone's—ideal of the natural beauty of wild landscapes. Consequently, we are strong in our support for funds for soil and watershed conservation work on the public lands. We think it is particularly reprehensible that the United States, as a landowner, should have to admit that erosion is a chronic condition—and in many instances an outright desecration—of the natural landscape on over one-half of the 175 million acres of western public lands. We hope, therefore, that the Committee will recommend against the decrease of $835,000 from last year's appropriation for this most important work. An increase in the budget estimate of at least $2,500,000 in this item could be well used for this necessary work to avoid further erosion of the value of our public domain.

I very much appreciate the opportunity to present this testimony here today, and thank the Chairman and the Committee for this privilege.

SUMMARY OF STATEMENT

Mr. BRANDBORG. I am Stewart Brandborg, director of The Wilderness Society, a national conservation organization which has a broad concern for natural resources, wilderness management and use of resources and particular concern for preservation of the wilderness. Our headquarters are here in Washington, D.C., at 729 15th Street.

I am here to speak in behalf of those programs of the Department of Interior and Forest Service which we know are deserving of particular concern and worthy of strong funding support. These include the programs for acquisitions of key tracts of wild lands and recreational lands including holdings within wilderness areas, national parks, habitat of endangered wildlife, and efforts to assure adequate protection and maintenance of wilderness areas.

Very important also is the financing of trail construction work and research to furnish the public land agencies with guidelines for providing the best recreational use of wilderness areas without damage to the fragile soil and unique plant and animal communities in these areas.

The National Park Service wisely has chosen to devote more of its available funds to the management and protection of the parks with smaller allocations for construction.

PARK SERVICE REGIONAL PLANNING EFFORTS

We strongly support the Park Service regional planning efforts, recognizing that such planning will be especially helpful in placing proposals for the establishment of new wilderness areas in their proper perspective.

The agency's fiscal 1968 budget request for only enough money to repair and construct a total of 100 miles of trails seems wholly inadequate in view of the need for such work. We make comparison here to place this figure in perspective—there are 653 trails in the Great Smoky Mountains National Park alone. We see that provision for only 100 miles of new trail next year as inadequate. We respectfully request that this subcommittee recommend against the Service request for $1,200,000 to build another 2½ miles of new road within the park along the north shore of Fontana Lake identifiable in the budget as Bryson City Road within the Great Smoky Mountains National Park.

TRANSMOUNTAIN ROAD PROJECT

I submit with my statement photographic evidence of the destruction of scenic values of this so-called transmountain road where portions of it have already been built.

We believe the transmountain road project should be held in abeyance until such time as the Congress decides which portions of the Great Smoky Park shall be designated as wilderness.

One other construction item needs special attention. The necessity to install the salt water barrier in Canal 111 at Highway 1, northeast of Everglades National Park before the earth plug in the canal is removed by the Army Corps of Engineers.

LAND ACQUISITION BUDGET

Moving to the Park Service land acquisition budget, we urge that additional funds be provided for acquisition at the Indiana Dunes and that this acquisition begin as soon as possible, at the full $6½ million level recommended by the Administration.

The allocation of less than 10 percent of the Park Service land acquisition budget to the purchase of inholding within existing park system units is very conservative in our opinion. We urge that the full amount requested by the Park Service for its master planning, natural history and natural science studies program be granted by the Congress.

Budget Request for Forest Service

The fiscal year 1967 budget request for the Forest Service asks for a sum of $1½ million to pay for the initial work of planning, making studies, posting boundaries and providing information as required by the wilderness law. This money was allotted and the Forest Service is making excellent progress. It is, however, important that this work be accelerated to reach a satisfactory level by fiscal year 1969.

The Wilderness Society also urges that the Forest Service programs of forest, wild land recreation service, both biological and sociological, the handling of people in back country areas be strengthened and extended. The western wilderness research program should have a base of $300,000 and the boundary water canoe area program should be strengthened at least $100,000 to field a team of etiological social scientists to develop knowledge which will guide the completion and maintenance of America's National Wilderness Preservation System.

LAND ACQUISITION PROGRAM

Within the national forest land acquisition program we have a major concern that there be acquisition as quickly as possible of inholding within national forest wilderness areas and primitive areas. The budget under consideration includes funds necessary to acquire about 2,300 acres within or immediately adjacent to national forest wilderness or primitive areas in California, Idaho, Montana, Oregon, and Washington.

Bureau of Sport Fisheries and Wildlife

The society recognizes the need for accelerating this effort by inholding acquisitions in 10 additional wilderness and primitive areas. The purchases would require $1 million additional appropriations to permit purchase of about 2,000 acres of national forest wilderness lands. We would strongly support such increase. In references to the request of Bureau of Sport Fisheries and Wildlife, we would respectfully request that provision be made by Congress to extend the Wetlands Loan Act for an additional 8 years. The society urges that the full amount requested by the Bureau for management and investigation of resources, wildlife refuges, construction and wildlife facilities line items be approved.

Wilderness Act Implementation Studies

Moneys for Wilderness Act implementation studies for national inventories and recreational planning are included in these two budget items.

The Wilderness Society noted with interest and appreciation the fact that the Bureau of Outdoor Recreation is participating in the positive and constructive way in the Interior Department decision-making relating to wilderness preservation and comprehensive recreation planning.

The regional offers of the Bureau are making important contributions to the record at a local administrative public hearing on agency wilderness proposals to presentation of statements relating to wilderness proposals on regional outdoor recreation needs.

PRESIDENT'S COUNCIL AND CITIZENS ADVISORY COMMITTEE

We are also aware of the important contributions being made by the President's Council and Citizens Advisory Committee on Recreational and Natural Beauty and extend and express the hopes these programs will receive $100,000 requested for their operation.

We urge approval of the suggested allocation of $74 million from the land and water conservation fund for Federal land acquisition projects.

BUREAU OF LAND MANAGEMENT

The next item, Mr. Chairman, is the Bureau of Land Management. We feel that the administration request for $1,100,000 for recreational facilities within public ownerships administered by the BLM is a very modest request, particularly so when it is known that on June 30, 1966, there was only one developed recreational site for every 4½ million acres of Bureau of Land Management and other publicly administered lands.

At least $1 million should be put into recreation facilities on the public lands so that we would have additional assurance that at the end of a 4-year period we would be prepared for the avalanche of visitors to these public ownerships. We believe it is absolutely essential that the full request of $4,650,000 for land classification and mineral examination be retained. We hope that the committee will recommend against the decrease of $835,000 from last year's appropriation for soil and water conservation work on BLM jurisdiction. An increase in the budget estimate of at least $2½ million in this item could be used for this necessary work to avoid further erosion of the value of our public domain.

Chairman HAYDEN. Thank you, sir.

STATEMENT OF DR. SPENCER M. SMITH, JR., SECRETARY, CITIZENS COMMITTEE ON NATURAL RESOURCES

SUPPORT OF APPROPRIATIONS FOR DEPARTMENT OF INTERIOR

Chairman HAYDEN. Dr. Spencer M. Smith, Jr., secretary, Citizens Committee on Natural Resources.

Mr. SMITH. Thank you, Mr. Chairman.

(The statement follows:)

Mr. Chairman and members of the committee, I am Dr. Spencer M. Smith, Jr., Secretary of the Citizens Committee on Natural Resources, a national conservation organization with offices in Washington, D.C.

We wish to indicate to the Committee our support of the Interior appropriations for FY 1968. The very nature of details of this budget are beyond our resources to comment on in full, but we feel the need to communicate to the Committee some highly significant areas that in our judgment are worthy of special attention.

BUREAU OF SPORT FISHERIES AND WILDLIFE

We feel the appropriations requested by the Bureau are lacking in two important areas. One is the funds affecting the programs of 18 research stations in the approximate amount of $440,000 which is vitally needed if these programs are to continue uninterrupted. It has been the practice in too many instances by administration after administration to reduce their requests for research when faced with a tight budget situation. The demands of civilization have caused such sweeping changes in much of the habitat and environments of wildlife that a heavy burden has been placed upon the professionals in wildlife management. Necessary research activities and appropriate planning, which embody changes in past plans, are mandatory, if there is to continue to be a vigorous wildlife population. We would hope to have included in this next year's budget this amount, since the failure to do so will cause a number of programs to be interrupted seriously. It is beyond our knowledge to assess whether there is a hard and fast ceiling for the funds of the Bureau, as such, but even in the event that such a condition does exist, we would strongly urge the inclusion of these funds as one of the highest priorities.

In a genuine sense these funds represent an important investment in the future of our fish and wildlife populations. We have been forced to agonizing reappraisals in many instances of the past, which may not have been necessary had our research activities been kept intact.

Secondly, we would hope that funds for research for minor species, such as mourning doves, snipe, woodcock, etc., could be included. Reports continue to come to us in abundance as to the need for accelerating research in these minor species as to their present condition and possibilities for better management. Funds that could achieve this have not been requested on many occasions of the past due to budget restrictions in general and a strong pressure for other demands upon the Bureau. Time is running out, however, and the need for greater concern as to these minor species has become more manifest in the past few years.

It has been estimated that $1,300,000 is required to effect a necessary program involving these species. Whether the entire amount need be appropriated in this one instance is not known conclusively. It has been suggested, by some most knowledgeable in this field of interest, however, that $250,000 could be used productively in FY 1968. Because of the delay in such research, others have contended that the quarter of a million is simply a token amount in terms of the overall problem. As we are able to envisage the program, however, this amount appears to us to be an appropriate start and we would rather have the Bureau in a posture of using a relatively small amount efficiently than a significantly larger amount inefficiently.

BUREAU OF OUTDOOR RECREATION

We would like to pay special tribute to the Bureau of Outdoor Recreation which has had the most formidable of all tasks, that is, starting anew a program vitally needed and earnestly demanded by impatient Americans. The creation of the Bureau occurred in the 88th Congress (PL 88–29) and upon its creation was given the significant task of administering much of the Land and Water Conservation Fund Act passed three years later (PL 88–578). In addition to these responsibilities it coordinates a number of projects under the Federal Water Projects Recreation Act passed in the 89th Congress (PL 89–72). Also ,the Bureau cooperates with the Department of Housing and Urban Development regarding the Open Spaces Program for urban areas.

The Bureau's request for this year appears to us as modest relative to their functions. The Bureau's own operation requests only an increase of $250,000 over the appropriation for FY 1967. Of this increase $100,000 will enable the Bureau to serve in a staff function to the President's Council and Advisory Committee on Recreation and Natural Beauty. This organization, as we are sure the Committee understands, is performing a great service in the overall planning for recreation and natural beauty. At times the influence of this organization appears obscure but is brought to the fore quickly, when its outstanding work is indicated in measures introduced in the Congress. The remaining $150,000 is occasioned by the previously authorized study of the Connecticut River Valley, and $75,000 will be utilized by the Bureau in studying a nationwide inventory of coastal and inland islands. President Lyndon B. Johnson has tendered to the Bureau a rather special task in assessing these coastal and inland islands and waterways.

The Land and Water Conservation Fund which was established in 1965 while boasting of revenues over $200,000,000 continues to fall short of recreation needs. It is evident, especially in the Federal sector, that many projects, which have been authorized will not be able to be funded if the schedule of the last two years is continued. We support, therefore, the Administration's request of $75,225,000 for the National Park Service, Forest Service, Bureau of Sport Fisheries and Wildlife, and the Bureau of Outdoor Recreation. This would entail an advance of $32 million from the general fund of the Treasury with the balance drawn from the revenues of the Land and Water Conservation Fund.

The escalating cost of land values has made acquisition a difficult task. Thus, without the additional $32 million advance, a number of projects already authorized will in all probability be in serious jeopardy of final completion if such an advance was not forthcoming.

While this method is helpful in closing the gap for FY 1968, it is hoped that a more permanent means will be found to expand the revenues allocated to the Land and Water Conservation Fund and in so doing overcome our serious deficit in recreation areas, that still exists despite the excellent efforts of all concerned.

NATIONAL PARK SERVICE

New legislation in the 89th Congress (PL 89–665) authorized the National Park Service to expand their activities in preservation of historic properties. The request of $2,323,000 for the 1968 FY is inclusive of an increase of $2,000,000 over the last fiscal year and represents the expansion of activities envisaged in the new Act. It is our hope that this program can go forward with the new authorization. Previous acts of the past were somewhat fragmented and did not provide for the full implementation of the services that could be employed by the Service.

The Everglades National Park represents a serious and a major concern to every conservation group in the United States. The fresh water supply of the Park has been threatened on two counts. First, the failure to achieve some agreement with the Corps of Engineers and the Central and Southern Florida Flood Control projects to the north of the Park regarding the supply of fresh water and second, the proposal to remove the earth plug in Canal 111 at Highway No. 1, north and east of the Park. In the latter case, if no barrier is constructed, removing the plug will allow salt water to intrude into the fresh water environment of the Park. Despite a series of studies and proposals, the supply of fresh water is not now guaranteed and though temporary measures have been taken, primarily motivated by an excess of water and runoff in the flood control projects, no permanent solution has been found.

We are not aware of any particular jurisdiction that this Committee has relative to the plight of Everglades National Park, but we hope the Committee in being apprised of the situation may find solutions that have not been found by others.

The Piscataway Park has had a most confused history. Originally $937,000 was authorized in the 87th Congress (PL 87–362) of which approximately $300,000 was appropriated. Last year the total authorization was increased to $4,100,000 leaving $3,700,000 to be appropriated. In view of the long-term difficulty of implementing this Park and in view of the number of donations by individuals and philanthropic organizations, which have granted the Federal Government lands in fee and in less than fee, we hope this acquisition can be completed by August 7, 1967, at which time the donations revert back to the owners unless the Secretary of the Interior can certify that there is a de facto Park. If the full amount is appropriated we understand that the Federal Government, by moving with dispatch, will be able to meet the deadline.

We are hopeful also that the appropriations for National Park acquisitions can be accomplished in order to reduce the backlog of those projects that have been authorized but not yet funded. We would urge also that the Service continue their exploration of new land acquisition tools such as scenic easements, zoning, purchase and lease back, and other means that may serve the purposes of the Government without taking the land in fee title. With greater utilization and development of these tools, even though negotiation is often more extended, it would appear to represent a saving on the part of the Federal Government.

While our general attitude regarding the efforts of the National Park Service is one of commendation, we must say in all candor that we are deeply concerned about the location and utilization of some roadway plans. The National Park Act of 1916 is quite specific in terms of the purpose of National Parks. It is our judgment that the Bryson City Road of the Great Smokies National Park is not compatible with park values. This request of $1,298,500 could be reduced from the request of the Park Service to the greater good of the Great Smokies

National Park. There is always the problem, with which we are not unsympathetic, of trying to determine when capital improvements, especially in road building, in order to suit the convenience of the people destroys the very values for which people come to the Park in the first place. We feel that Bryson City Road is essentially in this category.

We thank the Committee for the opportunity of presenting our views on these particular portions of the budget of the Department of the Interior.

STATEMENT OF DR. CARL MUSCHENHEIM, CHAIRMAN, NATIONAL COMMITTEE ON INDIAN HEALTH OF THE ASSOCIATION ON AMERICAN INDIAN AFFAIRS, INC.

DIVISION OF INDIAN HEALTH

Chairman HAYDEN. Dr. Carl Muschenheim, chairman, National Committee on Indian Health of the Association on American Indian Affairs, Inc.

PURPOSE OF ASSOCIATION

Dr. MUSCHENHEIM. Mr. Chairman and members of the subcommittee, thank you for this opportunity to appear on behalf of the Association on American Indian Affairs.

The Association on American Indian Affairs is a national voluntary organization founded in 1922 to assist American Indian and Alaska native communities in their efforts to achieve economic and social equality with other American communities. Its National Committee on Indian Health is composed of doctors, anthropologists and tribal and public health workers who are experienced in the conduct of health programs on the reservations.

In recent years our association has appeared before committees of the Congress in support of such measures as the transfer of health services from the Bureau of Indian Affairs to the Public Health Service in 1955; Public Law 86-121, the Indian Sanitation Facilities Act; the establishment of a preventive mental health program beginning with a pilot activity at Pine Ridge, S. Dak., during the fiscal year 1966; the establishment of a pilot preventive mental health project in Alaska in fiscal year 1967; the initiation of a 5-year comprehensive trachoma control program, also in fiscal year 1967.

Our association wishes to compliment the subcommittee on its pioneer action in bringing into being these two preventive mental health programs as well as a third one in the Southwest. We are hopeful that the positive impact of these programs on the populations served will win early and general recognition, thereby demonstrating the value and economy of establishing additional community-oriented preventive mental health programs to serve other Indian communities. Our association applauds the subcommittee for having established the aforementioned trachoma control program in fiscal year 1967. The eradication of this major cause of blindness among the Indian people fully merits the high priority assigned to it by the Division of Indian Health and by this subcommittee.

RECOMMENDATION

My purpose in appearing here today is (1) to comment on the budget request of the Division of Indian Health for fiscal year 1968 in light of Indian health needs, and (2) to recommend for your consideration appropriations for the provision of water and sanitation facilities beyond the amounts appearing in the Division's 1968 budget request; namely:

> An annual appropriation of $18 million for the construction of sanitation facilities in order that the existing backlog of need for such facilities be eliminated within a period of five to six years.
>
> An annual appropriation of $5,925,000 for field health services in support of a sanitation construction program of the recommended magnitude.

IMPORTANCE OF SAFE WATER SUPPLY

The provision of a safe water supply and facilities for the sanitary disposal of human waste is the most crucial and far-reaching step which can be taken to eliminate a large residue of illness which continues to plague the Indian and Alaskan native populations but which has long since been reduced to manageable proportions among the great majority of the rest of the population of the United States. These environmentally conditioned diseases are a subject of intense concern to our association and its National Committee on Indian Health, and they formed the topic of our Fourth National Conference on Indian Health, which was held in New York City in the fall of 1966.

DISEASES INVOLVED

By and large, the diseases with which we are here concerned are commonplace, and exist to some extent among the population as a whole. We are referring to the common respiratory infections—upper respiratory infections and their dangerous sequel, otitis media or inflammation of the middle ear, an important cause of hearing loss and consequent learning impairment among Indian children (for example 25 percent of the Eskimos in the Bethel area have significant hearing loss from otitis media); the lower respiratory infections: bronchitis, influenza, and pneumonia. I also refer to tuberculosis, still an important environmentally related disease, although one for which considerable progress has been made toward curbing the devastation which it once wreaked on the American Indian and Alaskan native populations. The incidence of infectious respiratory disease among the American Indians, as reflected in hospital discharge rates, is five times that of the rest of the population of the United States. Among the Alaskan natives the incidence is seven times as great.

Streptococcal sore throat occurs eight to 10 times as frequently among this group as among other Americans. In 1964 deaths from influenza and pneumonia among the Indians occurred twice as frequently as among the general population. Among the Alaskan natives, death from these illnesses was three times as likely.

There are also the infectious gastroenteric diseases, the most important of which is infantile dysentery. Dysentery occurs 35 times more frequently among the native populations as among the population in general. The mortality due to dysentery among the Indians and Alaskan natives is 17 times that of the U.S. population as a whole.

Evidence is emerging that nonfatal dysentery among infants may leave significant disability in its wake—that the severe dehydration which may accompany this condition may lead to permanent brain damage and consequent falloff in educability of the stricken child.

There are infectious meningitis and encephalitis, which, when not fatal, are apt to leave severe brain damage in their wake. It is estimated that 50 percent of the mental retardation of Alaska natives is due to residual brain damage from acute infestious disease suffered in infancy.

Other conditions which prevail at peak incidence where housing, water, sanitation, and economy are poorest are trachoma, infestious skin disease and physical trauma.

In 1965 more than 70 percent of pediatric hospitalizations of children under 5 years of age among the American Indian and Alaskan native populations were for diseases associated with the environment in which they live.

PROGRESS MADE BY DIVISION OF INDIAN HEALTH

Considerable progress has already been made by the Division of Indian Health in curbing the onslaught of those diseases which lend themselves to programs of management and prevention by medical techniques. In Alaska, for example, the tuberculosis attack rate has been reduced from 80 percent by age 3 (meaning that 80 percent of the children were infected with tuberculosis by age 3) to 0.5 percent within a 5-year period. This is an outstanding achievement and a tribute to the energy and resourcefulness which the Division has brought to bear on the massive medical problems of the Alaskan natives. All the same, the incidence of tuberculosis among this group remains 21 times higher than that of the general population.

AREA REQUIRING ATTENTION

Attention needs not to be directed to a sizable core of diseases which cannot be efficiently brought under control by a program of active medical interventive and preventive techniques comparable to that which has been launched against tuberculosis in Alaska. These illnesses are even more intimately bound up with the physical environments in which people find themselves. Neither drugs nor vaccines are available or likely to become available which can effectively cure, prevent, or limit the constant cycle of reinfection which is the lot of the majority of the American Indian and Alaskan native children. It is only by an effective attack on the medically dangerous physical conditions in which so many Indian and Alaskan native families are virtually trapped that we can effectively reduce the attack rates of these illnesses, diminish the baleful toil of infant mortality and eliminate the frightful wastage of human and economic resources taken by the disabilities they produce.

For certain of these conditions, otitis media, for example, precise environmental linkages, that is, mechanisms of transmission and role of factors such as adequate living space, proper heating and ventilation, and the availability of a safe water supply and sanitary facilities are not clear, while in others, such as infantile diarrhea, the pertinent environmental factors can more readily be identified. Nevertheless, for this entire group of diseases, the relevance of the physical environment is most emphatically demonstrated by the positive statistical correlation between inadequate housing and lack of safe water supply and sanitary facilities on the one hand and high attack rates and increased severity of these illnesses on the other. For example, the dysentery attack rate is 413 cases annually per 1,000 population in Indian communities where there is no on-premises water supply. With an inside water supply, the rate falls to 139 cases per 1,000 population. A further example is trachoma, which is virtually nonexistent in areas where there is an indoor water supply.

Our association recognizes that the provision of a safe physical environment will not of itself constitute an adequate attack on the vast residue of illness to which we are here addressing ourselves. There must, of course, be concomitant progress in the areas of health education and economic development. We applaud the successes of the Division of Indian Health in attempting to provide, along with sanitary construction, and education in the principles and techniques of personal and domestic hygiene and an orientation toward community involvement in improving the level of health. In these areas the Indian people themselves are the most valuable resource, and their active leadership and participation in community health projects deserves wide recognition.

PRESENT INDIAN HEALTH STATUS

The goal of the Division of Indian Health is to elevate the health status of American Indians and Alaska natives to a level comparable with the general population.

Marked progress has been made toward that goal since the transfer of program responsibility to the Public Health Service from the Department of the Interior in 1955. Infant mortality is down 41 percent among Indians and 31 percent among Alaska natives. Tuberculosis deaths among Indians have declined 57 percent and among Alaska natives 86 percent. Deaths from influenza and pneumonia are approximately 30 percent lower. Deaths from gastroenteric diseases have declined 60 percent among Indians.

Despite these strides forward, the program remains far short of its goal. Present comparisons with the general population are highly unfavorable, as I have indicated in my testimony. Poor environmental health conditions and a low level of family and community knowledge in the application of modern health measures contribute heavily to these intolerably high rates. Today approximately two-thirds of American Indians and Alaska natives haul their drinking water, in some instances, a mile or more, from potentially contaminated sources, in unsanitized containers, and have grossly inadequate waste disposal facilities or no facilities at all.

Most Indian and Alaska natives live in poorly heated, overcrowded homes, many with more than five people to one room. The Bureau of Indian Affairs has identified a current need for 65,000 housing units. However, in the last 5 years only 1,107 units of public housing have been built and occupied.

It is the firm belief of our National Committee on Indian Health that increased preventive medical services, including an aggressive program of health education, and improved environmental conditions hold the key to further progress.

1968 Budget Request

With the understanding and support of the Congress, funds available to the Division of Indian Health have increased steadily since July 1, 1955. The funds have made it possible to accommodate a substantial increase in patient load in the hospitals, clinics, and other outpatient facilities of the Division as well as those facilities under contract in non-Indian communities.

Over the years our committee has been concerned with the slow growth in the field health activities of the Division's program. Preventive and field clinic services have failed to keep pace with curative services, and appropriations for environmental sanitation facilities have lagged far behind recognized need, resulting in an unbalanced general health program and inefficient utilization of existing resources.

In fiscal year 1966 the Congress took an important step toward improving environmental health conditions by appropriating $2.2 million for construction of sanitation facilities in connection with approved public housing projects which had been stalled for lack of sanitation funds.

Analysis of the President's budget for 1968 indicates a program activity budget for the Division of Indian Health in the amount of $82,133,000, representing a gross increase of $5,809,000 over 1967 for the same activities. Of this amount $1,754,000 of the increase must be utilized for mandatory pay increases and other statutorily required costs, which reduces the net increase to $4,055,000. This represents a net program increase which falls short of the annual increment of $5 million that the Association on American Indian Affairs has, for the past several years, recommended for use in program activities by the Division of Indian Health in order that the growth of the preventive health program might measure up to the curative phase of the Division's operation in a balanced total program.

Our analysis of the President's budget for 1968 also indicates an appropriation request of $10,464,000 to correct existing gross sanitation deficiencies in the beneficiary communities. This represents a net program increase of $4,728,000 over fiscal year 1967, a significant increase. However, the total backlog need for sanitation facilities is estimated to be at least $100 million. At the present rate of expenditure it will take approximately 10 years to catch up with this backlog.

Recommendations

The Association on American Indian Affairs respectfully submits the following recommendations to this subcommittee:

1. An annual appropriation of $18 million for the construction of sanitation facilities in order that the existing backlog of unmet need be eliminated within a period of 5 to 6 years.
2. An annual appropriation of $5,925,000 for field health services in support of the sanitation construction program.

3. We also recommend that the committee explore with the Division of Indian Health the current status of nurses' salaries in order to determine whether recent pay increases awarded to nurses in non-Federal institutions have caused the salaries of nurses within the Division to fall below a competitive level.

4. We further recommend that the subcommittee explore with appropriate Federal agencies the feasibility of establishing a community transportation system on the reservations in support of medical, educational, and other community needs. The delivery of medical services and participation in community programs on the reservations is frequently greatly restricted because of a lack of adequate transportation facilities.

Our association believes these recommendations are fully justified in view of the now prevailing health conditions among Indian and Alaska native citizens.

STATEMENT OF EDWARD O. PLUMMER, RESOURCES DIVISION, NAVAJO TRIBE OF INDIANS

PREPARED STATEMENT

Chairman HAYDEN. The next witness is Mr. Edward O. Plummer of the resources division, Navajo Indian Tribe, who will speak for the director of resources, Mr. Ned A. Hatatli.

Mr. PLUMMER. Thank you, Mr. Chairman. May I submit Mr. Hatatli's statement for the record?

Chairman HAYDEN. You may do that.

(The statement follows:)

STATEMENT OF MR. NED A. HATATLI, DIRECTOR OF THE RESOURCES DIVISION OF THE NAVAJO TRIBE OF INDIANS

Mr. Chairman and members of the committee, my name is Ned A. Hatatli. I am the Director, Resources Division, of the Navajo Tribe of Indians with Headquarters in Window Rock, Arizona.

In behalf of the Navajo tribe of Indians, I appreciate the opportunity to appear before your Committee to present the views of the Navajo tribe concerning the appropriations requested by the Department of the Interior, Bureau of Indian Affairs, for the Navajo irrigation project and to ask this Committee and Congress to appropriate the $15,000,000 originally planned for use during F.Y. 1968.

The primary objective of the Navajo Irrigation Project is to bring the highest economic returns to the Navajo Indians consistent with optimum and desired levels of living and community life. The estimated population of the Navajo exceeds 110,000 with an estimated work force of 30,000 people. This has always been an area of underemployment, and at no time in recorded history have the people on this reservation had sufficient income to approach the standard of living enjoyed by their non-Navajo neighbors. This is the most graphically illustrated by the fact that unearned cash income this last year (from welfare and surplus commodities) has nearly doubled the earned income from livestock and agriculture. Economically, the problem on the Navajo Reservation is one of combating the result of underdevelopment and underemployment to establish an economy capable of supporting the population at an acceptable level.

Each year in which the requested appropriation is cut, it means another year before water would be delivered, and in the meantime an additional 3,000 persons each year are added to the work force with perhaps two-thirds going unemployed. These appropriation cuts will continually delay the project and the overall objective to provide improved and additional means of livelihood for thousands of presently impoverished Navajos. Senator Anderson of New Mexico in a letter dated December 1, 1965 to the Secretary of Interior stated that it will be 35 years before the Navajo Project is completed at the rate we are going; and this project was to be completed in 12 years from the first contract.

The Navajo Tribe is demonstrating the need for filling the education and technical gaps involved in irrigated agriculture. The Tribe has made an agreement with the New Mexico University Agriculture Experiment Station and the University is now constructing an experimental farm on the project lands to provide information in irrigation practices for use by Navajo farmers.

The Navajo Tribe has employed an experienced farmer to operate a demonstration farm on the Hogback Project to train Navajos assigned to the tribal training program in vegetable farming. This has been very successful the last season and this year we have planned to expand this type of cropping. The greatest value of this demonstration of experimental farming will be the personnel teaching and relationship in working with Navajo trainees on the farm.

We are presently negotiating with a private firm for the possibility of developing a large commercial operation, wherein, by agreement with the private firm, it has consented to train additional Navajo farmers in a commercial type farming.

The Navajo tribe has deep concern and a feeling of frustration with regard to both the progress and physical capacities at which the Navajo irrigation project is being constructed. Although earlier studies and proposals were made, the congruous sequence of studies and plans which ultimately culminated in the enactment of the Navajo irrigation project on June 13, 1962, began with the directive of May 20, 1953 from the Secretary of the Interior to the Commissioners of Indian Affairs and Reclamation to report on the feasibility of what came to be known as the Navajo Project. This feasibility study was reported in January, 1955 and proposed that the Navajo project be constructed with sufficient capacity to divert 630,000 acre-feet per year and to irrigate 137,250 acres.

Next, by letter dated December 12, 1956 the governor of New Mexico proposed to the Secretary of Interior that the Navajo Project be reduced to a diversion capacity of 508,000 acre per year and to irrigate 115,000 acres. This proposal was accepted by the Navajo Tribe, as expressed in the resolution of the Advisory Committee of the Navajo Tribal Council dated January 9, 1957 (Exhibit 1), in accordance with an agreement between the Navajo Tribe and representatives of the state of New Mexico providing that in exchange for this reduced capacity and acreage, all irrigated land within the project would be developed solely for Indian use. The state of New Mexico confirmed this agreement and expressed its desire to proceed in accordance therewith by a letter from Governor John F. Simms to Fred E. Seaton, Secretary of the Interior, dated December 12, 1956. (Exhibit 2.)

Consistent with that agreement, the Bureau of Indian Affairs supplemented the January 1955 feasibility report with a report dated March, 1957 in which it stated that the proposal to reduce the acreage to 115,000 acres had merit and a possible reduction in cost could be effected.

During the discussions and negotiations between the Navajo tribe, the states involved and the Department of the Interior, the point arose that the Navajo tribe had a paramount right to the waters of the San Juan river, as decreed in the *Winters* doctrine (and confirmed by other Supreme Court decisions), which could be raised at a later date by the Navajo Tribe to claim priority to water of the San Juan River in years of shortage, in preference to the other users in New Mexico. To allay this concern, the Navajo Tribe agreed to waive its rights of priority under the *Winters* doctrine as consideration for receiving the assurance that the project would not be reduced below an area of 110,630 acres and that the diversion to the project would not be reduced below 508,000 acre feet per year. This agreement was expressed in the statement of John H. Bliss, Upper Colorado Commissioner for New Mexico, (Hearing before the House Subcommittee on Irrigation and Reclamation, 86th Congress, Second Session, May 20, 1960, page 89) and in Navajo Tribal Council resolution CD–86–57 (Exhibit 3).

Next in this series of events, the Act of June 13, 1962 (76 Stat. 96) was passed, authorizing the construction of the Navajo Irrigation and the San Juan Chama projects. This Act provided in part that the Secretary of the Interior is authorized to construct the Navajo Irrigation Project with sufficient capacity to irrigate 110,630 acres of land and to divert 508,000 acre feet of water per year. The Act also authorized the Secretary to construct the Navajo project with sufficient capacity to supply municipal and industrial water requirements and for other miscellaneous purposes over and above the diversion requirements for irrigation. The Act authorized $135,000,000 (based on June, 1961 prices) to be appropriated for the construction of these facilities.

Next, Senator Clinton P. Anderson proposed to the Secretary of the Interior that a complete reevaluation of the Navajo Irrigation Project be conducted, and the Secretary, in his letter dated February 16, 1966 to Senator Anderson, advised that he was asking the Bureau of Reclamation to conduct such a reevaluation. It thereafter became known to the Navajo Tribe that the construction of the main canal from the Navajo Dam, which had originally been planned to have a capacity of 2,100 cubic feet per second (required to transfer directly sufficient water to irrigate 110,630 acres), had already been commenced but with a capacity of only 1,800 cubic feet per second. The Navajo Tribal Council opposed the making of this reevaluation survey by resolution CAP–56–66 passed on April 28, 1966. (Exhibit 4).

The reevaluation of the Navajo Irrigation Project was made nevertheless, and a preliminary draft of a report was submitted to the Tribe in August, 1966, among the findings of which were the following:

(a) That the capacity of the main tunnel coming from the Navajo dam should be reduced from 2,100 cfs to 1,800 cfs;

(b) The tunnel capacity of 1,800 cfs would not be adequate to irrigate 110,630 acres unless another reservoir, called the Gallegos Reservoir, were constructed;

(c) That even if the Gallegos Reservoir were constructed, the capacity of the Navajo Project would not be sufficient to deliver water for municipal and industrial requirements during the irrigation season and the only way any municipal and industrial requirements could be satisfied would be for those cities and industries to build their own supplemental storage terminals limited in location to the Burnham area of New Mexico;

(d) The reevaluation report states on page IV–6 of its Appendix that: "Therefore, it is the recommendation of this committee that the size of the works be of such size as to permit the irrigation of *not less than 90,000 acres* with a *potential* expansion to 100,000 or 110,000 acres *dependent upon industrial development*." (Emphasis added) This means clearly that any water to be used for municipal or industrial requirements must be taken from the supplies otherwise available for irrigation, rather than being supplied through facilities capable of furnishing municipal and industrial quantities above those required to irrigate 110,000 acres as authorized in the Project Act.

In addition to this series of reductions in the capacity of the Navajo Irrigation Project, set forth above, the time at which the first water would be delivered to the irrigated lands has been delayed seriously.

The Bureau of Indian Affairs has presented to this Committee and to the Senate Interior Appropriations Subcommittee that $5,300,000 is required for continuing the construction of the Navajo Project during fiscal year 1968. This amount has been reduced from $24,700,000 originally planned for construction during F.Y. 1968 and from $15,000,000 planned last year for construction during F.Y. 1968.

Robert L. Bennett, Commissioner of the Bureau of Indian Affairs, stated to the Senate Interior Appropriations Subcommittee on March 2, 1967 that the slow down in providing funds for the Navajo Irrigation Project will cause a delay in the delivery of first water to the lands by 2 or 3 years. The project data sheet prepared by the Bureau of Indian Affairs and Bureau of Reclamation shows only that the completion data of the Navajo Project will be "after fiscal year 1973."

I wish to mention briefly the San Juan-Chama Project which is the companion to the Navajo Irrigation Project. Both projects were authorized by the Act of June 13, 1962 and both will be supplied with water from the Navajo Reservoir. The San Juan-Chama Project will divert water out of the San Juan River basin into New Mexico to be used for irrigation and municipal and industrial requirements en route to and in Albuquerque, New Mexico. Although we would expect these two projects to progress at approximately the same rate, I wish to call the Committee's attention to what seems to be striking differences in the manner in which each has been handled:

(a) The reports from the Bureau of Reclamation show that there has been no change in the originally planned capacity of the San Juan-Chama Project nor in the land area which it will be capable of irrigating. I have mentioned before, the reductions which have been made in the Navajo Irrigation Project.

(b) The estimated completion time of the San Juan-Chama Project has been delayed only one year from F.Y. 1970 to F.Y. 1971, in contrast with the minimum of a three year delay in the Navajo Project, from F.Y. 1971 to sometime after F.Y. 1973.

(c) The $12,862,000 requested for the San Juan-Chama for F.Y. 1968 is a decrease of only 25% from the $17,026,000 estimated a year ago to be required for F.Y. 1968.

(d) Finally, the total funds authorized for the San Juan-Chama Project ($85,828,000) is only two-thirds the amount authorized for the Navajo Project ($135,000,000), that $12,862,000 requested for the San Juan Project for F.Y. 1968 is more than double that requested for the Navajo Project.

Another feature present in the San Juan-Chama development, which causes my people concern, was expressed in the 87th Congress by the House of Representatives Report No. 685, page 9, as follows:

"The Committee understands that the capacity which is frequently referred to as 'excess' and which would be necessary if the project were later enlarged will also serve a useful purpose in connection with the initial stage in that it will permit more efficient operation of the initial stage. In adidtion, should *additional diversions be possible* sometime in the future because of favorable water conditions, shifts in water use, etc., the cost of adding the capacity at that time would be many times the cost of building this capacity into the presently proposed works.

The Committee took the position of not objecting to including the excess capacity since New Mexico feels that the *possibility of future diversions* warrants the relatively small expenditure at this time and the state is willing to repay the cost of providing the *excess capacity* as a part of the project cost from revenues in the basin fund assigned to New Mexico." (Emphasis added.)

The existensce of this excess capacity and the continuation of the construction of the San Juan-Chama project almost on schedule, considered in contrast with the reductions and delays in the Navajo Irrigation Project, give rise to the great concern that water which would have been used for the originally planned capacity of the Navajo Project will now be diverted to the State of New Mexico through this "excess" capacity.

I wish to make clear that the facts I have stated have not been presented to this committee for the purpose of showing bad faith on the part of the states involved, any of the Bureaus of the Department of the Interior or of Congress in causing the delay in completion or in reducing the capacity and the area to be irrigated by the Navajo Project. These facts have been brought to the attention of this committee to show that, if the appropriations are reduced again this year or in subsequent years, these reductions will form another link in this chain of events, reducing drastically the benefits of the Navajo Irrigation Project to the Navajo Tribe.

The situation faced by the Navajo Tribe is simply this: the total demand of the state of New Mexico and the Navajo Tribe is greater than the available supply of water from the Navajo reservoir. Any delay or reduction in the capacity and ability to use that water on the part of one of the projects will be to its detriment and to the benefit of the other project. The Navajo Tribe fears that this has occurred to the benefit of the San Juan-Chama Project and to the state of New Mexico (outside the Navajo Reservation) and that it will occur to a greater degree if the disproportionate appropriation of funds is authorized by Congress.

The Navajo Tribe respectfully asks this committee and Congress to recognize the inequity and anomaly in this situation. The United States by its Congress, in its position as guardian and protector of Indian tribes should not, consistent with this position, permit this disparity between the treatment of its ward and one of the States.

In conclusion, we ask that the total amount of $15,000,000 originally planned for construction of the Navajo Project during F.Y. 1968 be appropriated and that this committee take cognizance of the needs of the Navajo Tribe in considering and appropriating the funds for the Navajo Project in subsequent years to permit the Navajo Project to be completed as nearly as possible on schedule.

Thank you.

EXHIBIT 1

RESOLUTION OF THE ADVISORY COMMITTEE OF THE NAVAJO TRIBAL COUNCIL

Approval of Proposal of Governor of New Mexico in His Letter Dated December 12, 1956, to the Secretary of the Interior Concerning the Navajo Irrigation Project

Whereas:

1. The Navajo Irrigation Project as proposed in the Feasibility Report dated

January, 1955 was to include two divisions:

(1) The Shiprock Division of 109,000 acres, located entirely inside the Navajo Indian Reservation.

(2) The South San Juan Division of 28,250 acres, 26,620 acres of which are non-Indian owned and 1,630 acres by individual Indians.

2. Studies conducted by the Irrigation Engineer of the Navajo Agency since the submission of the Feasibility Report have revealed that a better cost-benefit ratio could be obtained by combining the two divisions of the Navajo Project and reducing the total project acreage to 115,000 acres. Such reduction would also save water for industrial use in connection with the proposed Utah Construction Company coal and power project.

3. In accordance with this study, in a letter dated December 12, 1956, the Governor of New Mexico proposed to the Secretary of the Interior that the two divisions of the Navajo Project is combined, and the total acreage limited to 115,000, and, in accordance with a previous understanding between the Chairman of the Navajo Tribal Council and the State Engineer of New Mexico and the New Mexico member of the Upper Colorado River Commission, that all the irrigated land within the project be developed solely for Indian use. This would be accomplished by making the irrigable Federal and State lands within the old South San Juan Division a part of the Navajo Indian Reservation, by the Navajo Tribe's relinquishing non-irrigable lands of the present reservation to the State and Federal governments in exchange for the new lands to be added to the reservation. The proposal of the Governor of New Mexico, therefore, is that although the total area of the Navajo Project should be reduced from the acreage contemplated by the Feasibility Report, the actual area for Indian use should be increased from 110,630 acres to 115,000 acres, and that the Navajo Tribe should trade non-irrigable land in New Mexico for an equal area of irrigable land.

4. Before the Secretary of the Interior can request the Congress to authorize and appropriate funds to start construction of the Navajo Project, he must submit the plan to the States of Utah, Colorado and Wyoming giving them 90 days in which to return their comments. The Secretary will not submit a plan based on the above-described proposal of the Governor of New Mexico without an expression of approval from the Navajo Tribe. It is essential that the plan be submitted to the States without delay, so that their comments can be received at an early date and the plan sent to Congress in time for authorization at its current session.

Now therefore be it resolved that:

1. The Advisory Committee of the Navajo Tribal Council hereby approves and urges the early authorization by Congress of the Navajo Irrigation Project, in accordance with the Feasibility Report dated January, 1955, with the changes recommended in the letter of the Governor of New Mexico to the Secretary of the Interior dated December 12, 1956, to wit:

"The lands developed should be solely for Indian use, should include the most suitable lands in the Shiprock and South San Juan Divisions and should not exceed 115,000 acres with a diversion requirement of not to exceed 508,000 acre feet per annum."

2. The Advisory Committee further recommends inclusion in the act of Congress which will authorize construction of the Navajo Irrigation Project a provision to permit the addition of irrigable State or Federally owned lands in the South San Juan Division to the Navajo Indian Reservation in exchange for equal areas of non-irrigable lands contiguous to the boundaries of the present Reservation in New Mexico to be conveyed, with the approval of the Navajo Tribal Council, to the State of New Mexico and the Federal Government respectively. In the alternative, the Advisory Committee recommends that such legislation authorize the Navajo Tribe to purchase such lands and that such lands after such purchase be held in trust by the Federal Government for the Navajo Tribe.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Advisory Committee of the Navajo Tribal Council at a duly called meeting at Window Rock, Arizona, at which a quarum was present, and that same was approved by a vote of 9 in favor and 0 opposed, this 9th day of January, 1957.

SCOTT PRESTON,
Vice Chairman, Navajo Tribal Council.

EXHIBIT 2

STATE OF NEW MEXICO,
STATE ENGINEER OFFICE,
Santa Fe, December 12, 1956.

Hon. FRED E. SEATON,
Secretary of the Interior,
Washington, D.C.

MY DEAR MR. SECRETARY: Please refer to your letter of August 2, 1956 with which you submitted reports on the San Juan-Chama and Navajo Projects for consideration by the State of New Mexico. As you have recognized, coordination of these two projects and allocation of use of San Juan River water poses many very difficult problems for the State of New Mexico. The Interstate Stream Commission, with invaluable assistance from your offices, has carefully considered the problems and, at their meeting of November 26 approved the enclosed resolution. This resolution, in which I concur, expresses the position of the State of New Mexico in regard to use of water by both San Juan-Chama and Navajo Projects.

The essence of the Interstate Stream Commission resolution is a substantial reiteration of the State's position evidenced by the letter from the Governor to the Secretary of the Interior dated March 4, 1953, which established for study purposes a 630,000 acre foot diversion capacity for the Navajo Project and a 235,000 acre foot diversion capacity for the San Juan-Chama Project.

In view of the current water shortages in the Rio Grande Basin, and in view of potential large demands in that basin, it is essential that construction of the San Juan-Chama Project be initiated at the earliest possible date, and that provision be made in this construction for an ultimate diversion of 235,000 acre feet per annum. However, because of uncertainty about ultimate requirements in both the Rio Grande and San Juan Basins, and because it is anticipated that a number of years must pass before financing is available for the construction of a full 235,000 acre foot diversion project, it is not desirable at this time to make final decisions fully allocating the San Juan waters between the two basins. Accordingly, to initiate the development of the San Juan-Chama Project, New Mexico desires Congressional approval of the San Juan-Chama Project involving an average annual diversion of 235,000 acre feet on the basis of the Bureau of Reclamation report entitled, "San Juan-Chama Project, Colorado-New Mexico, November 1955" with authorization for immediate construction of an initial stage having an average annual diversion of not to exceed 110,000 acre feet. New Mexico intends that the water diverted in this initial stage will be used in conformity with the following priority of uses:

(a) Municipal and industrial supplies

(b) Development of water supplies for tributary irrigation units in depressed areas in northern New Mexico

(c) Supplemental irrigation

The municipal and industrial water is intended primarily to supply the City of Albuquerque; however, there is a possibility that the water requirements of other municipalities in the Rio Grande Basin may be met with water supplied by the San Juan-Chama Project. The tributary irrigation units include all those which are proposed in your November 1955 report. Water remaining after the satisfaction of priorities 1 and 2 is intended for supplemental irrigation on lands of the Middle Rio Grande Conservancy District.

The distressing poverty of the Navajo people in New Mexico is a matter well known to you. That the Congress and the President are aware of this problem is evidenced by the enactment of Public Law 485 which authorized the Navajo Storage Unit and provided that, in the event the Navajo Participating Project is authorized, the cost allocated to irrigation of Indian-owned tribal or restricted lands of the project and beyond the capability of such lands to repay, would be nonreimbursable. The State of New Mexico is also sharply aware of the plight of the Navajo people and anxious to cooperate in a solution of their problems. Conferences among Mr. Paul Jones, Chairman of the Navajo Tribal Council, and other members of the Council, engineering representatives of the Bureau of Indian Affairs and State officials have led to the decision, mutually agreed upon, that authorization of the Navajo Project should be sought on the basis of the Bureau of Indian Affairs report entitled, "Navajo Project, New Mexico, Feasibility Report, January 1955." However, the conferees have agreed and it is the desire of the State of New Mexico that the final planning of the Navajo Project effect the following changes in that report: *the lands developed should be solely for Indian use,*[1] should include the most suitable lands in the Shiprock and South San Juan Divisions and should not exceed 115,000 acres with a diversion requirement of not to exceed 508,000 acre feet per annum. It is believed that these criteria for the Navajo Project will substantially reduce construction costs and result in a better use of the water than would have occurred under the January 1955 plan.

The changes to be accomplished in final planning as set forth above will require the exchange of Federal and State lands in the South San Juan Division for lands on the Navajo Reservation. The State Engineer of New Mexico was advised by a letter from Mr. G. Warren Spaulding, General Superintendent of the Navajo Agency at Window Rock, Arizona, and concurred in by Mr. Paul Jones, that about 568.4 acres of State land would be involved in such an exchange. Exchange of these lands under conditions set forth in Mr. Spaulding's letter as satisfactory to the Tribal Council can be effected by relatively simple State administrative procedures. I presume that no difficulty would be encountered in similar exchanges of Federal land for lands on the Navajo Reservation.

Your letter also requests the views of the New Mexico Department of Game and Fish relative to the San Juan-Chama and Navajo Projects. The New Mexico Department of Game and Fish cooperated in the preparation of the Fish and Wildlife Service "Report on Fish and Wildlife Resources in Relation to the San Juan-Chama Project and Related Developments," dated September, 1955, and Mr. Homer Pickens, Director of the New Mexico Game and Fish Department has advised me that that report adequately represents the views of his department. The views of the department on the Navajo Project will be forwarded at a later date. The Governor's letter to the Secretary of the Interior dated March 4, 1953 sets forth State's policy that "transmountain water shall be used primarily for domestic, municipal and industrial supplies and for supplemental use on existing projects with deficient supplies." Consistent with that policy the State of New Mexico does not wish at this time to allocate any of the waters of the San Juan River for the betterment of fish and wildlife habitat. The State recognizes the possibilities for developing a number of desirable fish and wildlife benefits in connection with these two projects without materially increasing the cost or decreasing the amount of water available to water users under the projects. New Mexico desires to develop these benefits to the fullest extent possible consistent with the above conditions and will wholeheartedly cooperate with the Bureau of Reclamation and the Fish and Wildlife Service toward this end. With this in mind it should be pointed out that the statement that New Mexico does not wish to allocate water to fish and wildlife purposes at this time does not preclude the Fish and Wildlife Service or the New Mexico Department of Game and Fish from acquiring under New Mexico statutes, rights to the use of water.

The State of New Mexico desires that your department proceed with all practical speed toward completion of the San Juan-Chama and Navajo Projects in a form suitable for the authorizations requested above, and I trust that the advice given herein makes that possible. I wish to express the gratitude of the State of New Mexico for these excellent reports and for the cooperation and assistance that you and your Bureaus have afforded in the planning of these projects and in the resolution of our very difficult water allocation problems.

Sincerely yours,

JOHN F. SIMS, *Governor.*
By S. E. REYNOLDS, *State Engineer.*

EXHIBIT 3

RESOLUTION OF THE NAVAJO TRIBAL COUNCIL URGING AUTHORIZATION BY CONGRESS OF THE NAVAJO INDIAN IRRIGATION PROJECT AND THE SAN JUAN-CHAMA PROJECT IN NEW MEXICO AND APPROVING IN PRINCIPLE LEGISLATION PROPOSED FOR THIS PURPOSE

Whereas:

1. The Congress of the United States by Public Law 485, 84th Congress, 2d Session, 43 U.S.C. § 620, has authorized the Upper Colorado River Storage Project, which includes the Navajo Dam in New Mexico, and has appropriated funds

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[1] Italic supplied.

for the actual construction of this dam; but has not yet authorized the proposed Navajo Indian Irrigation Project, which, however, is listed in Public Law 485 for priority of study by the Secretary of the Interior in order to determine its feasibility for later authorization as a participating project of the Upper Colorado River Storage Project, and

2. The principal justification for construction of the Navajo Dam is to provide a water supply for the proposed Navajo Indian Irrigation Project and for industrial and municipal uses in the San Juan River basin in New Mexico, and

3. In order for the members of the Navajo Tribe, now comprising 85,000 people, to attain a standard of living equal to that enjoyed by the majority of the other American citizens, not only prompt construction of the Navajo Indian Irrigation Project, but also the greatest possible industrial development in the San Juan River Basin on and adjacent to the Navajo Indian Reservation are essential, and

4. In return for the generous support of the State of New Mexico for the proposed Navajo Indian Irrigation Project, and in recognition of the fact that the maximum economic development of all parts of New Mexico is a benefit to all citizens of New Mexico, including Navajo citizens of New Mexico, the Navajo Tribal Administration has supported authorization of the proposed San Juan-Chama Transmountain Diversion at the same time the Navajo Indian Irrigation Project is authorized, and

5. While the original Feasibility Report on the proposed Navajo Indian Irrigation Project, dated January 1955, contemplated a 137,250-acre project, 26,620 acres of which were to be for non-Indian use, further study, embodied in a supplemental report dated March 1957, has shown that reducing the total acreage to a net area of 110,630 acres making use of the best lands available for irrigation purposes under Navajo Dam, both on and off the present Navajo Indian Reservation, and reserving the entire project for exclusive Navajo Indian use, would result in a much more feasible project with a greatly improved cost-benefit ratio, in increased availability of water for industrial use in the San Juan River Basin in New Mexico, and consequently in greater over-all benefit to the Navajo people. Such plan would involve transfer of approximately 14,360 acres of Federal public domain, 960 acres of New Mexico State land, and 4,320 acres of privately-owned land of non-Indians to Indian Reservation status, so that the Project could be exclusively for Navajo use, and the provisions of Public Law 485 and the Leavitt Act would be applicable thereto. Such plan has been approved by the Advisory Committee of the Navajo Tribal Council on January 9, 1957, by Resolution No. ACJ-1-57, which contemplated an exchange of non-irrigable lands of the present Navajo Indian Reservation for the irrigable off-reservation lands needed for the Project, or in the alternative, purchase of the off-reservation lands by the Navajo Tribe and their transfer into trust status by Federal legislation. Further study, however, has shown that the plan of exchange is impractical because of the population displacement it would create but that purchase is feasible; and accordingly, the Advisory Committee has authorized initiation of a Tribal land purchase program to acquire the off-reservation portions of the proposed Navajo Indian Irrigation Project, and has authorized the expenditure of Tribal funds for that purpose, and

6. It appears feasible at this time to proceed with construction of only the initial phase of the proposed San Juan-Chama Project, with an average annual diversion requirement of 110,000 acre feet, building the tunnel to sufficient size, however, to accommodate the originally proposed annual diversion of 235,000 acre feet so that further stages of the project may be authorized without excessive cost when and if they become feasible, and

7. The Interstate Stream Commission of New Mexico approved the plan for reducing and consolidating the area of the proposed Navajo Indian Irrigation Project, and of purchase and transfer to trust status of the off-reservation lands required therefor, and of simultaneous authorization of the initial stage of the San Juan-Chama Project, in a meeting in Farmington on October 17, 1957. At said meeting, the Interstate Stream Commission approved proposed legislation for Congress to accomplish this purpose and further to provide for equal priority of water rights for the revised Navajo Indian Irrigation Project and the initial stage of the San Juan-Chama Project, and appointed the State Engineer and the Commission's legal advisor to work with representatives of the Navajo Tribe and the Department of the Interior to make further refinements in the proposed legislation, and

8. The State Engineer of New Mexico and the legal advisor to the New Mexico Interstate Stream Commission met in Phoenix, Arizona, on November 5, 1957, with the Solicitor of the Department of the Interior, the Field Solicitor and the Irrigation Engineer from the Gallup Area Office of the Bureau of Indian Affairs, and the Assistant General Counsel of the Navajo Tribe, and agreed on a draft of legislation to authorize simultaneously the Navajo Indian Irrigation Project and the initial stage of the San Juan-Chama Project. Such draft, with revisions in sections 4 and 7 is attached to this resolution, and

9. Subsequent to this meeting, the State Engineer of New Mexico and his advisers have meet with the Chairman of the Navajo Tribal Council and his advisers and representatives of the Bureau of Indian Affairs to discuss revision of sections 4 and 7 of the proposed legislation so as to provide for the sharing of shortages by all users of water in New Mexico from the San Juan River whose uses are hereafter initiated, and the Engineer and the Chairman and representatives of the Bureau of Indian Affairs have agreed that all such uses should share proportionately in all water shortages on the bases of their respective authorized diversion requirements, rather than on the basis of priority of appropriation.

Now therefore be it resolved that:

1. The attached proposed bill entitled "To authorize the Secretary of the Interior to construct, operate, and maintain in the Navajo Indian Irrigation Project and the initial stage of the San Juan-Chama Project as participating projects of the Colorado River Storage Project, and for other purposes," consisting of the draft made in Phoenix on November 5, 1957, but containing revisions as proposed by the State Engineer of New Mexico in sections 4 and 7 thereof, is hereby approved in principle, and the Congress of the United States is respectfully urged to enact legislation substantially semilar thereto into law at the earliest practicable date, and to provide funds for early commencement of construction of the Navajo Indian Irrigation Project and initial state of the San Juan-Chama Project.

2. The Chairman of the Tribal Council is hereby authorized to consider, and if in his discretion advisable in the interest of the Navajo Tribe to approve, further changes and modifications in such proposed legislation, provided the following principles are always adhered to:

(1) The Navajo Indian Irrigation Project not be reduced below a net area of 110,630 acres.

(2) The authorized average annual diversion requirement of the Navajo Indian Irrigation Project not be reduced below 508,000 acre feet.

(3) The Project be exclusively for Indian use, and the legislation provide for acquisition and transfer into trust status of the presently off-reservation areas susceptible to irrigation as part of the Project.

(4) No use in New Mexico of water of the San Juan River not heretofore authorized be given priority ahead of the Navajo Indian Irrigation Project.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Navajo Tribal Council at a duly called meeting at Window Rock, Arizona, at which a quorum was present, and that same was approved by a vote of 70 in favor and 0 opposed, this 12th day of December, 1957.

PAUL JONES,
Chairman, Navajo Tribal Council.

EXHIBIT 4

RESOLUTION OF THE NAVAJO TRIBAL COUNCIL OBJECTING TO PROPOSED RE-EVALUATION OF THE NAVAJO IRRIGATION PROJECT

Whereas: 1. Senator Clinton P. Anderson of New Mexico has proposed to Secretary of the Interior Udall, and the Secretary has agreed that the Navajo Irrigation Project totalling 110,630 acres of land, as authorized by the Act of June 13, 1962, (76 Stat. 96), shall be "re-evaluated" with the objective of reducing said irrigation project to approximately 77,000 acres, in order to make available more water for municipal and industrial purposes, allegedly on the grounds of increased costs of reducing the proposed acreage.

2. Factors now relied upon in proposing such changes were well known when the said Act of June 13, 1962, was passed, and the acreage deemed feasible for irrigation purposes was changed for various reasons from the original amount of 137,250 acres in the Feasilibity Report of January, 1955, to the amount of

110,630 acres for Navajos only in a Supplemental Feasibility Report of March, 1957. The project was accordingly designed, planned and authorized by Congress to provide for irrigating 110,630 acres with an average annual diversion of 508,000 acre-feet of water for this purpose—all represented to Congress as the principal reason for passage of said Act.

3. In addition to federal lands to be embraced in the Navajo Irrigation Project, the Navajo Tribe has proceeded in good faith in reliance upon said Act in purchasing privately owned land at a substantial cost to the Tribe for inclusion in said project, in order to assure and carry out the principal objective of relocating approximately 2,000 Navajo families and offering direct and indirect employment to approximately 17,000 Navajos through direct and collateral forms of employment, all as set forth in Senate Report 83 (87th Congress, 1st Sesion, pages 6–10), in a letter from the then-Secretary of the Interior to Senator Anderson and in said Act of June 13, 1962 (76 Stat. 96, Sec. 2).

4. The Navajo Tribal Council endorsed and supported the passage of the Act by Resolution CD–86–57, dated December 12, 1957, and again by Resolution CMA–14–64, dated March 2, 1964, authorizing substitution of other lands more practicably usable for the irrigation project pursuant to the Act of June 13, 1962 (requesting Congress to amend said Act to include lands in Township 26 North, Ranges 11, 12, and 13 West, and Township 27 North, Range 11 West, N.M.P.M.). The Navajo Tribal Council also authorized the signing of a contract between the Navajo Tribe and the United States for delivery of water to said project, which said form of contract was signed and sent to Secretary Udall in July, 1964, but has never been acted upon by Secretary Udall.

5. Throughout said Tribal Council resolutions and at all times in supporting the passage of the Navajo Irrigation San Juan-Chama Act of June 13, 1962, the Navajo Tribe has in good faith relied upon the commitments of all parties, including the Congress of the United States, to create said Navajo Irrigation Project of 110,630 acres and commit thereto an annual diversion of 508,000 acre-feet of water, and in addition the Tribe would be entitled to apply for and receive a reasonable portion of an additional 200,000 acre-feet which Secretary Udall has found to be available for municipal and industrial purposes. Said advantages and considerations moving to the Tribe would be greatly impaired, and the principal purpose of the Act defeated, if the irrigation project is now reduced in size and the water to which the Tribe is rightfully entitled is made available for municipal and industrial purposes to the great advantage of New Mexico and Albuquerque, and industries to be served.

6. The Navajo Tribe in good faith, and in deference to its neighbors in Albuquerque, New Mexico, compromised its legal rights under the Doctrine of *Winter's* vs. *U.S.* 207 U.S. 564 (see proposed contract between the Tribe and the United States, P. 10g) by agreeing to share shortages of water from the San Juan instead of insisting upon the Tribe's paramount rights, all in consideration of the foregoing and other advantages to the Tribe, such as benefits of the Levitt Act applicable to this irrigation project.

7. The Tribe now notes that the San Juan-Chama Diversion Tunnel originally planned for a capacity of 235,000 acre-feet was built to a far greater capacity, which said capacity could only be filled by diversion of water rightfully belonging to the Navajos pursuant to the arrangement sought by Senator Anderson and Secretary Udall in "re-evaluation" of the Navajo Irrigation Project about which the Navajos first learned by reading in the newspapers.

Now therefore be it resolved that:

1. The Navajo Tribal Council reaffirms and confirms the conditions established by the Council in its Resolution of December 12, 1957 (CD–86–57), namely, the following:

(a) The Navajo Irrigation Project not be reduced below a net area of 110,630 acres.

(b) The authorized annual diversion requirement of the Navajo Irrigation Project not be reduced below 508,000 acre-feet.

(c) The project be exclusively for Indian use and transfer into trust status of the presently off-Reservation areas susceptible to irrigation as part of the project.

(d) No use in New Mexico of water of the San Juan River not heretofore authorized be given priority ahead of the Navajo Irrigation Project.

2. The Navajo Tribal Council finds that the reasons assigned by Senator Anderson and Secretary Udall for "re-evaluation" of the Navajo Irrigation Project, namely, increased cost of construction and related factors, are insincere for the following principal reasons:

(a) The Tribe's proposed contract for receiving the water has been on the desk of Secretary Udall since July, 1964, at which time had Secretary Udall not improperly delayed his official action of approving the contract, the increased and inflated costs of today would not have been present;

(b) All other government projects are subject to the same increased inflationary costs but such other projects are not abandoned for this reason;

(c) Factors now relied upon in proposing this "re-evaluation" were well known when the Act was passed on June 13, 1962, and no new factors have arisen since the Act provides for covering additional costs due to changes in construction cost, based on June, 1961, construction costs (Section 615oo of the Act).

(d) The purpose of the Act, namely, the resettlement of 2,000 or more Navajos and employment of approximately 17,000 Navajos from a failing, grazing economy to a sustaining agricultural way of life on this irrigation project is even of greater force today than when the Act was proposed and approved by Congress.

(e) The tunnel called for in the original San Juan-Chama diversion plan was to have a capacity of 235,00 acre-feet, however, the tunnel as actually built has a capacity far in excess of 235,000 acre-feet. The excess amount to be carried by this tunnel could be obtained from only one source: water rightfully belonging to the Navajos.

3. Unless the Navajo Irrigation Project is carried out to completion as contemplated by the Act of June 13, 1962, the Navajo Tribal Council hereby finds a complete failure of consideration and therefore revokes any past actions of the Navajo Tribal Council in compromising or in any way waiving the Winters Doctrine.

The Council hereby gives notice that the Navajo Tribe will assert any and all rights thereunder against any person or governmental bodies whatsoever who might seek to divert water from the San Juan River or its tributaries in any manner or for any purpose inconsistent with the defined objectives and purposes of said Act of June 13, 1962. The General Counsel of the Navajo Tribe in Washington, D.C., and the Tribe's Legal Department are hereby authorized and directed to take any and all steps deemed necessary, advisable or incidental to carrying out the purposes of the resolution, including the full assertion of the Winters Doctrine, under any circumstances and by any means deemed by them appropriate in the event of any departure from the purposes of the Act of June 13, 1962, in diminution of the conditions heretofore and herein approved by the Navajo Tribal Council.

4. The Navajo Tribal Council, on behalf of the Navajo people, hereby memorializes Congress that the Navajo Tribe has complete faith that the Congress will keep faith with the commitment which it made in passing the Act of June 13, 1962, and will not allow any deviation therefrom.

CERTIFICATION

I hereby certify that the foregoing resolution was duly considered by the Navajo Tribal Council at a duly called meeting at Window Rock, Arizona, at which a quorum was present and that same was passed by a vote of 58 in favor and 0 opposed, this 28th day of April, 1966.

NELSON DAMOU,
Vice Chairman, Navajo Tribal Council.

STATEMENT OF JOHN BELINDO, NATIONAL CONGRESS OF AMERICAN INDIANS

DIVISION OF INDIAN HEALTH

Chairman HAYDEN. Mr. John Belindo of the National Congress of American Indians.

Mr. BELINDO. Thank you, Senator. In behalf of the National Congress of American Indians we would like to thank you for the opportunity to appear before the subcommittee. I enjoyed the testimony of the gentleman who preceded me citing the different causes of diseases of Indians which is of great concern to us. I will read the introduction and I would like to read the summation for you.

Chairman HAYDEN. All right. Your prepared statement will be printed in full.

(The statement follows:)

I. INTRODUCTION

I am John Belindo, Kiowa-Navajo, and Director of the Washington Office of the National Congress of American Indians. The National Congress of American Indians is the only private, national organization of the Indian people themselves, where the voting and programming is limited to legally recognized Indians and Indian Tribes. We are responsible for speaking up for the American Indian people on a national scale. Close to 68 Indian tribes including Alaska Native villages are represented in our organization. We are in close contact with these various tribes and Alaska Native groups which represent a major cross-section of the Native American population of our nation and we are in a position to be knowledgeable regarding conditions which exist on the reservations and other communities where our people live. Through this contact with the tribes and the Public Health Service we are able to maintain a current knowledge of health conditions among the Indian and Alaska Native people. It is hoped that this testimony may help achieve a better understanding of the problems of Indian medical care—and of those who must cope with them.

We have reviewed the requested Budget of the Division of Indian Health for Fiscal Year 1968 and, having recognized the conditions which give rise to this request, heartily give our support to the Division's wish for adequate funds to accomplish its aims of improving the health of Indian and Alaska Native people.

The major categories of the Division of Indian Health Budget request for Fiscal Year 1968 are as follows:

Hospital health	$46, 770, 000
Field health	18, 951, 000
Contract medical care	13, 906, 000
Special Menominee fund *	350, 000
Administration	2, 156, 000
Total health activities	82, 133, 000
Hospital and health: Facilities with related construction	11, 747, 000
Sanitation facilities	10, 464, 000
Total construction	22, 211, 000

*Special assistance to the Menominee Indian people.

President Johnson's pledge to wage unconditional war on Indian poverty cannot be fully effective unless the Indian people enjoy a level of health that will help them to break the vicious circle of economic indigence. Certainly, no single group in the nation suffers greater disadvantages than the American Indian. Family annual income is far below the $3,000 established by the Office of Economic Opportunity as the "poverty line." In many instances this figure is under $1,000. Roughly 90 per cent of Indian housing is below the level that is generally considered to be acceptable. The homes generally do not have sanitation facilities and almost 50 per cent of them obtain their domestic water from potentially contaminated sources. Satisfactory waste disposal facilities are in only 25 percent of the homes.

The health of Indian and Alaska Native people is approximately that of the general U.S. population 25 years ago. Infectious diseases that are known to be preventable and complications thereof cause most of the illnesses and 13 per cent of the deaths among Indians and Alaska Natives. Influenza and pneumonia are twice as high among Indians and three times as high among Alaska Natives. Gastroenteric death rates are five times the national rate. Tuberculosis death rates are five times higher among Indians and seven times higher among Alaska natives. Tuberculosis incidence is seven times as great. The infant death rate among Indians is nearly one and one-half times that of the general population and the average adult age at death is 44, in contrast to 63 years in the general population.

The harmony with the President's expressed desire to see the Indian's and Alaska Natives total life improved, the National Congress of American Indians respectively recommends that the Division of Indian Health budget request be approved by this committee. We wish to give emphasis to the following items as being of particular need at this time.

II. Hospital and Field Health Items

A. Hospital and clinic construction

The National Congress of American Indians recognizes that changing health problems, population shifts and other circumstances make it necessary to construct new facilities and expand already existing areas. In addition to those constructed in recent years, the 1968 budget request include (1) construction of a 125-bed hospital at Tuba City, Arizona, to replace the present 75-bed facility; (2) completion of a 15-bed hospital at Mescalero, New Mexico; (3) planning for construction of a new 100-bed hospital at Chinle, Arizona; and (4) alterations of health facilities at fourteen other locations.

Included in the 1968 request is $2,285,000 for construction or for planning of health centers and health stations at Chilocco, Oklahoma; Riverside, California; White Shield and New Town, North Dakota; Teec Nos Pos, Albuquerque, Sanostee and San Felipe, New Mexico; Beshbitoh, Many Farms, Dilkon, Nazlini, Oraibi, and Rock Point, Arizona; Red Water, Mississippi; and Stewart, Nevada.

Through a number of avenues of communication the National Congress of American Indians has become aware of the expressed needs of the Indian people for more adequate health facilities. For Example, the Choctaw Indians in Mississippi have a high rate of infectious diseases. Among Choctaw children these diseases were the leading cause of deaths in 1964.

The majority of Choctaw Indians live in a rural environment in substandard housing with its attendant accident and illness problems. The high death rate could be significantly lowered and a greater control held on disabling diseases if a new hospital facility could be made available to these people.

Variations of these same kinds of conditions prevail in many Indian communities throughout the Nation. The need for improved facilities for the care and treatment of the sick is imperative if the Public Health Service program is to be truly effective.

B. Staff quarters

With regard to staff quarters, we recognize the vital need to provide adequate housing for Indian health staff because of the remoteness and isolation in many locations from established communities. In many instances these locations are virtually in accessible in inclement weather; or so far removed from established population centers that recreational, shopping and educational facilities are reached only by traveling many miles over rugged terrain. It becomes important, therefore, that every effort, without extravagance, be made to provide a comfortable home for staff members. Otherwise, it is nearly impossible to attract, recruit and retain the type of professional and technical personnel who are needed to carry out the health program.

C. Environmental health

The Sanitation Facilities Construction Act, commonly called Public Law 86-121 has been a major source of health improvement for the Indian people since its enactment into law in 1959.

The National Congress of American Indians enthusiastically endorses the Public Health Service view that continued attention should be given to the remaining sanitation facility deficiencies which can be corrected through assistance provided under the authority of Public Law 86-121. The remaining total known need for this activity is estimated to be approximately $100 million for the Federal share. Some 30 per cent of the required needs have been met for Indian families through authorized projects to date. However, nearly 50 per cent of the water comes from potentially contaminated sources. Nearly 45 per cent have inadequate or no waste disposal facilities.

Expressions from various Indian groups indicate that they feel the Sanitation Facilities program is being implemented too slowly. At the current budget level of construction, it will take approximately 15 years to meet the presently estimated need for such facilities. During the 23rd Annual NCAI Convention held in Oklahoma City, Oklahoma, November 14-18, 1966, a resolution on Public Law 86-121 was adopted respectfully urging Congress to appropriate sufficient funds to the Division of Indian Health to permit acceleration of Indian sanitation and construction activities that would accomplish the needed environmental health improvements in Indian and Alaska Native communities within a five to seven year time period. An additional resolution with respect to incomplete sanitation projects was also adopted requesting: (1) the Public Health Service to follow-up on sanitation projects to insure that facilities are in working order before the projects are completed and approved; and to inspect all homes where hand pumps and outside privies were installed and request funds to replace needed to upgrade existing non-functional sanitation projects. Copies of these resolutions are attached. In view of the health needs and the Indian pressures to participate, the construction program for sanitation facilities should be accelerated so that major known needs may be met over a period of five to seven years.

D. Dental health

Dental disorders continue to present a major health problem to the Indians and Alaska Native people. The Indian and Alaska Native people have for some time expressed their desire for a more widely spread dental program. They would like to have additional contract dentists provided to help meet their dental needs. At the present time the Division of Indian Health contracts with approximately 200 dentists. In the general population the dentist ratio is about 1 to 2,000; however, in the Indian Health program there is one clinician to about every 4,100 people.

The National Congress of American Indians gives its support to the tribal members request for additional dental professional personnel, clinical facilities and further dental care for adults.

E. Mental health program

Mental health activity in the Division of Indian Health has increased in recent years. This effort has led to early identification and treatment of mental problems, however, on the basis of national estimates, there are still some 45,000 American Indians and Alaska Natives with treatable mental and emotional disorders. Suicide rates are 15 per cent higher and homicide rates three times the all races rate. Between 13 per cent and 30 per cent of the students treated at various boarding school infirmaries show signs of prolonged emotional stress. The rate of children placed in foster homes because of emotional instability and other weaknesses is three times the national rate. The abuse of alcohol is another problem on Indian reservations. Poor living conditions and lack of occupational status results in excessive drinking. More than half of the car accidents, involving Indians are alcohol related. There is here a clear need for action.

The National Congress of American Indians supports the Division of Indian Health view that continued attention should be given to special long-range mental health programs—programs which will systematically break the continuity of this stigmatized existence.

F. Community health aides

In an effort to provide the highest quality of services to the Indian people, an emphasis is maintained on Training Programs for Health aides in the communities. The program has two major objectives. (1) Providing optimum health services in beneficiary populations, (2) increase the participation of Indian and Alaska Natives in meeting their own health needs. In 1965 a program was initiated on three reservations under Title II of the Economic Opportunity Act to train Indian people as community health aides. Division of Indian Health participation in the program included development of a prototype course of instruction and providing instruction, field supervisors and facilities for field practice for the aides. The community health aides provide such services as giving individual and group instruction in simplified home nursing techniques, infant care, nutrition, home management and good health practices.

The National Congress of American Indians recommends that the health aide training program be continued with Office of Economic Opportunity support, and that the Division of Indian Health be funded in future years to provide employment of these aides following their training.

G. Other health-rated needs

Other health-related needs given specific emphasis by Indian Leaders in their meetings with Commissioner Robert L. Bennett of the Bureau of Indian Affairs are:

1. Transportation improvement, particularly for the aged and children to health facilities which, in many instances, are long distances from their homes.

2. Increased efforts expended by the Division of Indian Health to utilize all available resources for care for the aged.

The National Congress of American Indians by resolution at the 1966 Annual Convention, requested that Congress appropriate sufficient funds needed to encompass the health problems of Indians who live in locations adjacent to the reservation on non-federal lands and as a result are not thereby eligible for health benefits from the U.S. Public Health Service acting through its Division of Indian Health. A copy of the resolution is attached.

III. SUMMARY

The $82,133,000 appropriation request for 1968 Indian Health activities represents a $5,809,000 increase and a net increase of 474 positions; 182 in Hospital Health; 273 in Field Health; and 9 in Administration. In addition to mandatory items such as statutory increases and cost increases under the Contract Medical Care program in the amount of $1,754,000, the funds requested will provide for (1) a small increase in the hospital employee, patient ration: (2) direct services to beneficiaries on the Pribilof Islands, Alaska: (3) the establishment of an operations research program directed toward the design and preliminary implementation of an integrated and comprehensive management information system based on Service Unit planning and evaluation needs; (4) an increase in the preventive health activities consisting of Sanitation, Dental, Public Health Nursing, Health Education and Field Medical Services including the administration of an increased sanitarian facilities construction program and the establishment of a training program for aides on the health team in the communities, (5) special assistance to the Menominee Indian people, and (6) a slight increase to effectively implement the President's planning-programming-budgeting system.

The National Congress of American Indians firmly supports the Division of Indian Health Budget request for Fiscal Year 1968, and respectfully petitions this Committee to give full consideration to the items submitted therein in order to assure that the American Indian and Alaska Native people will be provided those services necessary to raise their health status to a level comparable with that of the general population. We hope that this statement resounds the tone of urgency which we believe is subject matter requires and which its recommendations reflect.

RESOLUTION ON "THE INDIAN SANITATION FACILITIES ACT," PUBLIC LAW 86-121

Whereas, the gross environmental deficiencies in Indian supplies and Alaska Native communities such as lack of safe available water supplies and waste disposal facilities continue to exist and are in large measure responsible for the high incidence of preventable diseases that prevail among Indians and Alaska Natives; and

Whereas, The Surgeon General of the Public Service is empowered by authority under Public Law 86-121 "The Indian Sanitation Facilities Act," to assist Indians and Alaska Natives in the Construction of sanitary facilities essential to the improvement of their physical environment,

Now therefore be it resolved, we respectfully urge the U.S. Congress to authorize sufficient appropriations to the Division of Indian Health to permit the Indian Sanitation Construction activities to be accelerated to accomplish needed environment health improvements in Indian and Alaska Native Communities within a five to seven-year period of time.

(23rd Annual Convention, 1966, National Congress of American Indians, Oklahoma City, Oklahoma)

RESOLUTION ON SANITATION

Whereas, sanitation projects are not always completed and are often inadequate, and

Whereas, repairs are needed to existing non-functional sanitation projects, and,

Whereas, there are still a multitude of homes where hand pumps and outdoor privies were installed.

Now therefore, be it resolved that the Public Health Service is hereby requested to follow-up on sanitation projects to insure that facilities are in working order before projects are completed and approved.

That the Congress is hereby requested to appropriate funds for emergency repairs to existing non-functional sanitation projects to bring them up to standard.

And that the Public Health Service inspect all homes with installed outside privies and hand pumps and request funds to replace these facilities.

(23rd Annual Convention, 1966 National Congress of American Indians assembled in Oklahoma City, Oklahoma.)

RESOLUTION ON OFF-RESERVATION HEALTH SERVICES

Whereas, The U.S. Public Health Service, acting through its Division of Indian Health, has the responsibility of meeting the health needs of the Indian people, and

Whereas, present Division of Indian Health Policy is directed at the health problems of Indians living on an Indian reservation or on lands under Federal jurisdiction, and

Whereas, large numbers of these people live in locations adjacent to the reservation on non-Federal lands and as a result are not thereby eligible for health benefits, and

Whereas, there presently exists a crying health need of these Indians that is not being met,

Now therefore, be it resolved, that the Congress is hereby requested to appropriate sufficent funds to meet these needs.

The 1966 NCAI member tribes—States and tribes

	Population
Alaska: Alaska native brotherhood	35,000
Arizona:	
Colorado River Tribe	1,475
Gila River Pima-Maricopa	6,737
Hualapai	627
Papago	5,494
Salt River Pima-Maricopa	1,936
San Carlos Apache	4,527
White Mountain Apache	4,657
Yavapai-Camp Verde	226
California:	
Fort Mojave	574
Hoopa Valley	1,440
Colorado:	
Southern Ute	1,081
Ute Mountain	1,347
Idaho:	
Coeur d'Alene	874
Kalispel	168
Nez Perce	2,454
Michigan: Keweenaw Bay Indian Community	928
Minnesota:	
Minnesota Chippewa	8,570
Red Lake Chippewa	4,301
Montana:	
Blackfeet	10,330
Confederated Salish and Kootenai	5,831
Crow	4,891
Fort Belknap	2,270
Fort Peck	8,250
Northern Cheyenne	2,342
Nebraska:	
Omaha	2,657
Winnebago	822
Nevada:	
Pyramid Lake Paiute	676
Western Shoshone-Paiute	990
Walker River Paiute	502
New Mexico:	
All Pueblo Council	18,840
Mescalero Apache	2,323
North Dakota:	
Standing Rock Sioux	7,682
Fort Totten Sioux	1,476
Three Affiliated Tribes	2,496
Oklahoma:	
Cherokee Nation	13,215
Chickasaw	4,713
Choctaw	11,545
Creek Tribe	17,904
Miami Tribe	404
Osage	5,307
Otoe-Missouri	1,313
Quapaw	1,487
Oregon: Umatilla Tribe	1,245
South Dakota:	
Cheyenne River Sioux	5,810
Crow Creek Sioux	1,058
Flandreau Sioux	283
Lower Brule Sioux	730
Oglala	13,875
Rosebud Sioux	7,201
Sisseton-Wahpeton Sioux	3,043
Yankton Sioux	2,066
Washington:	
Chehalis	191
Makah	1,000
Quinault	1,822
Spokane	1,421
Snohomish	213
Squaxon Island	
Swinomish	367
Tulalip	991
Yakima	5,475
Wisconsin:	
Forest County Potawatomi	509
Lac du Flambeau Chippewa	910
Oneida	1,356
St. Croix Chippewa	200
Stockbridge-Munsee	343
Winnebago	466
Utah: Uintah and Ouray	1,762

Number of States represented, 18; number of Indian organizations, 68; number of Indian people represented, 263,019.

SUMMARY OF STATEMENT

Mr. BELINDO. I am John Belindo, Navajo director of the Washington office of National Congress of American Indians and we are the only private National organization of the Indian people themselves. The voting and programing is limited to legally recognized Indians and Indian tribes. We are responsible for speaking up for the American Indian people on a national scale. Close to 68 Indian tribes including Alaskan native villages are represented in our organization. We are in close contact with these various tribes and Alaskan native groups which represent a cross section of American native population of our Nation and we are in a position to be knowledgeable regarding conditions which exist on the reservations and other communities where our people live. Through this contact with the tribes and public health service we are able to maintain a current knowledge of health conditions among the Indians and Alaskan native people.

RECOMMENDATION

In harmony with the President's message expressing a desire to see the Indian's and Alaskan natives' total life improved, the national congress respectfully recommends that the Division of Indian Health request be approved by this committee and also by the full committee. We wish to give emphasis to the following items as being of particular need at this time. Hospital and field health items, which I will not enumerate, staff quarters for environmental health, general health.

MENTAL HEALTH PROGRAMS

I think this is one subject of great importance to all Indians, those who are confronted with the Indian health problems, the mental health programs where suicide rates are 15 percent higher and homicide rates are three times higher. Between 15 and 30 percent treated at boarding school infirmary show signs of emotional stress and I hope this is a program that can be amended, community health needs and related needs.

SUPPORT OF 1968 BUDGET REQUEST

In summary, the appropriation request for 1968 Indian health activity represents a $5,809,000 increase in addition to mandatory items such as statutory increase and cost increase under the contract medical care program in the amount of $1,754,000, the fund requested will provide for, one, a small increase in the hospital employee patient ratio; two, direct service to beneficiaries on the Pribilof Islands of Alaska; three, establishment of an operations research program directed toward the design and preliminary implementation of an integrated and comprehensive management information system based on service planning and evaluation needs.

The National Congress of American Indians firmly supports the Division of Indian Health budget request for fiscal 1968 and respectfully petitions the committee to give full consideration to items submitted therein. We hope this statement resounds the tone of urgency which we believe the subject matters require and which its recommendations reflect.

Thank you.

STATEMENT OF RICHARD C. LONGMIRE, CHAIRMAN, LEGISLATIVE COMMITTEE, NATIONAL ASSOCIATION OF SOIL AND WATER CONSERVATION DISTRICTS

VIEWS ON APPROPRIATION ITEMS FOR DEPARTMENT OF INTERIOR AND FOREST SERVICE

Chairman HAYDEN. The last witness is Mr. Richard Longmire, chairman, legislative committee, National Association of Soil and Water Conservation Districts.

Mr. LONGMIRE. Thank you, Mr. Chairman.

(The statement follows:)

INTRODUCTION

I am Richard C. Longmire of Pauls Valley, Oklahoma, chairman of the Legislative Committee for the National Association of Soil and Water Conservation Districts (NACD). The Association represents approximately 3,000 local Soil and Water Conservation Districts in all 50 states, Puerto Rico, and the Virgin Islands. Our purposes are the conservation, orderly development, and wise use of the Nation's land, water, timber, and related natural resources through the exercise of local initiative and the operation of local programs in cooperation with landowners as well as federal and state resource agencies.

Close to 18,000 men and women serve without pay as the governing officials of these local Districts. Approximately 2,000,000 landowners are cooperators in the Districts' programs.

Throughout the country, District officials and District cooperators have a continuing and active interest in the condition, the use, and the improvement of public lands managed by the federal government. In literally thousands of situations, the public lands are intermingled with—or are adjacent to—lands in private ownership. The condition and the management of the public lands have important effects on the adjoining private lands. As a general statement, they are physically inter-related. Very often, they are economically related.

We appreciate this opportunity to present our views on appropriation items for fiscal year 1968 for certain resource agencies of the Department of the Interior as well as the Forest Service of the Department of Agriculture.

The level of government investment in programs for the protection and development of natural resources is a matter of deep and continuing interest to the members of our Association. This is true with respect to programs affecting public lands, as it is for programs focused on privately-owned lands.

Both categories of ownership and the resources involved are experiencing steadily greater pressures, either to meet the rising demands for production of food, fiber, and forage; or the similarly increasing demands for various uses, such as recreation, water supply, and wildlife preservation.

In the face of these pressures, the resource management job is becoming more complex and more expensive. Since these resources are the raw materials of our economy and the very essence of our environment, we have no alternative to doing whatever is necessary to keep them in good supply and in good condition.

The NACD recognizes, however, that all the desirable work cannot be undertaken at once. We understand the need to be selective and to set some kind of priorities. At the same time we are aware that effective resource work can rarely be accomplished swiftly, and it is important to anticipate oncoming requirements that could become critical.

FOREST SERVICE

The oncoming requirements for wood products are a case in point. Projections by the Forest Service indicate the demand for forest products will double by the end of the century. Since the increased production cannot be obtained by substantial additions to the acreage of commercial forest lands, most of it will have to come from better protection, better management, and improved yield rates from existing forests.

An important share of this future wood supply will be harvested from relatively small timber tracts which are parts of farms, ranches, and similar properties.

For this reason, the state and private forestry cooperation items in the Forest Service budget are of particular interest to Soil and Water Conservation Districts. These items cover programs which directly assist District cooperators with fire protection, woodland insect and disease protection, reasonably-priced forest and shelterbelt planting stock, and technical forestry assistance in the management and marketing of timber.

Most of the 4,000,000 private woodland owners of the United States are in Conservation Districts. Most all of these owners need the fire protection, low-cost tree seedlings, and technical forestry services offered through these cooperative programs. They are essential to development of the multiple-use capabilities of the forests.

The cooperative-state-federal forestry programs are carried out largely through the State Foresters. The State Foresters and their men on the ground work closely with Conservation Districts and with District cooperators in most parts of the country.

More than a third of all the Conservation Districts of the nation have written cooperative agreements with state forestry agencies, and another third, at least, are cooperating regularly without written agreements.

We are pleased by this trend. It is evidence of the increasing attention to farm forestry by individual Districts and private woodland owners.

Districts value highly the assistance they are getting from state forestry agencies. Indeed, they have made known their need for more of it.

We want to emphasize our needs for forest fire control. The enlarged use of forests, especially by sportsmen and recreationists, has increased the need for this protective program. It is an essential program, but we have noted with genuine concern that the federal share of the financing has failed to keep pace with the growing program needs. As one result of this, the states have been forced to assume most of the added costs in recent years.

Although a federal fund in the amount of $20,000,000 annually is authorized for use in the Clark-McNary Section 2 program, actual federal participation in the effort dropped to an all-time low of 15 percent of the total expenditures in fiscal year 1966. Our information indicates a federal participation that year of $12,803,000, compared with nearly $72,250,000 of state and private funds.

The federal appropriation for the Cooperative Fire Control Program for the current fiscal year is essentially the same—$12,811,000.

Although the financial burdens being assumed by the federal government are enormous, there is clearly a feeling in some states that the federal government's participation in the Cooperative Fire Control Program should be strengthened. Many state fire control officials believe that further large increases in state and private funds are unlikely.

Prospects of a leveling off in program activities would not disturb us so much if it were not for the following facts—

At the beginning of this year, an estimated 526 million acres of state and private forest lands were in need of protection. Of this total, approximately 480 million acres had been placed under organized protection, leaving about 46 million acres unprotected. Moreover, the level of protection was classified as inadequate on approximately 200 million acres of the "protected" base.

The capabilities of forest lands for all their multiple uses—recreation, forage, wildlife, and special forest products, as well as timber—cannot be fully developed unless protection from fire is assured.

We urge, therefore, an intensification and expansion of the effective fire protection program. Specifically, we wish to associate ourselves with the National Association of State Foresters in requesting an increase of $3,000,000 for fiscal year 1968 in the Forest Service budget item for Cooperation in Forest Fire Control. This would represent an increase to $15,811,000 for this item, which is carried in the budget at $12,811,000.

Our special interest in the preceding item is not intended to reflect any lack of concern about other items in the Forest Service budget. Our Association is sincerely concerned with all aspects of the forestry program.

The National Forests coincide to a major degree with the rural areas having the greatest need for economic improvement and present one of the best opportunities for its accomplishment. In fact, most of the National Forests in the East were established in cutover areas which required substantial investments to restore productivity. The increases for more timber sales, for recreation, fire protection, land exchange work, and forest roads and trails are sorely needed. We support them.

The increases for research items for timber, management of forest watersheds, forest products utilization, resource economics, and recreation are needed to provide facts to the action programs of many public agencies and to private enterprise in the forestry and related resource fields. With the current expansion of forest-based recreation, the relatively new research program of Recreation Research is particularly in need of strengthening.

We hope your Committee will see fit to approve the proposed budget in full for the National Forests and Forest Research programs before you. We believe they could be well supported at a higher level.

BUREAU OF LAND MANAGEMENT

The condition of the public lands administered by the Bureau of Land Management is a matter of continuing concern to Conservation Districts. We are steadily aware that millions of acres of these lands are so directly associated with the management of privately-owned lands—either through lease or permit arrangements, or by the simple fact that they exist side by side—that the success of private operations depends on the quality of the public lands. This means good vegetative cover and the application of essential soil and water conservation measures where needed.

As we have tried to emphasize before, the best evidence is that better vegetative cover and much more intensive use of conservation measures are needed on most of the 177 million acres administered by BLM within the contiguous western states. The Bureau's inventory of conservation needs on the public lands indicates, for example, the need for revegetation on more than 11,700,000 acres, the control of undesirable plants on more than 14,000,000 acres, and the application of other conservation practices on nearly 16,000,000 acres. This is only a partial listing of needs.

It is altogether evident that millions of acres of the reserved lands are deteriorating at a very serious rate. Continuing soil losses on more than 100 million acres, largely the result of depleted plant cover, are inflicting double damage. They are not only reducing the usefulness of an extremely valuable upland resource, but pouring costly deposits of sediment into downstream valleys and reservoirs. The damage to downstream areas includes agriculture, recreation, and the structures built for flood control, water supply, and power.

In the face of this evident damage and very large need, we find it very hard to understand the proposed decrease of $835,000 in the soil and watershed conservation item for BLM in the 1968 budget.

When this figure is translated to the land, we find that it means a reduction in the application of conservation practices such as contour trenching, pitting, furrowing, and water spreading on 92,000 acres. It would mean 200 fewer miles of protective fences and 55,000 fewer acres receiving revegetation care than are currently scheduled in fiscal year 1967.

In our judgment, this kind of cut-back is insupportable. At a time when spokesmen for the federal government are emphasizing the importance of natural resources, the dangers of water pollution, and the need for attention to our environment and natural beauty—comes a proposal to reduce the very work on the government's own lands. Moreover, it comes at a time when receipts from the disposition of resources are climbing in virtually every category to an estimated total of nearly $626,000,000.

We believe it is not only good economic sense, but a responsibility of leadership in Congress and in the executive branch to set a good example of resource stewardship. One would be hard put to find a better place to demonstrate this leadership than on the public domain administered by the BLM.

We believe it is extremely important to maintain—and not cut back—the momentum for soil and moisture conservation on public lands.

We urge the committee to take a more constructive step than that proposed by the budget. Instead of a reduction of $835,000 for this important work, as the budget proposes, we believe the committee should recommend an increase to bring this item to $16,000,000. This would be a rise of $1,093,000 over the sum appropriated for soil and watershed conservation for the current fiscal year. The increase is amply justified, in our judgment, by the formidable backlog of work built up over decades of inattention and by the substantial benefits that follow the installation of essential conservation measures.

BUREAU OF SPORT FISHERIES AND WILDLIFE

The national wildlife refuge system, containing approximately 30 million acres, is dedicated primarily to the benefit of wildlife and its habitat. In addition, the refuge units are managed to allow use by the public, insofar as this is compatible with the basic purposes.

At the time these refuge lands are acquired, a considerable acreage is marked by conditions of deteriorated soil, water, and vegetation. The Bureau undertakes to correct these conditions in order to obtail efficient management and maximum production. The most severely eroding areas get first attention, along with those areas where delay in treatment would accelerate costs.

Less than half of the needed conservation work has been completed on Bureau lands and the annual rate of accomplishment is discouraging. The budget proposes an appropriation of $713,000 for the soil and moisture conservation item for the coming fiscal year—an amount essentially the same as for the current fiscal year.

For the benefit of the Bureau's primary mission, as well as for the benefit of the millions of Americans who visit these unique areas each year, we hope the committee will give serious consideration to an increase, however moderate, in this item.

OTHER USDI AGENCIES

Our association is well aware of the extraordinary costs the country is now carrying because of the military operations in Southeast Asia. We recognize that this places limitations on what can be done during the coming year in many important areas of resource management—and we have stressed in our statement only those items we consider to be of exceptional urgency.

In addition, however, we wish to record our support for the budget proposals pertaining to the soil and moisture conservation items of the Bureau of Indian Affairs and the Bureau of Reclamation, as well as the forestry and fire control items for the National Park Service and the Bureau of Indian Affairs.

SUBMISSION OF STATEMENTS AND LETTERS

Chairman HAYDEN. A number of statements and letters have been received by the committee which I have directed the clerk to have printed in the record.

(The statements and letters follow:)

FOREST SERVICE

SILVICULTURE LABORATORY, BEND, OREG., LETTER FROM SENATOR JACKSON

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
March 20, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Although I imagine you have already received a copy of this resolution adopted by the Board of Directors of the Western Wood Products Association, I am sending it along to you with my endorsement for adequate staffing funds for the Bend, Oregon Silviculture Laboratory.

Sincerely yours,

HENRY M. JACKSON, *Chairman.*

LETTER TO SENATOR JACKSON

WESTERN WOOD PRODUCTS ASSOCIATION,
Portland, Oreg., March 8, 1967.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: At our Annual Meeting in San Francisco, held February 28–March 3, 1967, our Board of Directors adopted the recommendation of the

Oregon and Washington Forest Practice Committees in regard to the adequate staffing of the Silviculture Laboratory at Bend, Oregon.

Below is the resolution as adopted:

"Whereas, the current budget expenditure for the Forest Service Silviculture Laboratory at Bend, Oregon is $90,000 per year, and

"Whereas, the current program of the Laboratory is inadequate to serve the needs of the public and private timberlands located in Eastern Oregon and Eastern Washington, and

"Whereas, an adequately financed timber management research program promises to evolve land and timber management practices that promise the doubling of the current rate of timber production on public and private timberlands, and

"Whereas, current timber production on public and private timberlands is inadequate to meet the economic needs of the forest products industry based in Eastern Oregon and Eastern Washington

"Now therefore, be it, *Resolved*, That the Oregon and Washington Forest Practice Committees in joint session recommend that the Western Wood Products Association urge the Congress that the annual budget for the Bend Forest Service Silviculture Laboratory be increased. This is necessary to adequately staff the Laboratory so it can function effectively."

Resolution adopted February 10, 1967.

This is needed so that research and increase in timber production in the Pacific Northwest can be matched to provide for the needs of the nation.

Respectfully submitted.

DAVID T. KAUFFMAN,
Acting Chairman, Washington Forest Practice Committee.

FEDERAL-STATE COOPERATIVE FIRE CONTROL PROGRAM

LETTER FROM SENATOR THURMOND

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
March 21, 1967.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Committee,
1235 New Senate Office Building,
Washington, D.C.

DEAR MR. CHAIRMAN: I have received a letter from Mr. John R. Tiller, the State Forester of South Carolina.

Mr. Tiller is concerned over the level of appropriations requested in the budget under Section 2 of the Clarke-McNary law which, as you know, is the cooperative State-Federal Forest Fire Control Program. The budget contains a request for $12,811,000.00 for Fscal Year 1968. Those involved in the program feel that an additional $3,000,000.00 would be necessary to maintain adequate fire protection throughout the nation.

I am enclosing for your information a portion of the letter I have received from Mr. Tiller in which he discusses the need for these funds. I would appreciate you and the members of the Interior Appropriations Subcommittee giving this request your very careful consideration.

With kind regards,

Sincerely,

STROM THURMOND.

EXCERPT, LETTER TO SENATOR THURMOND

COLUMBIA, S.C., *February 27, 1967.*

HON. STROM THURMOND,
U.S. Senator, South Carolina,
Senate Office Building, Washington, D.C.

DEAR SENATOR THURMOND: I am addressing this urgent plea for assistance to you because I know you will recognize that it is both of importance to the protection of life and property in this State and the Nation, and of particular concern to forest owners, our forest industry and our vital forest economy.

This matter has primarily to do with the forest fire control program which is a most important part of our over-all forestry problem with which we are faced—in South Carolina, the South, and the Nation.

An apraisal of trends in the Nation's timber situation and for timber supplies and demands to the year 2000 has recently been made by the United States Forest Service, Department of Agriculture. Based on logical assumptions of continued major expansion in population and economic growth, demands for timber products are expected to increase about 80% by the year 2000 for the Nation as a whole.

In the South, however, where the bulk of the Nation's timber must be grown, demands for softwoods are expected to be nearly three times the 1962 cut, and 44% higher for hardwoods. (Increases in cut, particularly in pulpwood, are already being felt in South Carolina through large expansions of pulp mills drawing on South Carolina for wood.) Projected use of all products from forests in the United States rises from 11.8 billion cubic feet in 1962 to 21.3 billion cubic feet in the year 2000.

This is essentially the problem—a problem because, currently, South Carolina and the Nation as a whole are growing only half, or less, of the wood they are capable of growing, and without immediate and sustained intensification in *all phases* of forestry, including forest fire control, we cannot be reasonably expected to grow sufficient additional quantities of wood to meet these expected demands by the year 2000.

Adequate fire protection is the insurance we pay to protect the investment of money and time of our woodland owners in scientifically growing forest crops; the tremendous capital investment of our woodusing industries, their jobs and payrolls; and the forest economy of this State and Nation, which is considerable. Too, it is the insuracne we pay to protect vital water supplies for domestic and commercial use; an improved habitat for wildlife; and wholesome outdoor recreation for our citizens and visitors. It is also the insurance we pay to protect the homes and, in fact, the lives of all our rural folks.

South Carolina, and much of the Nation, *does not have adequate fire protection*. This is certainly borne out by the fact that here in South Carolina last year 5,467 wildfires occurred during the year July 1, 1965–June 30, 1966, which burned over 127,805 acres of woodland. During the week ending April 2, 1966 alone, 878 wildfires burned 78,867 acres of woodland and destroyed 41 dwellings and 93 barns and other service buildings in suburban and rural areas.

This has occurred because we are only financed and equipped to handle a very normal fire situation—and every abnormal situation inevitably results in abnormal losses which deal blow after blow to our woodland owners, the forest industry and our forest economy, not to mention our water, wildlife and recreation potential. Basically, we must be better financed, both by the State and by the Federal Government through the Clarke-McNary Law, Section 2, which is administered by the U.S. Forest Service and through which the Federal Government very properly cost-shares the expense of fire protection—in theory on a 50-50% basis and in practice on a 20% Federal-80% State basis. The Clarke-McNary Law, Section 2, program is authorized by Congress at $20,000,000; current appropriations are at $12,811,000; the Association of State Foresters urged $15,811,000 for Fiscal 1968; and the President has asked $12,811,00 for 1968. Not only are we under-financed to build an *adequate* level of protection, *but the cost to do the job continuously increases and we are unable to maintain the level of protection we have had.* The States, South Carolina included, are doing their part financially, but proper financing by the Federal Government has, for years, bogged down.

STATEMENT BY THE MERAMEC BASIN ASSOCIATION

The Meramec Basin Association is a not-for-profit Missouri corporation organized to represent the people of the Meramec Basin of Missouri and to work with them in securing sound use and preservation of the resources of the Basin and the closely adjacent localities having geographic, political, economic and social ties with the Basin area. The Association has 900 members and a board of 58 directors representing a cross section of interests and localities in the region.

In addition to the justification of the H–25 project provided by reports of both the U.S. Engineers and U.S. Dept. of Agriculture, and the social and economic changes which call for projects of this nature in the area, there is a strong, additional reason for moving H–25 reservoir to completion as part of this most unusual and wide scope of water resources development that is underway in our Basin.

The Basin development program embraces a 3,980 square miles drainage system of Ozark terrain. The combination of 5 U.S. Engineer mainstream reservoirs and 60 Department of Agriculture upland reservoirs called for in the planning will provide a water control and use system that has been much needed for flood control, recreation, water supply and related land treatment programs.

A very serious problem in connection with the H–25 project is the fact that the upland reservoir program of the U.S.D.A. is overshadowed in the minds of many people in the area by the large mainstream reservoir projects. Yet the upland program is designed to work with the mainstream program—both programs to operate as a system. And to achieve a great portion of the upland program—as well as some phases of the mainstream program, the participation of non-federal interests is required in financing, sponsorship, and operation.

Completion of H–25 (Council Bluff Lake is the name which has been selected for it) will not only meet pressing needs in its general locality but will give us the prime example needed in terms of encouragement and enlightenment, and a leadership project that will expedite the arrangements which are being shaped up at this time at state, regional and local levels for assuming responsibility for their share of financing and management.

The development called for in the entire cooperative effort based on the federal Basin plan will have—with no exaggeration—really gigantic economic, resource, and social values. The mainstream program is getting underway, thanks to the interest and financing provided by the Congress. There is an absolute minimum of opposition to any of the entire plan. Our people see the need for it. But seeing the need, and getting in gear for action, are two different matters.

Our Basin is largely Ozark hills and valleys—with, up to now, a rather static and lightly constituted population base. The development of new mines, the actualities of the water resource program—are all new to our people. With respect to the water program, construction of H–25 reservoir will aid us both materially and in building our peoples' confidence to move ahead.

Plans on paper are nice and create hope in many people. But—as we hope you will agree—we feel that incentive for action in such new programs comes strongest and most soundly from a good example of which can be done with a paper plan. Nothing could serve the cause more of advancing the needed program of the Department of Agriculture than completion of this Forest Service reservoir.

We respectfully request that the Appropriations Committee provide the necessary funds needed to bulid and develop H–25 reservoir by the U.S. Forest Service.

Respectfully submitted.

JAMES F. GAMBLE, *Executive Director.*

STATEMENT BY WESTERN FOREST INDUSTRIES ASSOCIATION

Mr. Chairman, Members of the Committee, I am Joseph S. Miller representing the Western Forest Industries Association, a trade association comprised of approximately 100 members. The membership is located in the States of California, Oregon, Washington, Idaho, Montana, and Colorado. Our members process, depending upon the year and level of national economic activity, from 4½ to 5½ billion feet of logs each year into lumber, plywood and allied forest products. They are primarily dependent upon timber sale offerings from the public lands for their logs.

Our industry is a cornerstone of our western economy. When it is sick, the economy is slow; when it is booming, the economy is healthy. This industry is divided between those few having adequate timber supplies in their own ownership or contracted from other private sources, to supply their predominant needs, and those dependent on the public timber supply. During the last few years this competitive industry has been beset by a number of additional problems. This is particularly true of that part of the industry dependent upon the public timber for its raw material supply. One of these problems has been the shortage of logs. Basically the installed capacity and the need for raw materials is greater than that available as annual allowable cut from the public lands and from private sources.

This record was established in 1962 when the Senate Commerce Committee conducted extensive hearings during which the Chief of the Forest Service reported that the 42 Western National Forests located in Montana, Idaho, Northwestern Utah, Washington, Oregon and most of California did not have annual timber offerings adequate to meet the installed capacity and industrial demand. Since then, additional demand was added with the Japanese purchasing ever-increasing volumes of softwood logs from Oregon and Washington. This additional log demand on our already short supply has increased from 311 million board feet in 1962 to 1.0 billion board feet in 1966.

Becoming fearful with the increased drain caused by log exports from the already short softwood log supply, a committee was formed in Oregon and Washington of persons whose processing plants were dependent upon National Forest timber. The purpose of this committee was to request a Pacific Northwest Federal Sustained Yield Unit. This unit, if formed was to encompass the National Forests of Oregon and Washington and was to provide for domestic manufacture of all National Forest logs originating from the National Forests of the two states.

On September 17, 1965, Secretary of Agriculture Freeman rejected the request for a Federal Sustained Yield Unit. In Secretary Freeman's letter rejecting the Committee's request, he stated, in part:

"I am directing the Forest Service to use every means available to it to maintain timber harvesting at allowable cut levels and to accelerate offerings of timber not normally included under allowable cut limitations such as material from prelogging salvage operations and thinning of young growth stands."

Similarly, in a letter of December 9, 1965, from then Secretary of Commerce Connor to Senator Warren G. Magnuson responding to a request by Senator Magnuson that a review of the log export situation affecting the Pacific Northwest be made, Secretary Connor said ". . . a positive program is indicated including increasing the log supply in the Pacific Northwest through intensified management . . . and further . . . it would appear that a positive approach should be taken leading toward an overall increase in timber supply."

With these two policy directives to the Forest Service, they have undertaken considerable analysis, searching for opportunities to increase the available supply of timber.

Two programs have been developed, one needing substantial developmental research and offering tremendous returns as this applied research bears results. The other program is one that can immediately be put into effect that would produce annual benefits, when implemented, far in excess of the minimal financing and additional manpower needed. In fact, some progress was made in this year as a result of an unexpected saving in another area of Forest Service activity.

Timber Volumes Available in Presently Inoperable Areas Require Development of an Aerial Logging System

The program requires developmental research in aerial logging systems. Forest engineering research, if implemented, should make aerial logging operational within two to four years. Aerial logging systems would add immediately, upon becoming operational, an additional annual harvest of 100 million board feet from National Forest lands and 150 million feet from other ownerships, public and private, from mature timber now considered inoperable because of difficult terrain, unstable soils, high road construction costs, etc., all from Western Oregon and Western Washington. In addition, an estimated 110 million board feet of logs from young growth thinnings not now available on the National Forest lands could be placed on the market. This is a 360 million board foot addition to our Douglas-fir timber supply. This total 360 million board feet available, upon the satisfactory completion of this operational research, is only a portion of the total 840 million board feet of current annual losses from all unloggable lands of the region. The following table illustrated the importance of this program to public timber receipts and the National Forest program.

National forest lands, western Washington-western Oregon

[In million board feet]

	Total potential annual yield	Possible increase with aerial logging systems
Presently unloggable public lands needing—		
Harvest of mature timber	186	110
Young growth thinning	148	100
Total	334	210

Annual Economic Returns When Operational (Includes Forest Service and Other Federal)

Total Federal timber stumpage return	$3,800,000
Receipts to U.S. Treasury	3,000,000
Receipts to Counties	800,000

Also, aerial logging systems make possible the addition of more than $1,000,000.00 per year to timber receipts from Alaska's National Forests and additional significant increases in National Forests in other parts of the West having millions of acres of timberland currently classified as mature, needing harvesting and inoperable, due to terrain, soil or other such obstacles.

For this research program an estimated $500,000 per year is needed for four years. We urge that, if granted, at the end of the first and second years this committee instruct the Forest Service to present a detailed progress report; if the aerial systems continue to be promising and if progress has been made, before receiving appropriations for continuing the program, the Forest Service at that time include all or most of this additional 210 million board feet of annual allowable cut to the already existing allowable cuts of the respective National Forests of Western Oregon and Washington.

Forest Service Salvage and Thinning Program in Addition to the Sale of the Full Allowable Cut

The Forest Service's report entitled "Timber Trends in the United States" referred to several technical forestry measures that could be strengthened to increase supplies of timber now and in the future. The same references occurred in both Secretary Freeman and then Secretary Connor's letters, previously mentioned. Among these techniques mentioned were thinning, prompt reforestation, increased protection, closer utilization, greater mortality salvage and accelerated road construction. This increased intensity of management offers a significant opportunity to increase the annual cut in the west by 423 million board feet merely by increasing thinning, salvage and small timber sales. This volume needs no additional road construction. The volumes are in addition to the allowable cut and are located as follows:

Region:	*Volume*[1]
1 (Northern Rocky Mountains)	60
3 Southwest	20
5 (California)	30
6 (Pacific Northwest)	313
Total	423

[1] Millions of board feet.

The Administration's proposed budget has an item providing for the preparation and sale of 280 million feet of the 423 million foot total. An additional $700,000 is needed to make the program totally operational.

It is estimated the sales preparation and administration cost will be about ⅓ the appraised selling value of the timber. Thus, the increase in this program can be expected to generate revenues well above the necessary $700,000 addition.

We hope you will provide the funds necessary to make this thinning and salvage program fully operational. Approval of the regular timber sales program should provide for the sale and harvesting of the full regulated allowable cut.

Intensive forest management is a goal our Association has long been anxious to achieve on national forest lands in the West. We are fully aware that there is more behind the allowable cut than just building roads and making timber sales. Also, we are well aware that the reforestation program of the Forest Service other than reforestation of current timber sales areas, as provided by returning a portion of timber sales receipts, needs substantial modernizing.

An example of these reforestation needs exists in Oregon and Washington. The National forests in the two states have about 180,000 acres of commercial forest land, unproductive due to past fires—needing reforestation. Yet, these lands, if reforested, are capable of adding some 90 million board feet to the National Forest's annual allowable cut. The present rate of achievement in reforesting these lands with appropriated funds will require in excess of twenty years. An accelerated program is needed.

The Forest Survey

Our association member mills are almost entirely dependent upon the free and open market for logs and timber. We are forced to buy what is offered when it is offered. Our best defense in this situation is to have as much knowledge as possible about the current and prospective timber supply in each area upon which we depend.

Forest Survey research projects in Portland, Juneau and Ogden make inventories and report on the forest resources of the western United States. At least ten years elapse between inventories, and some areas haven't been inventoried for much longer. The reports of results are often limited to the barest of statistics. Analysis and interpretation of the significance of the data have been limited to broad areas. Our association members need additional local information, and its meaning in terms of future jobs and products should be explained. Special studies are needed on amount of timber being cut, the volume of usable logging residues and the volume of mortality. Past studies of these subjects are out of date.

The basic information that Forest Survey gathers and reports also is used by public agencies and private associations for their studies of timber supply. For example, Forest Survey information is a principal basis for the timber supply study that the Forest Service is now making in the Douglas fir region, a study that should be extended to the Pine Region upon completion of the present area study in July 1968. Similar information and similar studies are needed in the rest of the West in order to examine the policies and programs for growing more timber for the future economic growth in the timbered western states.

Our association is in favor of increased financing for the western Forest Survey units so the inventory cycle can be shortened, more detailed reports can be published, and special studies of timber cutting, waste wood and mortality can be made. Nationwide, the Forest Survey costs less than one-half cent per acre of commercial forest land. The expenditure of an additional small amount per acre for this necessary information would pay off many fold in the future strength of the timber industry which has so far been the basis for much of the economic development and employment in the West. We support the budgeted increase of $103,000 and request early consideration of further increases. A ceiling of $2,500,000 limits this appropriation. We favor legislation that would raise that ceiling to $5,000,000.

Bureau of Land Management Timber Sales Program

Another important source of softwood logs in Western Oregon is the O. & C. and Public Domain lands. The Administration's 1968 budget includes funds to sell the full allowable cut, to sell much of the fire killed timber in the Oxbow area and to sell 140 million feet of salvage and thinnings. I hope you will approve this item in full.

STATEMENT BY COLLEGE OF FORESTRY, STATE UNIVERSITY OF NEW YORK

Nature of Existing Program

The above two agencies have a soundly structured cooperative program in this subject field aimed at

1. Getting more and better answers to major problems affecting both private and public interests through concentrated multidisciplinary research; and

2. Providing a Center of Excellence, at the graduate and postdoctoral level, for thorough preparation of greater numbers of effective resource leaders at a time when this need is a regional and national problem of mounting importance.

The U. S. Forest Service clearly has recognized the significance of these needs for society. In order to meet its responsibilities best for the populous Northeast region, it has found it most fruitful to consolidate its nominal forest recreation research funds and personnel at one University base where optimum complementary research and advanced instruction could be provided for mutual effectiveness. The entire program is housed in College facilities, on its Syracuse campus.

This cooperative program in basic research and encouragement of professional leadership in forest recreation is a dynamic and effective unified endeavor. It constructively couples the finances, specialized personnel, and physical resources of the federal Forest Service research unit with pertinent counterparts at the State College of Forestry. Experience to date confirms that this combined effort generates the outstanding quality and interdisciplinary capability so critical to real progress in this complex subject field. Also, it provides much greater efficiency and utility in the use of public funds.

Major additional indirect values accrue to the recreation program at Syracuse from close association with the other strong complementary resident programs in resources management and biology, including forestry economics, soils, tree improvements, tree diseases, insect pests, forest engineering, meteorology, water, landscape architecture and forest administration. The State University of New York has just recently established its Statewide Water Resources Center at the College of Forestry. This coordinative unit for all campuses and colleges of the State University will directly impinge upon many facets of recreation, such as pollution, water quality, aquatic plants, fish and recreational uses of our waters.

Presenting Funding Levels for the Program

This U. S. Forest Service regional recreation research unit at Syracuse serves primarily the deepening needs in society's use of outdoor resources for rerceational benefits throughout the 14 states east and north from Kentucky, Ohio, West Virginia, and Maryland. In this most populous region of our nation there are rapidly mounting urgencies for accommodating the dwindling open land base to the most appropriate present and future needs of people—needs both for supporting livelihoods and for providing amenity qualities sought to make our society livable.

Over one-third of all the people in the United States live and pay taxes and vote in the region served by this Forest Service research unit. About one-fourth of this regional population resides in New York State. Also, approximately one-sixth of the total revenues supporting federal government activities is derived from New York State alone.

Public funds (state and federal) provided in the current fiscal year for support of the major efforts of this cooperative program are approximately as follows:

A. State college of forestry (direct and indirect support):	
Direct funding of personnel and research projects in forest recreation	$92,000
Value of administrative services, space and facilities contributed to Federal program	60,000
Contributed values by associated faculty in other related disciplines on campus	65,000
Value of adjunct support from associated research in related programs at the college	55,000
Annual cost of formal instruction furnished graduate students in forest recreation programs	28,000
Support to forest recreation research (approximately)	300,000
Direct State costs of closely allied and complementing resident instructional program in landscape architecture at the college of forestry, other than above	240,000
Direct State costs of closely allied and complementing resident instructional program in resources management at the college of forestry, other than above	390,000
Total	930,000

B. U.S. Forest Service: Federal budget allocation for forest recreation research, Northeastern Forest Experiment Station	110,000

The Importance of Outdoor Recreation to Our People and Our Economy

Forest-oriented and related outdoor recreation has become a prominent characteristic of the contemporary American way of life. Recently this has become supplemented by a widening public attention to its esthetic consciousness. A trend toward the cities as a place to live and work has brought a counter need for frequent return to shaded forests, pastoral meadows, peaceful streams and lakes, and quiet wooded hills as places to rest from work and to re-create implicit but critically important human values essential to the lasting quality of our society. Increased crowding with its concomitants in our cities is further increasing the trend to seek out open spaces, fresh air, esthetic quietude, and other qualities of a wildland environment that are vital ingredients to the environmental health of a dynamic and prosperous nation. The continuance and furtherance of the opportunities for quality outdoor recreation in the future depends upon our being able to effectively meet the highly complex recreation-resource pressures and requirements of today. This objective can be most soundly assisted in the long run through a comprehensive and adequately financed program of research and education for leadership.

The services we seek from our natural resources through use for forest recreation cannot be treated in either a social or a resource vacuum. The great complexity and fluidity of our society accompanies a similarly great complexity of our resources. Use of large amounts of our land resource base and capital for recreation developments has been justified on two grounds—(A) social, and (B) economic benefits. The social and economic benefits of forest recreation are not merely the result of a few simple activities on a few static sites set aside for recreational purposes. Recreational benefits, instead, are the result of an immensely complicated societal-resource system. Both major elements of the system—society and the resource—are, themselves, dynamic systems with multitudes of interacting forces and values. Alternative combinations of inputs into the societal-resource system generate various interactional impacts which result in different mixtures of societal benefits and types of resource "wear and tear".

Throughout the northeastern United States, needs for outdoor recreation are constantly accelerating upward. The Empire State, along with her sister states throughout the Northeast, has recognized the tremendous importance of outdoor recreation both to residents and to those who visit their state. As a result, a $100-million bond issue approved by New York voters in 1961 and 1962 for land acquisition for outdoor recreation purposes included $50,000,000 solely for acquisition of nonurban wildland. This was a crucial step toward providing for immediate and future needs. In addition, it is estimated that over the next 13 years, an additional $12,700,000 will be needed each year to develop for use the land that has been acquired. In 1965, a $200-million bond issue was passed overwhelmingly by the people of New York State to develop the recreation lands previously acquired for outdoor recreation. These monies are a heavy investment in public outdoor recreation activities. Similar governmental activities are prevalent in New Jersey and Pennsylvania. Such investments can be expected to grow through coming decades.

A. *Social benefits.*—The need for publicly-supported outdoor recreation is often defended by public agencies and legislators in terms of the nonmaterial societal benefits that accrue to both individual participants and to society. These include such things as improved health, strengthened families, better attitudes toward contributing to community affairs, appreciation for our nation's natural beauty, and pride in our country's heritage. If, in fact, such social and individual benefits do result from outdoor recreation, society needs to encourage and support such use of our land and capital in order to strengthen these benefits.

There also should be abundant opportunity for provision of these social and individual benefits of outdoor recreation through greater use of our private enterprise mechanism, thereby relieving more of the extreme cost and pressure upon publicly-provided recreation resources than may be expected otherwise. The economic values and benefits are, themselves, sufficient to justify development of better ways and means for preserving our heritage of strength through individual entrepreneurship in this major area of service to social needs. Better knowledge of these amenity and economic values, and their derivation through participation in various recreation activities, would undoubtedly yield much improved efficiency in use of money and resources to create them.

B. *Economic Benefits.*—Of equal importance in justifying public support of outdoor recreation are the material, or economic, benefits that result to those who provide equipment, supplies, and services to the recreation publics. These benefits include the many private enterprises that sell opportunities for recreation, and which often operate in vital complementary and cooperative relationship with the public land management agencies near them. The local economies of certain areas, as in the Adirondacks, for example, are almost wholly dependent upon different kinds of outdoor recreation activities.

The importance of the economic benefits from outdoor recreation is reflected in the fact that $2.2 billion of the New York State Gross Product resulted from expenditures in recreation of all types in 1962. This compares with $2.3 billion spent in the same year in New York State for medical care and death expenses. At the national level, $31 billion was spent on all forms of leisure activities in 1953. That figure would be considerably larger today and illustrates the dollar involvment of recreation activities in our economic system. Incalculable social value accrual is even more important to the tone and character of our society.

The Need for a Center of Excellence

Highly competent leaders in far greater abundance than now available are needed if we are to make headway in overcoming the visible worsening of our environmental standard of living. The continuance and furtherance of the opportunities for quality recreational and esthetic uses of our natural environment in future depend upon our being capable of planning to meet these needs effectively in relation to other increasing land use pressures. Experienced land managers, such as in the Forest Service, are very well aware of the extreme dearth of qualified leadership personnel in the forest recreation field. Men with the requisite depth and quality of interdisciplinary preparation are in extremely short supply, due in part to the lack of suitable centers of education and research and in part to the high cost and length of time necessary for educational preparation to requisite levels in intercultural disciplines. The cooperative center herein described is already making its mark in a small but promising way in serving this need. Much more needs to be done than present funding can sustain.

The diversity of the natural resource base for recreational values has involved several scientific disciplines, each with its own interests and interpretations of research needs and priorities. Consequently, much research into recreational problems has been piecemeal and fragmented, rather superficial, and with little central concept or purpose to guide the total effort forward. Solid basic data are not generally available as yet for making decisions that should endure. Empirical studies of all sorts have strongly dominated research efforts in the field and they are quite necessary to meet numerous needs of resource managers. But the urgent need is for fundamental studies and more sophisticated methods that can find answers within the complexity which actually controls use of our natural resources. Determining priorities and relative values for the whole series of invaluable resources on a forest land unit simultaneously supporting numerous "vitally necessary" multiple use demands by society, calls for a broader and deeper knowledge base than normally provided. It is down this road toward better knowledge of fundamenals that our college believes the cooperative support of the Center of Excellence in recreation research must move to be worthy of its public trust. The Center provides the vehicle and the system for focusing unusual capabilities and talents, and for synthesizing the premises and concepts guiding those who must work together to attain significant progress through sound research in this field.

With so much public money being spent in support of state and federal programs in outdoor recreation, it is timely to evaluate the benefits that seem to accrue from such expenditures. Are we really getting our money's worth compared to other federal, state, and private programs where we could strengthen support? Are the social benefits from outdoor recreation real or imagined? Where are our present outdoor recreation policies leading us? The public vote strengthens our intuitions concerning the reality of recreation values but an intuitive awareness of these nonmaterial benefits is scarcely sufficient as a basis for prudent and judicious investment of the enormous sums being put into land, capital improvements, and management. The public vote is a mass response that expects action and assumes resource agencies know what to do. For a limited time, the agencies can ride on their experience, intuitions, common sense, and communicated expressions of demand from interested persons in order to progress in the general direction of public needs. But wisdom in reaching appropriate division of responsibility between business enterprise and public subsidy in this sector, prudent sensibility in working out optimum allocation of land, and best coordination of the competing commodity and recreation requirements for the land resources, all require concentrated, deliberate, and systematic accumulation of a fundamental knowledge base that we do not now have. As New York's former Conservation Commissioner Dr. Harold Wilm has stated:

> We (in New York State) would have been in better shape to undertake this (aforementioned) acquisition program, if we had already had the advantage of some well-conducted research to determine what types of lands are best adapted to the several phases of outdoor recreation.
>
> Will our choices prove right five, ten, or twenty-five years in the future when we make investment development to meet the recreational demands on these lands?

The public concern and trust in its agents needs to rest on a much greater fund of sound knowledge about the justifications for such decisions, the alternatives we might now employ, and about what the future will require in present outdoor recreational resource use and planning. The responsibility of the College of Forestry (State University of New York) and of the Northeastern Forest Experiment Station (Forest Service, U.S. Department of Agriculture) to carry forward serious research in this important societal-resource system has become apparent over the past decade. In the State of New York alone, with over 17 million people and land area 47 percent forested, with millions of dollars of public funds being invested annually in support of the millions of visits for outdoor recreation activities, the time is overdue for a much stronger research effort on the core issues of outdoor recreation.

The urgent need for such concentrated research in this area of concern has been recognized nationwide. The national Outdoor Recreation Resources Review Commission, headed by Laurance S. Rockefeller, strongly sounded the need for a systematic and continuing program of recreation research to provide the basis for wise decisions and sound management. The National Academy of Sciences and National Research Council in its report to the President of the United States emphasized that research in the human aspects of resource use is needed to clarify some of the complex resource-system relationships and help sharpen the tools for finding and weighing the alternatives open to us in shifting the equilibrium of the system to achieve desired goals. President Johnson, in his recent message on a Natural Beauty, has emphasized the need for research in wildland esthetics—a major recreation resource which is now emerging as an important domestic policy issue.

Past Research Effort

Most forest recreation research efforts to date have been limited to studying small phases of major problem areas. Much larger efforts are needed to provide information on the important core or basic issues. As Marion Clawson of Resources for the Future stated (Clawson, 1963):

> There has been almost no basic research applied to outdoor recreation. * * * The need is acute for basic research, to develop principles, understanding, and laws. . . . There is equally great need for research applied to specific areas and problems, *but the latter is likely to be relatively unproductive until a better theoretical framework has been developed.*
>
> The total values created by outdoor recreation are a *major* fraction of those created by agriculture, for instance, yet the amount of research in outdoor recreation is miniscule as compared with agriculture. There is every reason to believe that research applied to outdoor recreation can be as productive as has been research applied to agriculture.

It is apparent, then, that a strong need exists for a much more sophisticated and higher caliber effort in outdoor recreation research. Furthermore, the greatest need is for studies on fundamental social and economic aspects of forest recreation in both the public and private sectors. The most expeditious way of achieving the necessary quality of research effort is through strengthening the funding of the cooperatively supported Center of Excellence already structured toward these goals as herein described.

Present Research Effort

The cooperative agreement entered into in 1962 by the College of Forestry and the U.S. Forest Service to foster mutual pursuit of research needs in recreational use of forest land resources currently brings together four federally-financed scientists and four state-financed faculty scientists actively engaged in research dealing with recreational phenomena in both the public and the private sectors. In addition, there are approximately 18 other faculty scientists at Syracuse who devote varying portions of their attention to research related to or contributory to progress in forest recreation research, and at least an equal number of graduate students. This scope of effort provides sufficient base of interest and capability upon which a worthy Center of Excellence could properly and readily be structured with much less additional cost than would be incurred otherwise to attain similar results.

Recommended Research Support

Our State depends upon the recreation research results to provide basic data for program direction and to guide decisions regarding land use, recreational enterprise, and related needs of both the public and the landowner. However, because of insufficient funds, the scope of the present cooperative program cannot encompass many of the important problems that should be included in a Statewide, and regional, recreation research program. Further, during recent years, costs of significant research here as elsewhere have increased substantially, even without considering the greatly increased needs for research information of all sorts.

It is urged that immediate consideration be given by Congress to legislative action necessary to increase the authorization limit on U.S. Forest Service research funds to allow for the expanding demands throughout the Northeast region for current and comprehensive Forest Recreation Research. There is no increase in funding provided for this cooperative Center for the Northeast in the pending federal budget for fiscal year 1968. New York State, in proportion to land area and number of people served, is now contributing very substantially to support of this cooperative research need. It is recommended that, in recognition of the much wider scope of responsibility served by the U.S. Forest Service Northeast Region, its appropriation for forest recreation research be increased by at least $250,000 in the current budget hearings.

LETTER FROM WESTERN COUNCIL, LUMBER AND SAWMILL WORKERS

MARCH 2, 1967.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

Each year at this time, the Western Council of Lumber and Sawmill Workers takes the opportunity to express our continuing interest in the forestry and conservation programs of the Nation. We appreciate your support of these programs.

This year we are pleased to note that the proposed budget for the U.S. Forest Service for fiscal year 1968 provides for several increases in forestry research. We concur with the need for all of these increases and would like particularly to support several programs that will bring important benefits to the Northwest as well as to the Nation.

The Forest Survey is a first essential to forestry progress. The recent report on "Forest Industries of Eastern Washington" is an example of the worthwhile work being done. However, keeping this timber inventory up to date requires constant effort. The increasing importance of the forests for all uses and users makes it necessary not just to maintain but to intensify the Forest Survey. The proposed increase of $103,000 in the fiscal year 1968 budget is more than justified in view of the fact that an increase of $400,000 is authorized and much needed nationwide.

Too little has been done about the need for economical applications of forestry action programs. Economic studies are an important part of the whole forestry program. The economics research at the Pacific Northwest Forest and Range Experiment Station in Portland has been particularly productive. The recently published report entitled "Manpower Use in the Wood Products Industries of Oregon and Washington" is an example of the many analyses needed to help understand and, in time, to solve our resource-related employment problems. The current level of effort in this work is far below that which is needed and projected in the "National Forestry Research Program." The proposed budget provides for an increase of $297,000 for forest economics research nationwide. We are very much in favor of this increase.

The large gains that could come from the successful development of aerial logging systems through engineering research were explained to the Congress last year, and they are well documented in the record of the hearings. This work is headquartered in Seattle. The three research engineers assigned to this project work closely with forest industry, the logging equipment industry and the University of Washington.

Their preliminary tests of skyline and balloon logging indicate that exceptional efficiencies could be realized by improving these systems through research and then using them extensively in harvesting timber from the rugged terrain typical of so much of the West. In fact, more than 25 million acres of commercial timberland in the West cannot be logged by conventional methods. These lands can contribute importantly to our timber economy and employment if engineering research can develop the key to efficient timber harvest from them. The expected benefits exceed the costs of this program many fold, but the level of financing and the rate of progress need to be increased.

For these reasons our Western Council urges your support of the proposed nationwide increase of $215,000 in forest engineering research and the further strengthening of this work as rapidly as feasible.

I want to express again our commendation for your successful efforts a year ago in obtaining construction funds for the Silviculture and Animal Problems Laboratory at Olympia. Construction is now well underway, and the new laboratory is expected to be ready for use by early fall. This modern facility will greatly help to increase the effectiveness of research scientists who are working there on the related problems of reducing tree losses from animal damage and raising production rates in Douglas-fir forests through development and testing of more intensive cultural practices.

We do feel, however, that the research on Douglas-fir silviculture should now be strengthened rapidly to bring these studies in balance with the importance of Douglas-fir in our Northwest timber industry, and the dominant species on some 20 million acres in western Oregon and western Washington. Research on possible use of fertilizer treatments for Douglas-fir shows much promise, and should be pushed aggressively along with study of other kinds of cultural treatments. The estimated cost of bringing this essential effort up to the strength planned under the 10-year National Forestry Research Program is $160,000 annually—an investment we are confident is justified many times over by the benefits that will accrue.

Members of the Council are concerned with opportunities for constuctive forest recreation as well as with forests to supply timber for jobs and essential products. Clean lakes and streams—a nice spot for trailer or camper—a quiet place to get away from it all—good hunting and fishing—these things too are important, along with productive employment.

Thus, we are pleased to note that the President has proposed to strengthen forest recreation research in the Forest Service. This is much needed to keep pace with the rapid expansion of recreation and tourism which are becoming increasingly important in the economy of the West. Both private and public forest lands are under pressure to supply more recreation, water, fish and game as well as wood products.

For these reasons, the Council urges stronger Forest Service recreation research programs, including the establishment of a cooperative research unit with the University of Washington, and strengthening recreation research to meet the pressure of increased use. This program should be implemented as rapidly as possible.

We are pleased also to learn that next years' budget proposes at least modest strengthening for watershed research. We have been concerned during the past two years that the new Forest Hydrology Laboratory in Wenatchee has not been fully staffed. Strengthening here will yield essential information concerning timber harvesting, grazing and recreational development on mountain watersheds. We urgently need to know how to build roads and harvest timber without causing excessive soil loss, and how to increase the yield of high quality water. The economy of our east side country is geared to a dependable supply of usable water.

We in the Western Council strongly back these needed increases in forestry research, and ask that you give them your careful consideration and support. I shall appreciate having a copy of this letter included in the record of the hearings on the Forest Service appropriation bill.

Yours very truly,

WESTERN COUNCIL, LUMBER & SAWMILL WORKERS,
EARL HARTLEY, *Executive Secretary.*

BUREAU OF OUTDOOR RECREATION

LETTER FROM SENATOR ALLOTT

UNITED STATES SENATE,
COMMITTEE ON APPROPRIATIONS,
March 16, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: It has come to my attention that the Department of Interior, and specifically the Bureau of Outdoor Recreation, has asked for an advance of $32 million from the general fund to the Land and Water Conservation Fund for FY 68. Coupled with projected receipts of $110,000,000, the Department is requesting a total appropriation to the Land and Water Conservation Fund of $142 million. Of that $142 million, only $65 million is proposed to be available to states on a matching basis for state and local outdoor recreation development. This amounts to only 46% of the total appropriation as the states' share, while 54% would be the Federal share. Section 4(a) of the authorizing legislation, Public Law 88–578, establishes the apportionment between the states and the Federal government as 60% for the states and 40% for the Federal program. While the Act does permit the President to vary the apportionment by fifteen percentage points either way, the States must match on a dollar-for-dollar basis the amount they are allocated under the states' share of the fund. Therefore, for every dollar allocated to the states it can be anticipated that $2.00 will be spent in the field of outdoor recreation, and the long-term interest of outdoor recreation is better served by increasing the apportionment to the states and reducing the apportionment to the Federal program. Furthermore, the states tend to concentrate their efforts in the areas of greatest need, namely, the acquisition and development of outdoor recreation facilities near to metropolitan areas.

With a projected deficit of $8.1 billion for FY 68 and with strong indications that this deficit will go considerably higher, and with the national debt standing at an all-time high of approximately $336 billion, this does not seem to be an appropriate time to further burden the Administrative budget with a $32 million advance to the Land and Water Conservation Fund. Deferral of such advances from the General Fund would seem most appropriate at this particular time. I respectfully urge you and the members of the Committee support the reduction of this item from $142 million to $110 million. Further, I respectfully urge that you consider increasing the state apportionment to 60% or above in light of the fact that anticipated benefits will be on a basis of two for one, $2.00 for every $1.00 of Federal money expended.

Sincerely yours,

GORDON ALLOTT, *U.S. Senator.*

LETTER FROM COLORADO DEPARTMENT OF GAME, FISH, AND PARKS

PAUL EATON,
Clerk, Senate Appropriations Subcommittee, Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR MR. EATON: We are vitally concerned about the change that is taking place in the Federal budget for the Land and Water Conservation Fund Act and request that our statement be included in the hearings on this subject in the Senate Appropriations Subcommittee for Interior and Related Agencies.

As we understand it, the Federal budget for Land and Water monies totals $142,000,000, of which $77,000,000 is allocated for Federal agencies, and $65,000,000 for state agencies. This is approximately 54% for the Federal share and 45% for the state share. This proposed change in the ratio of the fund is not consistent with the states' and the political subdivisions' outdoor recreation needs, and is contrary to the pre-passage propaganda which advertised a 60% allocation for the states with 40% allocation to the Federal agencies.

The 1966 appropriation for Colorado was $1,160,000. Requests totalled over $3,000,000. The 1967 appropriation is currently estimated at $876,000. Requests amount to over $3,500,000. The Land and Water Conservation Fund, at the current rate of estimated funds, can match only about $1 in $4 that is available in Colorado.

Colorado has allocated 70% of available Land and Water Conservation Fund monies to the political subdivisions allocated along the Front Range from Fort Collins to Trinidad where approximately 80% of our population resides.

We feel there is an overwhelming need to develop outdoor recreation facilities by the state and the political subdivisions of government in areas that are reasonably close to metropolitan centers of population. Any reduction of Federal funds for this purpose would seriously curtail the outdoor recreation program of the states and the political subdivisions of the nation.

Federal agency policy makers will attempt to justify a proposed change in the allocation of Land and Water Conservation Funds on the contention that the states and political subdivisions have spent money for development of facilities rather than for land acquisition. Their proposal is to allocate a greater share of funds to Federal agencies for acquisition of land for federal recreation areas.

We hope that 60% state and 40% Federal ratio upon which the Land and Water Conservation Fund Act was sold to the people of the country will be maintained.

Sincerely,

HARRY R. WOODWARD,
Director.
GEORGE T. O'MALLEY, JR.,
Assistant Director, Parks and Recreation.

LETTER FROM WISCONSIN CONSERVATION DEPARTMENT

Hon. CARL C. HAYDEN,
Chairman, Senate Subcommitte of Interior Appropriations, Old Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: It has come to my attention that the Land and Water Conservation Fund under the proposed Department of the Interior fiscal year 1968 budget calls for a decrease to the states of $703,000.00. At the same time the funds available to the federal agencies under this program will be increased by $32,488,000.00. I do not oppose the increase to the federal agencies, but I believe the states' share should similarly be increased.

Public Law 88–578 places the pivotal role for outdoor recreation upon the states. Section 4(a) while calling for 60% of the funds to go to the states does authorize a 15-point change during the first five years. This change is to reflect the current relative needs of the states and the federal government. The proposed budget would make the percentage split 46.7 state and 53.3 federal.

Without a doubt the current relative needs still rest with the states and local units of government. This act is designed to create outdoor recreation areas where the people are. As worthy as the federal projects are, they are still resource oriented and not people oriented as are the projects of the cities and local governmental agencies.

It is also designed to accelerate outdoor recreation. By pumping additional funds into the federal share, it will reflect that amount as acceleration. At the same time, a $32,000,000.00 increase in the state apportionment would mean an acceleration of $64,000,000.00. It is at this level where true acceleration can take place.

Undoubtedly, part of the thinking behind this proposal is the amount of funds unencumbered in past years' state apportionments. I believe there are very good valid reasons for this as follows:

1. Prior to submitting projects, the states had to have an acceptable plan. In most cases, this took between 1 to 1½ years after passage of PL 88–578. This requirement was not imposed upon federal agencies and the national plan is still not complete.

2. Since the states' share had to be matched at all levels, budget problems often existed. Many local units of government had no advance warning of this program, and they had not budgeted for it. In some cases, biennium budgets were involved which compounded the problem. This was no problem to federal agencies since it was not 100% funds.

3. A delay existed after a state had received acceptance of their plan due to informing local governments of the requirements. Staffing at both the state and local level was a problem. I believe the local response has been real encouraging in light of both of these problems.

4. The money encumbered is low, but why? Sufficient local projects have been qualified for eventual Bureaus of Outdoor Recreation (BOR) approval to just about exhaust the available funds; however, when projects have been submitted for encumbrance, inadequate staffing at the BOR level has resulted in often a six-month delay before final approval and encumbrance of funds. In the early stages all projects no matter how small had to go to Washington for approval which resulted in a real bottleneck.

Since the BOR is charged with coordination of outdoor recreation, they review projects with numerous other federal agencies; e.g., Housing and Urban Development, Federal Aviation Bureau, Fish and Wildlife Service, Federal Power Commission, Corps of Engineers and the Water Pollution Commission. As desirable as this is, it takes time.

5. A certain reluctance existed with the lower government levels as to getting into recreation. Many of them had never before been involved and there was uncertainty as to what they were getting into. This I feel in Wisconsin has now been overcome and there now exists an eagerness to compete with their neighbors in this field.

I believe this to be one of the main contributions of the Land and Water Conservation Fund. It has provided the stimulus for state planning and for many groups to get into recreation that never before had a single acre devoted to it. We find park commissions being formed and professional people being hired by increasing numbers.

This stimulus cannot be promoted by pumping more funds into the federal share. Actually it might have the reverse effects by making people again sit back and let the federal government do it for them.

I don't believe the states should now be penalized in the light of the above requirements. These factors affecting participation by local governments were caused by requirements imposed upon the states and not upon the federal agencies. When all things are considered, I believe the states have done remarkably well. Projects are now being received and processed in sufficient quantities to show the slack has been overcome and the funds can and will be encumbered.

Section 4 (b) of PL 88–578 permits advance borrowing up to $60,000,000.00 annually. It is my understanding that this is the avenue being taken for the federal increase proposed for 1968. I would, therefore, propose that borrowing also be used for the states' share at some level up to the balance of $28,000,000.00. With the increase of projects and since this fund does not lapse for two fiscal years after the one in which it is appropriated, I would see no danger of losing this amount. Conceivably, since these borrowed funds must be repayed, the states could be faced with less funds now and still in the future find that the repayment is coming from the states' share thus imposing a double burden upon the states' share.

I am enclosing a progress report for the State of Wisconsin dated January 1, 1967 (withdrawn). You will note from the last page that ample projects are in various stages of processing to amply encumber all Wisconsin funds. Of the 186 projects received by that date, 120 had been submitted to the BOR, but signed contracts had been received for only 41. I believe other states can also demonstrate that the projects are there to sufficiently justify an increase in the states' share of the Land and Water Conservation Fund.

Your efforts to increase the Department of the Interior's budget to provide additional funds for the states under the Land and Water Conservation Fund Act will be appreciated.

Very truly yours,

L. P. VOIGT, *Conservation Director.*

LETTER FROM FLORIDA OUTDOOR RECREATIONAL PLANNING COMMITTEE

SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
March 15, 1967.

U.S. SENATE,
Washington, D.C.

GENTLEMEN: The Florida Outdoor Recreational Planning Committee—an inter-agency coordinating committee of the Florida state government, chaired by Governor Claude R. Kirk, Jr.—urges that the ratio of 60% states—40% federal agencies be observed by the Congress in appropriating monies from the Land and Water Conservation Fund for Fiscal Year 1968. The Committee feels that this ratio, established as the normal division of funds by the 1964 Land and Water Conservation Fund Act, should be strictly adhered to in apportioning all funds, including any advance appropriations which might be made.

It has been suggested that the Congress might interpret the substantial unobligated amount remaining in the states' share of previous Land and Water Conservation Fund appropriations as an inability or lack of desire on the part of the states to take full advantage of this grants-in-aid program. This is not the case. It is true that some states have had difficulty during the first three years in getting geared up financially to meet their share of the responsibility. Others, however—and these include Florida—take the position that, since two additional full years are provided in which to obligate the funds for any single years, it was the original intent of the Congress that the most careful deliberation precede the selection of outdoor recreation projects on which available funds are to be used. Until the law is changed to require obligation of funds on a year to year basis, we will continue to take maximum advantage of the time limits provided.

We understand that the President has asked the Congress to advance $32,000,000 to the Land and Water Conservation Fund for Fiscal Year 1968, all to be utilized by federal agencies. If this is done, not only would it reduce the states' percentage of the total forthcoming appropriation, but it would also penalize the states further eight years from now when half of the proceeds of the Fund must be used to repay the advance appropriations.

We urgently request that the 60%–40% ratio be maintained, preferably by increasing the amount of the proposed advance appropriation so that maximum land acquisition programs can be carried out at both the federal and state levels during the coming year.

Consideration of these views in connection with your March 20 hearing and all further deliberations will be greatly appreciated.

Very truly yours,

NEY C. LANDRUM, *Director.*

STATEMENT BY THE AMERICAN FORESTRY ASSOCIATION

MR. CHAIRMAN: I am Kenneth B. Pomeroy, Chief Forester of The American Forestry Association.

The members of this citizens organization are deeply interested in outdoor recreation. Each year our people take about 20 two-week expeditions into remote sections of the national forests and national parks as a part of our Trail Riders of the Wilderness Program.

Our members are trying to help provide recreational opportunities desired by the general public. Many of them have purchased the $7.00 Land and Water Conservation Fund sticker during each of the years it has been offered for sale.

These conservationists are well aware of the unfunded authorizations for additions to the National Park System and of the increasing recreational needs of state and local governments.

Therefore, The American Forestry Association recommends that Congress appropriate the full amount of the $142 million item in the President's budget for this purpose.

Respectfully yours,

KENNETH B. POMEROY.

GEOLOGICAL SURVEY

LETTER FROM SENATORS ANDERSON AND MONTOYA

U.S. SENATE,
COMMITTEE ON GOVERNMENT OPERATIONS,
March 20, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Affairs Subcommittee,
Senate Appropriations Committee,
Washington, D.C.

DEAR CARL: The U.S. Geological Survey's Program for the collection of water resources information is one which will greatly extend the knowledge of water resources data throughout the United States.

The present request for this program in the President's budget for FY 1968 is $13,960,000, which is approximately $1,300,000 under the estimate of matching funds to be appropriated by State and Municipal Governments.

Realizing the need for this program as we do in the Southwest, as well as the desire by local governments to provide matching funds in excess of the submitted President's budget request, we strongly urge that the appropriation for this program be increased to $15,260,000.

Sincerely,

CLINTON P. ANDERSON,
U.S. Senator.
JOSEPH M. MONTOYA,
U.S. Senator.

LETTER FROM SENATOR TYDINGS

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
March 9, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee, New Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: Mr. Kenneth N. Weaver, Director of the Maryland Geological Survey, has called to my attention the fact that the budget proposed for the Geological Survey, United States Department of the Interior, for fiscal 1968, provides $13,960,000 in federal money for Federal-State cooperative water resources investigation programs. Although this is an increase of $790,000 over the present fiscal year, it falls nearly $1,500,000 below the estimated amount necessary to meet State program proposals for 1968. Mr. Weaver advises me that such a shortfall in federal funding will "undoubtedly mean a rather serious curtailment in the water resources investigations program unless additional funds are made available to the Geological Survey."

I am sure you are aware, Mr. Chairman, of the value of this program to every state. It would certainly be unfortunate if Federal-State cooperation in water resources investigation is not pressed forward at the maximum rate possible.

I am confident the Appropriations Committee will provide as great a funding level for this worthwhile program as the budget will reasonably bear. Nonetheless, I will appreciate your making my views on this program known to the other members of the Subcommittee on Department of Interior and Related Agencies during your proceedings on the Geological Survey budget.

Sincerely,

JOSEPH D. TYDINGS.

LETTER TO SENATOR ELLENDER

STATE OF LOUISIANA DEPARTMENT OF CONSERVATION,
LOUISIANA GEOLOGICAL SURVEY,
Baton Rouge, La., February 27, 1967.

Hon. ALLEN J. ELLENDER,
Senate Office Building,
U.S. Senate,
Washington, D.C.

DEAR SENATOR ELLENDER: It has come to my attention that the budget now before Congress includes an increase of $790,000 Federal money for Federal-State water resources investigation programs. Inasmuch as the present estimates of the increased State offerings for th fiscal yar 1968 total $2,273,800, the U.S. Geological Survey faces the prospect that they will not be able to match all firm offerings for the cooperative programs in 1968.

In Louisiana the State Department of Public Works, State Department of Conservation—Louisiana Geological Survey, and Louisiana Department of Highways cooperate with the U.S. Geological Survey in this program and are offering $476,800 for 1968 which is an increase of $85,100 over 1967.

If the budget now before Congress is approved there will not be sufficient funds to match the State offering and our program will suffer. This program is vital to our State and additional funds are needed to carry on the projects now underway. One of the most important projects is to complete the study of groundwater resources under Lake Pontchartrain in order to find a new supply of fresh water for Jefferson Parish and the New Orleans area.

We will appreciate it if you will look into this situation and encourage the budget Committee to appropriate to the U.S. Geological Survey the funds as requested so that they can carry on this vital work in Louisiana.

Yours very truly,

LEO W. HOUGH, *State Geologist.*

LETTER TO SENATOR COOPER

UNIVERSITY OF KENTUCKY,
Lexington, Ky., February 21, 1967.

Hon. JOHN SHERMAN COOPER,
U.S. Senate, Senate Office Building,
Washington, D.C.

DEAR SENATOR COOPER: The States are offering to the cooperative water resources investigations programs with the Geological Survey, United States Department of The Interior, increases in matching funds in estimated amounts of $2,273,800 for FY 1968 to bring this total program to $15,223,800 of estimated offerings. These monies must be matched by the Federal government if they are to become available.

The Geological Survey budget request for FY 1968 up for consideration by Congress includes $13,960,000 Federal money for the Federal-State program, an increase of $790,000 over the present fiscal year.

The water resources investigations programs furnish the basic data on a nationwide basis in the areas of surface, ground, and quality of water, from which all studies in water are made. It is particularly imperative these programs continue and increase in view of our increased problems in water supply, management, and pollution.

I urge our Kentucky Senators and Representatives to request $15,223,800 for the FY 1968 cooperative water resources investigations programs of the Geological Survey to be used to match the estimated State offerings—see attached programs. This would include an amount of $282,200 for Kentucky, an increase approved by the Kentucky Water Resources Authority which has approved a new five-year plan.

With best personal regards,

Sincerely yours,

WALLACE W. HAGAN,
Director and State Geologist, Kentucky Geological Survey.

Water resources investigations—Estimates of State and municipal offerings for fiscal year 1968 (as of Feb. 1, 1967)

State	Matching Federal funds committed, 1967	Estimated offerings, 1968	Increase (+) or decrease (−)
Alabama	$247, 000	$307, 900	+$60, 900
Alaska	95, 000	144, 000	+49, 000
Arizona	408, 800	432, 400	+23, 600
Arkansas	134, 000	192, 000	+58, 000
California	1, 150, 700	1, 268, 000	+117, 300
Colorado	335, 800	357, 200	+21, 400
Connecticut	142, 500	149, 100	+6, 600
Delaware	25, 000	18, 200	−6, 800
District of Columbia	4, 600	4, 600	0
Florida	665, 100	700, 000	+34, 900
Georgia	211, 700	179, 600	−32, 100
Hawaii	321, 200	361, 000	+39, 800
Idaho	199, 000	197, 000	−2, 000
Illinois	186, 000	211, 400	+25, 400
Indiana	301, 500	339, 000	+37, 500
Iowa	180, 000	206, 800	+26, 800
Kansas	391, 800	417, 600	+25, 800
Kentucky	173, 700	282, 200	+108, 500
Louisiana	391, 700	476, 800	+85, 100
Maine	37, 600	41, 500	+3, 900
Maryland	199, 000	239, 200	+40, 200
Massachusetts	161, 100	176, 500	+15, 400
Michigan	271, 000	330, 000	+59, 000
Minnesota	229, 100	235, 800	+6, 700
Mississippi	140, 000	196, 500	+56, 500
Missouri	168, 800	202, 000	+33, 200
Montana	110, 400	113, 600	+3, 200
Nebraska	155, 800	168, 500	+12, 700
Nevada	143, 000	153, 000	+10, 000
New Hampshire	39, 200	70, 000	+30, 800
New Jersey	288, 000	344, 200	+56, 200
New Mexico	325, 000	416, 700	+91, 700
New York	762, 100	815, 000	+52, 900
North Carolina	312, 200	342, 000	+29, 800
North Dakota	218, 700	231, 700	+13, 000
Ohio	254, 400	306, 000	+51, 600
Oklahoma	135, 800	202, 700	+66, 900
Oregon	181, 500	221, 000	+39, 500
Pennsylvania	493, 000	479, 400	−13, 600
Puerto Rico	164, 800	160, 000	−4, 800
Rhode Island	33, 200	40, 800	+7, 600
South Carolina	67, 500	80, 000	+12, 500
South Dakota	130, 800	154, 800	+24, 000
Tennessee	176, 500	214, 600	+38, 100
Texas	720, 900	1, 118, 500	+397, 600
Utah	317, 700	326, 900	+9, 200
Vermont	27, 800	32, 300	+4, 500
Virginia	119, 000	227, 800	+108, 800
Virgin Islands	32, 500	15, 000	−17, 500
Washington	459, 700	680, 000	+220, 300
West Virginia	49, 800	59, 800	+10, 000
Wisconsin	284, 400	340, 000	+55, 600
Wyoming	174, 600	243, 200	+68, 600
Total	12, 950, 000	15, 223, 800	+2, 273, 800

FISH AND WILDLIFE SERVICE

PAHRANAGAT WILDLIFE REFUGE LETTERS TO SENATOR BIBLE

STATE OF NEVADA,
FISH AND GAME DEPARTMENT,
Las Vegas, Nev., March 15, 1967.

Hon. ALAN BIBLE,
Senate Office Building,
Washington, D.C.

DEAR SENATOR BIBLE: Monday and Tuesday of this week I attended the North American Wildlife Conference in San Francisco.

Monday afternoon I met with officials of the United States Fish and Wildlife Service, concerning Nevada programs. It was brought to my attention that funding to rehabilitate the Pahranagat Wildlife Refuge was not included in the Interior Budget. I do hope you can assist us here in Nevada to secure approval of these much needed funds. This refuge is the only Waterfowl Refuge in Southern Nevada and a most important link in the flyway chain through Central and Eastern Nevada, as well as all Southern Nevada. The waterfowl program of the Nevada Fish and Game Commission is closely integrated with this important area.

If you need additional information in this connection, please call Mr. Noble Buell at U.S. Fish and Wildlife in Washington, D.C. Mr. Buell and his staff are completely in accord with this request and a call from you would help this program.

I am enclosing copies of the Proposed Rehabilitation Plan.

Thanks for your continued support of our Wildlife Resources and Public Recreation.

Sincerely yours,

WAYNE E. KIRCH, *Chairman.*

Rehabilitate Pahranagat National Wildlife Refuge

Drill—2 Wells	$15,000
Construct & Repair Ditches—4 Miles	15,000
Water Conservation Dikes—2 Miles	10,000
Rebuild & Repair all Access Roads—6 Miles	3,000
Complete & Repair Fences—10 Miles	10,000
Total	53,000

U.S. DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C., March 21, 1967.

Hon. ALAN BIBLE,
United States Senate,
Washington, D.C.

DEAR SENATOR BIBLE: We are providing the following information in response to your telephone request of March 20 regarding the Pahranagat National Wildlife Refuge in Lincoln County, Nevada.

The Pahranagat Refuge now consists of 5,203 acres of land located in a relatively well-watered valley in southeastern Nevada. The refuge was established in 1964 after approval by the Migratory Bird Conservation Commission. The area has a long history of waterfowl use mostly during migration, but also has heavy use by migratory birds during favorable winters. The refuge is on an important waterfowl flight lane between Great Salt Lake and the Imperial Valley in California.

Peak populations of waterfowl did not exceed 12,000 birds in 1966 but are expected to exceed 50,000 birds under full development of the refuge. Portions of the refuge were opened to waterfowl hunting for the first time in the fall of 1966 and provided sport for 150 hunters. In addition, a pheasant hunt was held in cooperation with the Nevada Fish and Game Department which provided sport for over 700 hunters.

The principal water areas on the Pahranagat Refuge are the upper and lower Pahranagat Lakes. Supplementing these are seasonal impoundments which hold water for a short time during the migration period. The number and size of these seasonal impoundments will be dependent on development of ground water. Waterfowl food crops are grown on about 400 acres of land. Grazing is used as a management practice to maintain range and pasture lands in optimum conditions for waterfowl use.

The developments proposed include a short dike to permit maintenance of higher water levels in upper Pahranagat Lake, concrete lining for irrigation ditches, and irrigation well to provide water for farm crop irrigation. The necessary roads, trails, and fences must be constructed or rehabilitated. In addition, a service building is required for the repair of the equipment used on the refuge. This development is proposed in three phases as listed below:

PHASE I

Irrigation well	$20,000
½ mile dike	20,000
Concrete lining 6 miles of ditches	30,000
Total, phase I	70,000

PHASE II

Concrete lining 9 miles of ditches	50,000
Cleaning existing drains and ditches	27,000
Rehabilitate roads and trails	21,000
Fencing and posting	17,000
Total, phase II	115,000

PHASE III

Rehabilitate irrigation drainage system	32,000
Fencing and posting	13,000
Biological improvements	5,000
Service building	20,000
Structures and utilities	5,000
Rehabilitate roads and trails	21,000
Recreation development	2,000
Total, phase III	98,000
Total for development	283,000

The developments proposed in Phase I are especially important in order to provide a manageable unit to attract waterfowl and to provide food and cover for migratory birds. These developments should be initiated as soon as possible in order to make this newly acquired refuge available to migratory waterfowl.

A copy of a proposed development plan for Pahranagat Refuge is enclosed for your information. We shall be happy to provide any additional information you may wish.

Sincerely yours,

A. V. TUNISON,
Deputy Director.

WILLOW BEACH FISH HATCHERY LETTERS TO SENATOR BIBLE

STATE OF NEVADA,
FISH AND GAME DEPARTMENT,
Las Vegas, Nev., March 15, 1967.

Hon. ALAN BIBLE,
Senate Office Building,
Washington, D.C.

DEAR SENATOR BIBLE: I wish to thank you for taking time of your very busy schedule, during your recent trip to Nevada, to make an examination of the Willow Beach Fish Hatchery.

You know of my interest, and the interest of hundreds of thousands of fishermen of the Southwest, in the great winter playground area of Lake Mohave. In 1960 and 1961 you were instrumental in securing Federal funds to construct the Willow Beach National Fish Hatchery on the shore of Lake Mohave just a few miles downstream from Hoover Dam.

The output of trout from this hatchery, stocked in the Lake and the Lower Colorado River, has created a sport fishery that draws fishermen and vacationers from the population centers of Southern California, Arizona, New Mexico and Utah. Each year the public use of this area multiplies. The pressure placed on the fishery is staggering. Between 1961 and 1965 visitor use to the area increased 62% while fishing increased 90%. The same pattern is forecast for the five year period ending in 1970.

The rainbow trout is the principal sport fish in Lake Mohave and it is the species produced and stocked by the Willow Beach National Fish Hatchery. It cannot spawn naturally in the lake and river so we must continue to plant it if we are to satisfy the needs and demands of the people who come here seeking fishing.

I know we are going to need more fish from this hatchery. It is clear to me that we already need more than we have been stocking over the last few years. This concern for the need for more fish prompted me to visit the Willow Beach hatchery recently and to inquire about the possibility of increasing production. This is what I learned.

Production can be increased by 25% to 30% but not until the facilities at the hatchery are rehabilitated to provide for better and more efficient use of water. Other changes are needed to their pumping system and in facilities for receiving the visiting public.

An extension on the east end of the hatchery building to house the incubators and a well to produce clean water for the aquarium and the incubators would increase production and provide something of interest to the visiting public.

At the present time the hatchery is completely dependent on electricity for operating its pumps. An electrical storm could damage pumping equipment to the extent that the auxiliary power plant will be of no value. An auxiliary pump powered by a diesel engine would correct this problem and perhaps at some future time save a hatchery full of fish. The raceway drain lines are so constructed that one series of raceways, 10% of the total production space, must be used for waste ways and, therefore, are lost for production use. New supply and drain lines are needed to free these raceways for production.

The hatchery is an integral part of the Willow Beach Recreation Area but completely unequipped to handle the thousands of people who visit this site every year. The ½ mile access road connecting it to the concession area is narrow and unpaved. There is parking area for only 20 cars where 200 are needed. These conditions need to be corrected.

The Bureau of Sport Fisheries and Wildlife is trying to do a good job of putting out as many good quality trout as possible but they are working with two strikes against them. The fish they are stocking are vital to the recreational satisfaction and economy of the area. Only money will solve their problem and ours. I ask your support in, once again, helping us to get more fish for the lower Colorado River area.

The estimated cost of the rehabilitation and improvement program is $295,000. This will be a small cost to pay for the many millions of hours of extra enjoyment afforded to our local and visiting fishermen.

Sincerely yours,

WAYNE E. KIRCH,
Chairman, Nevada Fish and Game Commission.

U.S. DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C., March 21, 1967.

Hon. ALAN BIBLE,
United States Senate,
Washington, D.C.

DEAR SENATOR BIBLE: This is in response to your telephone inqury of March 20 concerning the Willow Beach National Fish Hatchery, Arizona. As requested, we are furnishing a brief statement of the management objectives of this unit, and a breakdown of development requirements.

More than twelve million people live within a radius of 350 miles of the Willow Beach hatchery. The warm dry climate of the lower Colorado River area has served to create a major recreation area and winter playground. In 1965, some 3.6 million people visited the Lake Mead National Recreation Area. More than 600,000 of these visitors were fishermen. Between 1961 and 1965, visitor traffic in the Recreation Area increased by 62 percent; during the same period, fishing pressure increased by 90 percent. In 1965 alone, trout fishing pressure on Lake Mohave increased by 38 percent. By 1970, some 6.3 million persons will visit the Recreation Area, an increase of 75 percent in five years.

Trout production at the Willow Beach hatchery helps to support much of the trout fishing pressure on the Colorado River. More than 900,000 trout are stocked in the River in four major management areas: Needles to Davis Dam, Lower Lake Mohave, Eldorado Canyon to Hoover Dam, and Lake Powell. Existing production facilities are capable of producing about 250,000 pounds of trout annually. However, in order to reach this level, the raceway water supply and drain lines must be modified, and other improvements made to operational and support facilities.

The development program outlined below will streamline operations and increase the production potential by ten percent. A number of existing operational hazards will be eliminated. Recent surveys indicate that increasing trout fishing pressure will utilize the maximum station production capability within five years, without consideration of development of new trout fishing waters. Funds are required for the following:

PHASE I

Addition to hatchery building for incubator room & storage of hatchery & aquarium equipment	$30,000
Construct block building to replace metal shed over auxiliary generator	3,000
Refrigerated building air conditioning with ducts and outlets	11,000
Install new water supply line to raceways, 470′ pipeline complete with fittings in place	20,000
Correct and rebuild raceway drain lines, 450′ pipeline complete with fittings in place	20,000
Construct truck loading ramp and barge loading slip with fencing and docking facilities	22,000
Construct float with diesel engine and pump linked to pipeline for auxiliary water supply	35,000
Enlarge septic tank to handle estimated load and correct pipeline supply facilities	3,000
Fish cultural equipment	6,000
Subtotal	150,000

PHASE II

Residence	20,000
Blacktop road from Park Concession, station roads and parking areas, including subsurface preparation and road beautification	125,000
Subtotal	145,000
Total estimated cost of the program	295,000

We very much appreciate your continuing support of our programs to help enhance the Nation's fish and wildlife resources. As you are very keenly aware, these resources are providing valued recreational opportunities for an ever increasing number of our citizens.

Sincerely yours,

A. V. TUNISON,
Deputy Director.

ORANGEBURG FISH HATCHERY LETTER FROM SENATOR THURMOND

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
March 21, 1967.

Senator CARL HAYDEN,
Chairman, Senate Appropriations Committee,
Washington, D.C.

DEAR MR. CHAIRMAN: I am enclosing a copy of a letter I have received from Mr. W. C. Bethea of Orangeburg, South Carolina. Mr. Bethea has over the years been interested in the development of the Orangeburg fish hatchery, and in his letter he requests a sum of $185,000.00 to complete a reconstruction project in this hatchery.

I think you will find this letter self-explanatory on the details of the project. I would appreciate it if you and the members of the Subcommittee on Interior Department Appropriations would carefully consider the inclusion of this item in the appropriation bill.

With kind regards.

Sincerely,

STROM THURMOND.

LETTER TO SENATOR THURMOND

FIRST NATIONAL BANK IN ORANGEBURG,
Orangeburg, S.C., March 10, 1967.

Senator J. STROM THURMOND,
Senate Office Building,
Washington, D.C.

DEAR SENATOR: The Orangeburg Fish Hatchery is a great asset to South Carolina. For many years I have contacted our representatives in Congress in behalf of this excellent government agency.

This past year a sum of money was obtained through a special appropriation to begin a modernization program of the Orangeburg National Fish Hatchery's County Unit. The amount appropriated was sufficient to rebuild eight (8) of the nineteen (19) ponds in the system and to construct a modest home for one of the Hatchery personnel to live in. Heretofore, no one was present at night on these premises to prevent vandalism and poaching.

To reiterate the need for this program, the pond system was originally developed in the early 1930's by W.P.A. funds and no modernization has taken place since. Now, due to the increased demands for fish in this area through increased tourism, an accelerated recreational program on a national as well as statewide level, and the increase in the construction of farm ponds, which are also supplied by this hatchery, more production ponds are desperately needed.

It is conservatively estimated, by a very good authority, that a sum of $185,000.00 would fairly well complete the reconstruction of the earthen ponds, replace the water supply lines and drain lines to these ponds, and drill a much needed well for dependable uncontaminated water supply.

Any help you may be able to extend us in securing this appropriation will be gratefully appreciated by all of South Carolina and particularly by the citizens of Orangeburg County.

Thanking you for all considerations past and present and with kindest personal regards, I remain,

Sincerely yours,

W. C. BETHEA.

COOPERATIVE FISHERY UNITS—LETTER FROM SENATOR MUSKIE

UNITED STATES SENATE,
COMMITTEE ON PUBLIC WORKS,
March 13, 1967.

Hon. CARL HAYDEN,
Senate Office Building,
Washington, D.C.

DEAR CARL: My attention has been called to an apparent inequity in the Interior Department Appropriations for Cooperative Fisheries Units in five states including Maine.

As I understand the situation, eighteen out of the twenty-three Cooperative Fisheries Units receive a base appropriation from the Department of the Interior of $40,000 while the five earlier established units at Idaho, Louisiana, Maine, New York and Pennsylvania are supported only to the extent of $30,000. Rising costs of salaries and other operating expenses are placing an unfair burden on these five states.

In your consideration of the Fiscal Year 1968 Interior Department Appropriations, any assistance you could extend to correct this situation would be appreciated.

Sincerely,

EDMUND S. MUSKIE,
U.S. Senator.

COOPERATIVE WILDLIFE RESEARCH UNITS—LETTER TO SENATOR HAYDEN

MARCH 14, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
Senate Office Building,
Washington, D.C.

DEAR SENATOR HAYDEN: I am surprised and disappointed to learn that the Department of the Interior has not requested additional funds in its 1968 budget to bring the financing of the eighteen Cooperative Wildlife Research Units up to the level of the more recent Cooperative Fishery Units. I had thought that this inequity would have been taken care of by the directive of Congress last year that the Interior Department seek equal funding in the 1968 budget.

As you can see from the enclosed tabulation, federal financial support of the Fishery Units greatly exceeds that of the much older Wildlife Units, both here in Arizona and throughout the country. The federal financial contribution to the Wildlife Units scarcely has risen since the first Unit was established in 1935. Contributions of the cooperating universities and land grant colleges and the state wildlife departments have risen greatly, however. In fact, the financial contributions of those two cooperators completely overshadow the federal share.

The provision of funding to the Wildlife Units equal to that of the Fishery Units would strengthen this essential program. Large benefits would result by way of intensified student training at the graduate level and the conducting of necessary wildlife research. The enclosed brochure describes the accomplishments made under this program.

It is hoped that the federal funding of the Wildlife Units can be increased this year. It is unfortunate that it has not been done by now.

With cordial regards,

Sincerely yours,

RICHARD A. HARVILL.

Federal funding of cooperative wildlife research units and cooperative fishery units, fiscal years 1965, 1966, and 1967

State	Cooperative wildlife research units, fiscal year—			Cooperative fishery units, fiscal year—		
	1965	1966	1967	1965	1966	1967
Alabama	$13,900	$14,400	$14,500			$40,000
Alaska	22,400	23,000	23,400			
Arizona	14,400	15,200	15,300	$40,000	$40,000	40,000
California						40,000
Colorado	15,400	15,300	15,500	30,000	30,000	40,000
Georgia				30,000	40,000	40,000
Hawaii					40,000	40,000
Idaho	14,750	15,300	15,500	30,000	30,000	30,000
Iowa	14,750	15,300	15,500		40,000	40,000
Louisiana	14,950	14,400	14,500	30,000	30,000	30,000
Maine	14,750	15,300	15,500	30,000	30,000	30,000
Massachusetts	15,300	15,300	15,500	30,000	30,000	40,000
Missouri	14,750	15,300	15,500	30,000	30,000	40,000
Montana	14,750	15,300	15,500	30,000	30,000	40,000
New York	13,500	14,400	14,500	30,000	30,000	30,000
North Carolina				30,000	40,000	40,000
Ohio	13,600	40,000	40,000		40,000	40,000
Oklahoma	13,100	13,400	13,500		40,000	40,000
Oregon					40,000	40,000
Pennsylvania	14,200	15,000	15,200	30,000	30,000	30,000
South Dakota	14,950	15,400	15,600		40,000	40,000
Utah	14,750	15,300	15,500	30,000	30,000	40,000
Virginia	13,750	14,400	14,500		40,000	40,000
Washington						40,000
Washington, D.C	2,050					
Budget	270,000	302,000	305,000	400,000	700,000	870,000

LETTER TO SENATOR ELLENDER

BATON ROUGE, LA., *March 17, 1967.*

Senator ALLEN J. ELLENDER,
Senate Office Building,
Washington, D.C.

HON. SENATOR ELLENDER: On Tuesday, March 21, 1967, the Senate Appropriations Committee will discuss the budget of the Department of the Interior. It is sincerely requested that you support the portion of that budget which provides for elevation of the operating funds of the Louisiana Cooperative Fishery Unit and the Louisiana Cooperative Wildlife Research Unit each to a minimum of $40,000 annually.

It is pertinent that the Louisiana Cooperative Wildlife Research Unit, founded in 1962, and the Louisiana Cooperative Fishery Unit, established in 1963, are funded much below other Units in the United States. Of 25 fishery units, only 5 are funded as low as $30,000. The Unit at L.S.U. is one of the five.

If the records of the units are consulted, it is evident that the Louisiana Units are doing significant work in research, extension, and instruction, and must rate in the upper 10 per cent of the national aggregate. It is inconsistent that the funding is so low. At present, the State of Louisiana is contributing much more than the federal government to the cooperative effort.

Support of the increased funding, as a follow-up of your help in establishing the two units, will be much appreciated, and a real service to Louisiana.

Thank you very much.

Sincerely,

R. ONEAL SMITHERMAN.

RESOLUTION OF PACIFIC MARINE FISHERIES COMMISSION

COMMERCIAL FISHERIES RESEARCH AND DEVELOPMENT

Whereas, the Commercial Fisheries Research and Development Act was enacted in 1964, and

Whereas, the primary purpose of the act is to supplement and, to the extent practicable, increase the amounts of state funds available for commercial fisheries research and development, and

Whereas, Section 4(a) of the Act authorizes $5,000,000 to be appropriated for each of the five fiscal years following enactment, and

Whereas, Congress appropriated only $4,100,000 each year for fiscal 1966 and 1967 under Section 4(a), and

Whereas, the several states have submitted many needed research and development projects requiring funding in excess of these appropriations,

Be it therefore resolved, that the PMFC does hereby respectfully petition the Secretary of the Interior, the Director of the Bureau of Budget, and the Congress of the United States, and particularly the Appropriations Committees of the Senate and House of Representatives, to assure that the full allowable amount of $5,000,000 be appropriated for fiscal 1968 and subsequent years.

The Executive Director of the PMFC shall transmit copies of this resolution to the Secretary of the Interior, the Director of the Bureau of Budget, to the members of the Congressional Delegations of the States of California, Idaho, Oregon, Washington and Alaska, the Chairmen of the Appropriations Committees, the Commissioner of the Fish and Wildlife Service, the U.S. Department of the Interior and the Governors of the aforementioned states.

(Adopted at Annual Meeting, Seattle, Washington, November 18, 1966.)

ANADROMOUS AND GREAT LAKES FISHERY RESEARCH

RESOLUTION OF PACIFIC MARINE FISHERIES COMMISSION

Whereas, the Anadromous Fish Act was enacted in 1965, and

Whereas, the basic purpose of this Act is the conservation, development and enhancement of the nation's anadromous fish, and

Whereas, Section 4 (a) of the Act authorizes to be appropriated for the period ending June 30, 1970, not to exceed $25,000,000 to carry out the purposes of this Act, and

Whereas, $5,000,000 was appropriated for this section during fiscal 1967, and

Whereas, the U.S. Bureau of the Budget has made available to the Department of the Interior for allocation to the states only $2,000,000 of this sum,

Be it therefore resolved, that the remainder of the appropriation of $5,000,000 for fiscal 1967 be immediately released to the Secretary of the Interior for apportionment to the several states, and

Be it further resolved, that the PMFC hereby respectfully petition the Secretary of the Interior, the Director of the Bureau of Budget, and Congress of the United States, and particularly the Appropriations Committees of the Senate and House of Representatives to assure that a sum of $6,700,000 be appropriated for fiscal 1968 as authorized under Section 4 (a) of the Anadromous Fish Act of 1965.

The Executive Director of the PMFC shall transmit copies of this resolution to the Secretary of the Interior, the Director of the Bureau of Budget, to the members of the Congressional Delegation of the States of California, Idaho, Oregon, Washington and Alaska, the Chairmen of the Appropriations Committees, the Commissioner of the Fish and Wildlife Service of the U.S. Department of the Interior and the Governors of the aforementioned states.

(Adopted at Annual Meeting, Seattle, Washington, November 18, 1966.)

WILDLIFE SERVICES

STATEMENT OF DEFENDERS OF WILDLIFE, INC.

The Defenders of Wildlife is a national, nonprofit, conservation, education organization, founded over forty years ago, with headquarters in Washington, D.C.

Park Lands Natural Areas and Wilderness

Defenders of Wildlife wish to support all appropriations for the acquisition of additional park lands, estuaries, natural, and wilderness areas now while they are still available. These are all constructive aims for the benefit of present and future generations of Americans. Defenders of Wildlife urge their favorable consideration by the Congress.

Endangered Wildlife

Defenders of Wildlife strongly recommend that the maximum funds be allocated for survival and preservation programs for endangered species of wildlife.

Wolves

We urge a generous appropriation for saving the wolf, with particular attention to returning this most valuable mammal to the National Parks, from which "predator control" operations once eliminated it. In this endeavor, preference should be given to those National Parks where wolves are most needed for natural controls, and where appropriate habitat already exists, such as Yellowstone, Yosemite, and Grand Canyon National Parks. Available natural food could keep most of them within park areas.

Unless protection can be given the wolf on a national basis, return to the National Parks may now be the only means of saving this highly intelligent and interesting mammal. The outlook for its future is ominous.

In Minnesota, where the only sizeable number of wolves is said to exist in the U.S. outside of Alaska, they now face additional, perhaps unsurmountable hazards. With the official incentive of a bounty restored, the helicopter and the snowmobile added to make their killing cruel and easy "fun", wolves seem to be doomed, for such "hunting" gives no living target a chance for escape.

Red Wolf

We strongly urge funds be appropriated for research and some possible cooperative agreement with such as the Welder Wildlife Foundation in Texas, for protection and encouragement of the red wolf (*Canis rufus*), if as has been reported, a few still exist in that area.

Predator Control

While the taxpayers' money is pledged to saving endangered wildlife on one hand, the taxpayer should feel confident that his taxes are not causing additional species to become "endangered", by appropriations to animal control activities.

Many predators are reported scarce or completely missing from their natural habitat as a result of indiscriminate federal predator control operations.

The harmless and entirely beneficial kit fox and ringtail cat are reported as almost extirpated in their native habitat of the southwestern United States, from the 1080 poison on baits put out for coyotes. The California Fish and Game Department incorporated in their 1965 Code, a regulation, "Kit Fox may not be taken at any time". However, this in the face of the spreading of 1080 poison baits by federal animal control agents, can be of little help.

The call for rodent control frequently follows the usual excessive predator control. This also destroys indiscriminately, unlimited numbers of wildlife that consume 1080 poison killed rodents and other creatures.

A letter from a competent trapper in Grand Junction, Colorado, dated December 28, 1966, reads:

"You ask me about the coyotes, if there were any more around Grand Junction There are [almost] no more coyotes in Colorado. The F. and W. have caught on to the 1080 poison grain for rodent control and it is going to wipe out everything. Of course, they still put out 1080 in meat baits also, but it isn't as bad as the rodent control. It is taking its toll of Deer, Birds of Prey, as well as the Prediator Animals."

A note just received from Mrs. W. J. Galbraith in Utah is characteristic of many:

"We have seen the same scene, year after year, of the animals hanging from the fences here in Utah—out on the desert near Jerocho, Utah. It is heart breaking and revolting and so needless and pointless."

Therefore, Defenders of Wildlife recommend that appropriations for animal control not exceed $100,000.00, in 1968; that any additional costs be paid by the special interest groups themselves.

That the animal control activity of Wildlife Services is now too heavily funded is evidenced by such objections as the following recent letter to Secretary Udall. People are persistently propagandized that the killing of predators on a large scale is an economic necessity, in spite of scientific evidence to the contrary. This propaganda is being disseminated in areas where there are no legitimate reasons for destroying the peoples' wildlife.

A letter from Burdett Green follows:

JANUARY 5, 1967.

Hon. STEWART UDALL,
Secretary of the Interior,
Washington, D.C.

DEAR MR. SECRETARY: During the past two years a number of us in this area have been attempting to correct a very unsatisfactory situation as respects the native wildlife. The Fish and Wildlife Service of the United States, through its branch of predator control, has been requesting permission to come onto our lands to kill off such wildlife as foxes, coyotes, wildcats, 'coons, skunks, and even mountain lion—although on this last species they are apparenty weakening somewhat, since the bounty on mountain lion has been removed as a result of public protest.

Please understand that this is an area of very, very little population in the Santa Cruz Mountains, south of San Francisco. A considerable part of the area is used for watershed and, as you may know personally, large acreages are in tree farms and devoted to the production of timber and Christmas trees. Therefore, there is no excuse that some rancher might lose a chicken to a fox, and there is very little excuse that one of these animals might carry rabies. If the animals are to be killed at all, they should let hunters have the satisfaction, during the season, of hunting the 'coons, etc. However, the majority of the people simply want the wildlife left alone, for it is interesting to have them around our own places as well as to see them in the Big Basin State Park and Portola State Park, both of which are very near us.

Then, of course, there is still another reason for discontinuing this unwanted work, and that it's a waste of Federal tax money. It is possible most people never think of that any more, but some of us do and I hope you people in Washington share our attitude. In case a 'coon or 'possum or squirrel gets under somebody's porch in town, such as Los Gatos, it would be my recommendation that you let them take care of the situation themselves or possibly they could call the County Agent—but there is certainly no excuse for having several agencies render this service, and certainly no excuse for their destroying the wildlife where the broad consensus is that we would like the animals left alone.

The reason I am suggesting this work be discontinued, without asking the reasons for it, is that I have already written several groups representing largely conservationists and they tell me that their efforts to bring about changes in your predator control activities have had few favorable results up to date. I am writing you not just as a conservationist myself, but on behalf of myself and many others around me who own these lands and want your agents in the above department to stay off of them. And, of course, we want these activities generally curtailed or eliminated in this large area at least.

Sincerely,

BURDETT GREEN.

We urge that the appropriation for destructive control work be reduced to where it will not be inconsistent with the reported constructive *aims* of Wildlife Services.

It is known that Kansas and Missouri have successfully regulated the numbers of carnivorous mammals under the State Extension Specialist System for eighteen years and twenty-two years, respectively, at less than one-twentieth the cost of the Federal Predator Control Cooperative System in the adjoining State of Oklahoma.

Thank you for this opportunity to express our views.

MIGRATORY BIRD RESEARCH LETTER TO SENATOR RUSSELL

MARCH 7, 1967.

Hon. RICHARD B. RUSSELL,
Senate Office Building,
Washington, D.C.

MY DEAR SENATOR: The Fish and Game organizations in this section of the country are interested in getting a larger appropriation for the study of various migratory birds.

We have a bad situation in Georgia in that North Georgia is quite different from South Georgia. They claim that if they get any dove shoots they have to have them in September, whereas the doves in South Georgia at that time are immature—in fact, in September they are still hatching new birds.

We have been interested for years in getting the State zoned and this is one of the items they are studying. The various game and fish organizations in our section are very much interested in getting further research on this matter and at this time are all cooperating with the Government, working to this end.

Due to the fact that people have more time than they formerly did the pressure for hunting and fishing for various types of game and fish is greater than ever before.

It seems there is some difficulty in the Bureau in Washington, on account of Senate procedures, for them bringing up a matter of this kind without having previously submitted it, unless it is requested by one of the members of the Sub-Committee. I hope you will ask Director Gottschalk for the proposals, probably best referred to as the proposal of the International Association of Game and Fish Commissioners.

Anything you can do in this regard would be greatly appreciated and if there is any other information we could give you please do not hesitate to call on me.

With best regards, I am,

Sincerely yours,

H. LANGDALE.

LETTER FROM MISSOURI DEPARTMENT OF CONSERVATION

March 17, 1967.

Hon. CARL HAYDEN,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: For several years conservationists have been aware of gaps in the information necessary for proper management of certain migratory game birds, including the mourning dove, woodcock, snipe and rails. Many states, acting independently and through regional associations such as the Southeastern Association of Game and Fish Commissioners and the Association of Midwest Fish and Game Commissioners, have devoted substantial funds to research and management of these birds.

It is worthy of note that some thirty-six million mourning doves are taken annually in the thirty-one states which permit hunting. The dove provides more hunting recreation than any other game bird in the United States. In 1965, an estimated 46,745 Missouri sportsmen took 1,035,762 doves and spent 533,898 gun-hours in this pursuit. The other migratory game birds provide sport for fewer, but equally enthusiastic, hunters.

The Migratory Bird Treaty Act places migratory birds under the jurisdiction of the U.S. Department of Interior and its Bureau of Sport Fisheries and Wildlife. It follows that research and management are primarily federal responsibilities. Federal research to date has been concentrated on waterfowl, and rightly so in the light of critical needs and budget limitations. But research on other migratory game birds which offer important recreation to the sportsmen has been relatively neglected. A strong federal research program on these is certainly in order.

The Bureau of Sport Fisheries and Wildlife recognizes its responsibility and has included funds in its budget request for an expanded research program. We understand that hearings are scheduled in the Senate next week. We urge you to work for approval of the full amount requested for research on migratory game birds. A comprehensive effort on this important resource is long overdue.

Sincerely,

CARL R. NOREN, *Director.*

STATEMENT BY AMERICAN FORESTRY ASSOCIATION

Mr. Chairman, I am William E. Towell, Executive Vice President of The American Forestry Association. This Association is concerned not only with private and public forests of the nation but with resources derived therefrom, including water, recreation, and wildlife. We particularly support work of the Bureau of Sport Fisheries and Wildlife, Department of Interior, and respectfully ask favorable Committee consideration of the following appropriation items:

1. Long-overdue attention to research and management of mourning doves and other non-waterfowl migratory birds. We recommend a minimum of $500,000 to be appropriated for mourning dove research as the federal share of a cooperative program with the States.

2. Increased financing of the Cooperative Wildlife Research units at State Colleges and Universities. State contributions have been increased over the years but federal financing has remained static. We recommend a minimum of $40.000 federal funds for each unit to equal the federal share to Cooperative Fisheries units more recently established.

3. Appropriation of the full budgeted amount of $7,500,000 as an advance to the Migratory Bird Conservation Fund. We further recommend that this vital waterfowl wetlands acquisition program be extended through other legislation now before the Congress.

Respectfully submitted.

WILLIAM E. TOWELL.

NATIONAL PARK SERVICE

STATEMENT BY THE AMERICAN FORESTRY ASSOCIATION

Mr. Chairman, I am Kenneth B. Pomeroy, Chief Forester of The American Forestry Association.

Several decades ago our Association had the honor of participating in a survey to determine the boundaries of several well-known national parks. At that time the parks were relatively inaccessible. Comparatively few people had opportunities to enjoy their scenic beauties. Management consisted of leaving the parks in their primitive condition.

Roads and automobiles are changing this situation. These conveyances bring hordes of people into the parks. Last year there were more than 133 million visitations. The presence of people inside the parks and their activities outside park boundaries are having unfavorable impacts upon both flora and fauna. People trample the grass, compact the soil, and upset the balance of nature in countless other ways. The most serious threat involves supply of fresh water for the Everglades National Park.

It seems to us that much more attention should be given to the twin problems of (a) managing fauna and flora as nature meant them to be, and, (b) managing people so that they can enjoy the resource without impairing it.

If these steps are not taken, and taken soon, the increasing hordes of visitors eventually will destroy that which we now cherish.

Respectfully yours,

KENNETH B. POMEROY.

BUREAU OF LAND MANAGEMENT

STATEMENT BY THE AMERICAN FORESTRY ASSOCIATION

Mr. Chairman, I am Kenneth B. Pomeroy, Chief Forester of The American Forestry Association. The members of this citizen's organization advocate "Conservation Through Wise Use" as a basic guide for the administration of natural resource management agencies of the Federal government.

When the Bureau of Land Management came into being, it acquired jurisdiction over a vast acreage of range and forest land. Much of the range resource had been depleted severely during previous decades.

With the aid of interested ranchers, the Bureau began to apply scientific management to the range. But much of the land had eroded to a stage where such measures had little effect. For example, in 1951 the Secretary of Interior stated "50 percent of federal rangelands are in a state of severe to critical erosion, 32 percent are eroding moderately and only 18 percent are in a condition of slight to moderate erosion". He estimated that erosion could be stopped within twenty years, and the productive capacity of the land increased three-to-ten fold, at a cost of 400 to 500 million dollars.

Three-fourths of the Secretary's 20-year period has elapsed, but only a tiny fraction of the land has been rehabilitated. Over 30,000,000 acres still need to be reclaimed from invading species of brush; nearly 12,000,000 acres of range still need to be reseeded; erosion still needs to be controlled on thousands upon thousands of drainages.

Progress on this major task should be speeded up. Agricultural economists tell us that by 1980 the Nation will need 25 percent more beef to feed our growing population. How much of this increase can be produced on the Public Domain?

Perhaps the first step should be to make a thorough survey of range resources to determine their present condition, contribution to the economy, importance for other uses such as wildlife and recreation, treatments needed for restoration, probable cost and, most importantly, to schedule an orderly program of rehabilitation.

Respectfully yours,

KENNETH B. POMEROY.

SUBCOMMITTEE RECESS

Chairman HAYDEN. That will conclude the hearings for today. The subcommittee will adjourn until tomorrow, at 10 a.m.

(Whereupon, at 12:30 p.m., Monday, March 20, 1967, the subcommittee was recessed, to reconvene at 10 a.m., Tuesday, March 21, 1967.)

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1968

TUESDAY, MARCH 21, 1967

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10 a.m., in room 1223, New Senate Office Building, Hon. Carl Hayden (chairman) presiding.

Present: Chairman Hayden and Senators Bartlett and Young.

DEPARTMENT OF THE INTERIOR

NONDEPARTMENTAL WITNESSES

STATEMENT OF HON. WALLACE F. BENNETT, A U.S. SENATOR FROM UTAH

UTAH PROJECTS

Senator BENNETT. Mr. Chairman, I thank the committee for this chance to testify in support of funds for worthy Utah projects which appear in the Interior Department appropriations bill now before the committee.

I have a fuller statement which I would like to submit for the hearing record. Then, I have a short summary of my testimony which I would like to read this morning.

DUCHESNE COUNTY HOSPITAL

My first request is for an additional $158,000 to be added to the $250,000 available under the Indian Health Service Transfer Act for construction of the Duchesne County Hospital. This hospital will serve certain Indian reservation populations eligible for assistance under provisions of the Indian Health Service Transfer Act.

PUBLIC LAND LAW REVIEW COMMISSION

Mr. Chairman, I also wish to state my full support for adequate appropriations for the activities of the Public Land Law Review Commission. The President's budget for fiscal year 1968 totals $860,000 for the Commission but indicates that no funds are being requested to undertake the important study contracts that are necessary if the Commission is effectively to pursue its overall study.

I endorse the proposal for additional funds which may be considered appropriate by the committee.

DIAGNOSTIC SERVICE UNIT AT SPRINGVILLE FISH HATCHERY

I also would like to bring to the attention of the committee the need for an additional $56,000 for the establishment of a diagnostic service unit at the Springville Fish Hatchery in Utah.

The hatchery has recently undergone a rehabilitation program and the construction program is now completed with space available to house the proposed diagnostic service unit. Therefore, the unit can be activated with only a minimum of additional cost.

OURAY NATIONAL WILDLIFE REFUGE

In addition, Mr. Chairman, the fiscal year 1968 budget includes $70,000 for the Ouray National Wildlife Refuge in Utah. However, an additional $125,000 is needed for this vital refuge. The funds would be used to complete the many programs at the refuge which are giving us so many benefits in the wildlife field.

COOPERATIVE WILDLIFE RESEARCH UNIT

Another project which requires assistance is the cooperative wildlife research unit at Utah State University. Evidence of satisfactory progress in the program lies in the fact that both the University and the Utah Fish and Game Department have voluntarily increased their contributions over the years to where they now provide 65 or 80 percent of the basic annual budget.

I also think that the Federal contribution also should be increased from $15,000 to $40,000 per year so that an assistant leader can be added to utilize more efficiently this research unit.

WESTERN BROWSE IMPROVEMENT LABORATORY

Mr. Chairman, I also would like to bring to the committee's attention once again the requirement for funds for the planned Western Browse Improvement Laboratory at Provo, Utah. The BYU has given the Federal Government a 50-year lease for a building site and $37,000 was appropriated in fiscal year 1967 for the design and specifications.

Unfortunately, no funds are included in the 1968 budget for this worthy project. It is my feeling that an efficient start can be made on the research program while awaiting construction of the laboratory. An increase of $50,000 is needed in research funds for the Forest Service.

INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION

Another worthy research program is the insect and disease program at the Intermountain Forest and Range Experiment Station of the U.S. Forest Service in cooperation with Utah State University.

To implement adequately this needed program an increase of $100,000 will be required.

Mr. Chairman, I am grateful for the opportunity to make this brief statement at the beginning of your hearings today and I will be happy to get out of the way for my colleagues are waiting for me.

Thank you very much.

Chairman HAYDEN. We are glad to have you come.

Senator BENNETT. Incidentally, now, I go up to another committee.

(The statement follows:)

INTERIOR DEPARTMENT APPROPRIATIONS

Mr. Chairman, it is a privilege to testify before this distinguished subcommittee in support of funds for worthy Utah projects; and I appreciate the opportunity afforded me. In general, I support the budget request; however, their are some items to which I would like to direct the subcommittee's attention.

Duchesne County Hospital

The Roosevelt Hospital in Duchesne County, Utah, has become obsolete and unsafe. Recently, the Church of Jesus Christ of Latter-day Saints gave this facility to the County along with certain accumulated assets. The County has voted a bond issue for a new hospital of thirty-two beds and can use Hill-Burton funds to support it. Approximately 40 percent of the patient load is made up of Indians from the Ute-Ouray Reservation. This proposed hospital is designed to serve, and will serve, certain Indian reservation populations eligible for assistance under provisions of Public Law 85–181, the Indian Health Service Transfer Act. An analysis of the bed use for Indians by the Division of Indian Health indicates that 40 percent of the cost of the in-patient facility could be justified as proper Indian Health participation. In addition, there is need for an outpatient department to serve the Indians instead of the present inadequate facility at Fort Duchesne. The Division of Indian Health's estimated participation for the out-patient facility would be 100 percent.

Dr. Charles S. McCammon, Indian Health Area Director, recently met with the Utah State Health Officer and leaders of the Roosevelt community and discussed plans for the hospital and the addition of a wing to house the health center now located at Fort Duchesne. Without this type of coordinated construction and financing, it would be necessary to build two separate small facilities to serve this population. This would result in increased construction and operational costs.

As you know, the Indian Health Service testified before this subcommittee that "$250,000 was included in the budget for a P.L. 85–151 project in Juneau, Alaska. However, since the time of the preparation of the 1968 budget the Alaskan project has not progressed as expected. However, a project for a community hospital in Roosevelt, Utah, has progressed faster than expected and is currently the most appropriate project for consideration. In the event that the Division of Indian Health finalizes its plans to assist in this construction project, we will seek the necessary approval to reprogram these funds for this project."

The $250,000 buget request was based on what was needed in Juneau 18 months ago. The Duchesne County Hospital is a larger project and would require additional funds. The 12 beds proposed to be included in the in-patient facility portion of the project have been estimated to cost $26,000 each for a total of $312,000. The portion of the project proposed to be used by the Division of Indian Health as a diagnosis and treatment facility for out-patient Indian beneficiaries is planned to be approximately 3,200 square feet in size. It is comparable in area to similar projects which have been built and operated successfully by the Division. The total cost of both portions of this project will be $408,000. If the funds for the clinic and the hospital are available, plans could be completed and construction started this summer.

The Fort Duchesne Uintah and Ouray Indian Council has enthusiastically approved the project. There is a very good relationship between the hospital and the Indian Health Service. The community has shown its support by the sale of bonds. All are agreed that the hospital is badly needed. May I respectively request, therefore, that in addition to the $250,000 available under the Indian Health Service Transfer Act, $158,000 be appropriated for construction of this worthy project for a total of $408,000.

Public Land Law Review Commission

I also wish to state my full support of adequate appropriations for the activities of the Public Land Law Review Commission. The study of our complex public land laws and their administration by the Commission will be a monumental work and will result in the development of policies which will enable more efficient handling of our public lands and their administration in the future. I have a high personal regard for the members of the Congress who are serving on this Commission and for the public members who are devoting so much of their time in an unselfish effort to bring about a comprehensive study that will be useful to all of us in future consideration of public land problems.

The President's budget for fiscal 1968 totals $860,000 for the Commission and indicates that no funds are being requested to undertake the important study contracts that are necessary if the Commission is effectively to pursue its overall study.

Officials of the Commission have indicated that additional funds would be helpful now in order to pursue the contract study program. I heartily endorse such a move and would support any amendment in this direction considered appropriate by this Committee. I believe it is essential that this study be adequately funded since the task that it is accomplishing and the recommendations that it may make will result in countless savings in the years ahead.

Springville National Fish Hatchery

I also would like to bring to the attention of the subcommittee the need for an additional $56,000 for the establishment of a Diagnostic Service Unit at the Springville National Fish Hatchery, Utah.

To produce the large numbers and pounds of fish required for resource management and recreational fishing, the numbers and poundages of fish held in hatchery rearing facilities far exceed the densities in any natural situation. The so-called normal host-pathogen relationship no longer exists. Thus, the hatchery environment is favorable for outbreaks of serious diseases. In addition, hatchery production is increasingly directed to production of fish for specific management needs. Eggs are entering the hatchery production cycle during several months of the year, rather than only during fall or early spring as was the common practice formerly.

These two factors—intensive fish cultural practices and large scale movement of fish and fish eggs throughout hatchery systems and across State and National boundaries—are operating together to produce the vehicle for rapid, widespread distribution of fish pathogens. The best way to prevent the spread of fish diseases is a program of monitoring and control at fish hatcheries across the country.

A unit staffed and equipped to provide on-site diagnostic services in this region of high fish hatchery production is needed in the Intermountain area.

The services would be available to Federal, State, and commercial fish hatcheries.

The Springville National Fish Hatchery has recently undergone a rehabilitation program and the construction program is now completed with space available to house the proposed diagnostic service unit. Therefore, the unit could be activated with only a minimum of additional cost. Annual operation and maintenance funding requirements would be $56,000, which would cover salary costs of the unit leader and a staff of three and provide necessary funds for travel and purchase of supplies and equipment.

Ouray National Wildlife Refuge

The fiscal year 1968 budget includes $70,000 for the Ouray National Wildlife Refuge in Utah; however, an additional $125,000 is needed for this vital refuge.

The Ouray Refuge was established in 1960 by former secretary of Interior Fred A. Seaton. However, the Bureau of Sports Fisheries and Wildlife was not ready to begin developing the refuge until fiscal year 1964 when the Committee at my request added funds to initiate construction. The refuge is located in Uintah County, Utah, and extends along either side of the Green River for seven and one-half miles. It will provide habitat conditions capable of producing at least 1,000 geese each year with sufficient food to maintain a peak population of 400,000. Moreover, it is expected the refuge will produce 13,000 ducks each year and provide food for peak populations of 75,000 ducks during fall migration with overall duck use-days totaling 4,245,000 The refuge will offset the loss of Canada Goose production areas as a result of Flaming Gorge Reservoir.

In addition to its importance as a prime waterfowl production area and a resting and feeding area for migratory birds, the refuge will protect and maintain the upland game birds, big game, and furbearer populations that now use the area. Ultimately it also will provide hunting as well as recreation facilities; thus, social and economic benefits will accrue to nearby communities.

We are already reaping benefits from the money we have put into the development of the refuge thus far. It is estimated that a remainder of $599,000 will be necessary to complete the program. The addition of $125,000 will help put this important project back on schedule.

Cooperative Wildlife Research Unit

The Department of Wildlife Resources at Utah State University has had a Cooperative Wildlife Research Unit since initiation of the program in 1935. The Unit is supported primarily by the Land-Grant University, the State Fish and Game Department, and the Bureau of Sport Fisheries and Wildlife. A fourth cooperator, the Wildlife Management Institute, annually contributes $1,000 or more.

Evidence of satisfactory progress in the program lies in the fact that both the University and the Fish and Game Department in each participating State have voluntarily increased their contributions over the years to where they now provide 65 to 80 percent of the basic annual Unit budget. The contributions of the Bureau, provided by the Congress, are limited essentially to the salary and minor expenses of the Unit leaders, now averaging annually about $15,000 per Unit. The Bureau is thus in the embarrassing position of falling behind in its support of the Cooperative Wildlife Research Unit program.

The demand for high quality wildlife professionals with graduate training is increasing. As the multiple use principle is extended and the demands of a burgeoning population intensify, added managerial talent will be even more necessary. By increasing the Federal contribution from $15,000 to $40,000 per year an assistant leader could be added to utilize more efficiently this research unit.

Browse Laboratory, Provo, Utah

I would like again to bring to the Committee's attention another planned research facility in Utah, the Western Browse Improvement Laboratory, to be located on the campus of Brigham Young University at Provo, Utah. The University has given the Federal Government a 50-year lease for a building site on the south side of the campus. A total $37,000 was appropriated in fiscal year 1967 for design and specifications. Unfortunately, no funds are included in the 1968 budget for this worthy project.

This would be the first major research effort in the West for developing superior wildland shrubs, and would be extremely beneficial to Utah and the entire West. It has exciting possibilities because it will be aimed at improving range and forest shrubs or browse through selection and breeding. It would provide superior strains of native shrubs for wildlife habitat improvement, renovating and screening forest campgrounds and picnic areas, and for stabilizing and beautifying roadsides and other landscape scars.

The browse on game ranges must be built up if hunting demands are to be met in Utah. A reduction of approximately one-third of the average number of out-of-state big game hunters and loss of license revenues during the past season has necessitated a severe curtailment of the Utah Fish and Game Department's activities. This, of course, is only one aspect of the loss to Utah's economy. The only way to provide more deer is to provide more forage.

Browse from shrubs is the main food for deer, but desirable shrubs have almost disappeared from any critical game ranges as a result of past abuse. Efforts have been made to rehabilitate the ranges by seeding shrubs and other plants under a small research program in which the Fish and Game Department has cooperated with the Intermountain Station of the U.S. Forest Service during the past ten years. Although some progress has been made, the need remains to develop superior strains of native browse species which are better adapted to the variable conditions of our forest and range lands. There are many opportunities to develop, through selection and breeding, shrubs with high palatability, nutritional value, resistance to disease and insects, or drought tolerance. Research is also needed to find satisfactory methods for producing and processing seed of selected shrubs, and for establishing them on the range.

An efficient start can be made on the research program while awaiting construction of the Laboratory. Key scientists can be recruited and initial steps taken in the development of an effective research program in cooperation with Brigham Young and Utah State Universities and the State Fish and Game Department. An increase of $150,000 is needed in research funds for the Forest Service.

The laboratory will provide modern offices, laboratories, greenhouses and other facilities needed for the browse improvement research and two other research projects located at Provo. Early construction of the first of two phases of the Laboratory, now being planned, is highly desirable and is estimated to cost $460,000.

Insect and Disease Research

I would also like to discuss a new project of the Intermountain Forest and Range Experiment Station of the U.S. Forest Service in cooperation with Utah State University.

Reports of insect or disease damage to outdoor recreation areas and game or livestock browse plants are being received with increasing frequency. Shrubs and trees are of major importance for browse on many big game and livestock ranges as well as for the shade, beauty, and screening they provide in outdoor recreation areas.

A new project is research on woody plant disease and insects of recreation areas and game ranges. We need to learn what these insects and diseases are, their impact, how recreational use encourages damage, and how to control this. This project will be the first such effort in the West.

Damage or loss through insect and disease attacks has serious impacts on recreational values of intensively developed outdoor recreation areas in National Forests, National Parks, and other areas. Here invesments may run as high as $15,000 per acre, and the annual investment by the Federal Government alone in high use recreation areas is estimated at between $5 and $10 million in the Intermountain West. Extensive damage on big game or livestock ranges is of serious consequence to the highly important animal populations dependent on them.

Many shrubs that produce nutritious food for big game and livestock have been virtually decimated by the aroga moth, tent caterpillars, and other insects and by diseases such as rusts. At present we know of no quick and easy way to combat these pests, but we believe that a joint research effort between the Forest Service's Intermountain Forest and Range Experiment Station and Utah State University would produce results of great benefit to all.

To implement adequately this needed disease and insect research program will require $100,000. I respectfully request that the Committee add the necessary funds to the Appropriations Bill.

Cooperation in Forest Fire Control

As we all know, fire protection starts with fire prevention. The goal of the Utah State Forester is to eliminate wildland fires caused by man through an effective fire prevention program. In Utah there are 9,006,000 acres of state and private lands that are classified as needing fire protection.

In fiscal year 1967 the Federal allotment for Utah was $74,730. Although fiscal year 1967 data on State expenditures are not available, the State spent $137,035 in fiscal year 1966. The budget for 1968 continues funding at the same level as fiscal year 1967. Obviously, with the rising cost of protection and the increased values of our forest and watersheds as the economy has expanded, this will fall far short of the funds necessary to assure adequate protection. I strongly support, therefore, an increase of $3 million in Federal Clarke-McNary funds for Cooperation in Forest Fire Control for fiscal year 1968.

Thank you, Mr. Chairman.

STATEMENT OF HON. J. CALEB BOGGS, A U.S. SENATOR FROM DELAWARE

HYDROLOGIC SURVEY OF DELMARVA PENINSULA

Chairman HAYDEN. Senator Boggs.

Senator BOGGS. Thank you, Mr. Chairman.

Mr. Chairman, I thank you very much for permitting me to appear this morning to request your assistance in getting a 5-year hydrologic survey of the Delmarva Peninsula underway.

You may remember, Mr. Chairman, on March 8, a year ago I appeared before you and requested $100,000 for the first year's appropriation of a 5-year hydrologic survey of the peninsula. At that time the committee graciously approved $50,000 under the cooperative matching program which exists in the U.S. Geological Survey section.

PUBLIC LAW 89-618

Before any action can be taken under that appropriation, the Congress enacted S. 2287, which become Public Law 89–618, dated October 4, 1966. This bill, which received the unanimous support of both the Senate and House Interior Committees authorized a 5-year hydrologic survey of the Delmarva Peninsula. It was the feeling of these committees that since three States were involved in the peninsula study, it would be most difficult to apply the Federal-State cooperative program to the survey and that because of the critical nature of the water problem in the peninsula and the need for the survey to begin as soon as funds can be appropriated the committees determined that the Federal Government should bear the cost of the survey.

LETTER OF ACTING DIRECTOR, GEOLOGICAL SURVEY BRANCH

On March 15 of this year, my colleague, Senator Williams, received a letter from Mr. Baker, the Acting Director of the Geological Survey Branch of the Department of the Interior. In that letter, Mr. Baker said and I quote:

> It is our considered opinion, however, after encountering the difficulties in implementing the study through the Federal-State program, that a project of regional significance of this kind should be financed entirely with Federal funds.

In addition, Mr. Chairman, the letter also indicates the intention of the Geological Survey to request funds in fiscal year 1969 to initiate the survey as a Federal project.

May I request, sir, that this letter be made a part of my testimony?

Chairman HAYDEN. It may be done.

Senator BOGGS. Thank you.

(The letter follows:)

U.S. DEPARTMENT OF THE INTERIOR,
GEOLOGICAL SURVEY,
Washington, D.C., March 15, 1967.

Hon. JOHN J. WILLIAMS,
United States Senate,
Washington, D.C.

DEAR SENATOR WILLIAMS: The Geological Survey is pelased to reply further to your letter of March 8, 1967, addressed to the Secretary of the Interior.

We appreciate the concern of the Delmarva Advisory Council about the funding for the hydrologic study of the Delmarva Peninsula that has been authorized by Congress. The Council's Executive Director, Mr. Worthington J. Thompson, in his letter of February 27 to you, has asked some specific questions about this project, and we are pleased to have the opportunity to comment on them.

The Geological Survey believes that the water-resources study of the Delmarva Peninsula, as authorized under Public Law 89–618, would provide much new and valuable information that is needed in the development and management of the water supply of the Peninsula. We feel that the study is both timely and critical.

Funding of $50,000 for the conduct of the Delmarva study was provided in the appropriation for 1967 for the support of water-resources investigations of the Geological Survey, but was identified as part of the appropriation that, under language of the Act, can be used only if matched by State or local agencies. None of the three States has responded favorably to inquiries regarding availability of matching funds for a cooperative study. Therefore, the work has not been undertaken. The Federal money for this program is still available for fiscal year 1967. Funds have not yet been appropriated for 1968, but no funds have been identified for this project in the budget currently before the Congress.

It is our considered opinion, however, after encountering the difficulties in implementing the study through the Federal-State program, that a project of regional significance of this kind should be financed entirely with Federal funds. It is our present plan to include in our fiscal year 1969 budget request funds sufficient to initiate the Delmarva study as a Federal project.

Sincerely yours,

ARTHUR A. BAKER,
Acting Director.

AMOUNT REQUESTED

Senator BOGGS. While this letter is good news, Mr. Chairman, it is my feeling and the feeling of my colleagues that we cannot and should not wait until 2 years to commence this important study.

With this in mind, Mr. Chairman and remembering the kindness with which you accepted my testimony last year we request that the committee appropriate $100,000 as authorized by Public Law 89–618 for the first year of operation of this 5-year Delmarva hydrologic study.

I shall not attempt to reiterate the support of various public and private bodies for this survey. These, Mr. Chairman, were included in the hearing record of a year ago when the authorization bill was approved.

I can only ask that you give careful consideration to our request for this appropriation in light of what we consider to be a critical water situation in part of our State of Delaware as well as parts of Maryland and Virginia, which compose the peninsula.

Mr. Chairman, I would like to advise the committee that I have the authority to present this testimony on behalf of my colleague from Delaware, Senator Williams, as well as the two distinguished Senators from Maryland, Mr. Brewster and Mr. Tydings, and Senator Spong of Virginia.

I do appreciate this opportunity to appear before the committee.

Chairman HAYDEN. We thank you and it will be given careful consideration.

PUBLIC LAW 86–686

Senator BOGGS. Mr. Chairman, I have one other brief, small matter, if I may, at this time.

Again, I appreciate the opportunity to make this presentation.

On September 2, 1960, Public Law 86–686 was signed into law. The purposes stated in the act were to—

> facilitate cooperation between the Federal Government, colleges and universities, the States, and private organizations for cooperative unit programs of research and education relating to Fish and Wildlife and for other purposes.

OBJECTIVES OF PROGRAM

Some of the program's objectives as outlined in the Department's brochure are as follows:

> Training fishery biologists is the most important function of the unit. Management of the Nation's waters in such a manner as to best meet increasing

demands for public fishing requires more and more trained personnel to carry out research and management responsibilities. The units, therefore, contribute to a ready pool of fully trained biologists to meet the Federal, State and private employment needs on a continuing basis.

Research by unit personnel and by graduate students is also a major objective of the program. This involves individual research projects chosen with respect to the interests and capabilities of the personnel, facilities available or other research programs of the Bureau and in response to State, regional and National needs.

Now, the first unit was activated in January 1962, under this law, at Utah State University, and to date some 23 universities have actively entered into the program.

REQUEST OF DELAWARE STATE COLLEGE FOR COOPERATIVE FISHERY UNIT

Delaware State College has requested that a cooperative fishery unit be established at that college and has received the support of the Governor of the State and of the State game and fish commission.

In a letter to President Mishoe of Delaware State College, Governor Terry said, and I quote:

> This letter is to inform you that I approve this program and you are now authorized to seek the support of Delaware's Congressional Delegation and necessary Federal funds to support this program.

LETTER OF ACTING DIRECTOR, BUREAU OF SPORT FISHERIES AND WILDLIFE

Also, Mr. Chairman, I would like to include in my testimony a letter received last week from the Acting Director of the Bureau of Sport Fisheries and Wildlife, Mr. Tunison.

Chairman HAYDEN. Very well.

(The letter follows:)

U.S. DEPARTMENT OF THE INTERIOR,
FISH AND WILDLIFE SERVICE,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C., March 14, 1967.

Hon. J. CALEB BOGGS,
U.S. Senate, Washington, D.C.

DEAR SENATOR BOGGS: A copy of the letter addressed to Dr. Luna I. Mishoe, President Delaware State College signed by you, Senator John J. Williams and Congressman William V. Roth in support of a cooperative fishery unit at Delaware State College has been provided us by Secretary Stewart L. Udall.

We in the Bureau of Sport Fisheries and Wildlife believe a cooperative fishery unit at Delaware State College would add very significantly to our capabilities of meeting the training and research objectives of the program. We will be pleased to work with representatives of the College and the Delaware Board of Game and Fish Commissioners in the establishment and operation of the unit as soon as funds can be provided.

Sincerely yours,

ABRAM V. TUNISON,
Acting Director.

Senator BOGGS. In his letter Mr. Tunison says, and I quote:

> We in the Bureau of Sport Fisheries and Wildlife believe a cooperative fishery unit at Delaware State College would add very significantly to our capabilities of meeting the training and research objectives of the program.

Delaware State College is ideally situated for a unit of this type as it is only a short distance away from the Delaware River estuary as well as the Atlantic Ocean. It is near fresh water ponds and less than an hour away from the Chesapeake Bay on the other side of the Delmarva Peninsula.

Added to the eagerness and interest of the college in this field, it is nearly ideally geographically located for field studies and experiments.

SUPPORT OF CONGRESSIONAL DELEGATION

Mr. Chairman, Dr. Mishoe, who is president of the State college, has met with the congressional delegation and has the wholehearted support of the delegation. It is for that reason that I appear this morning on behalf of my colleague and myself, the senior Senator from Delaware, Senator Williams, to make this request of the committee to appropriate the sum of $41,000, which is the Federal share for the establishment of a cooperative fishery unit at Delaware State College.

Incidentally, Mr. Chairman, the State of Delaware does not have such a unit at this time and it is my understanding that in the whole middle Atlantic area of the States there is not such a unit which would seem to me to make it even more urgent and desirable to have one in Delaware.

Again, I want to thank you for the time you have given me to make this presentation.

Chairman HAYDEN. I assure you your statement will be given very careful consideration.

Senator BOGGS. Thank you very much.

STATEMENT OF HON. CLIFFORD P. HANSEN, A U.S. SENATOR FROM WYOMING

PREDATOR CONTROL PROGRAM

Senator HANSEN. Mr. Chairman and members of the subcommittee, I appreciate the opportunity of presenting this statement to your subcommittee on a matter of extreme importance to the State of Wyoming—the need for adequate funds for a responsible predator control program under the U.S. Bureau of Sport Fisheries and Wildlife for fiscal year 1968.

INCREASED LOSSES CAUSED BY PREDATORY ANIMALS

As a former Governor of Wyoming, I am well aware of the contribution that the sheep and wool industry makes to the economy of my State. I am also very much alarmed and concerned about the future of this industry in Wyoming; more and more wool growers and other stockmen are going out of business annually because of the increased losses they are experiencing on account of predatory animals.

With annual production of approximately 22 million pounds of wool, and 1.5 million head of feeder lambs, Wyoming is the second largest wool- and lamb-producing State in the Nation. Its sheep industry contributes approximately 17 percent of Wyoming's total agricultural income.

The total gross income from the sheep and lamb industry is approximately $31 million, which consists of sales of sheep, lambs, income from wool and pelts. To earn this income of $31 million, it is necessary for sheepmen to expend a large amount of money for such items as feed, labor, taxes, transportation, utilities, building materials, farm implements, trucks, interest payments, and numerous kinds of household expenditures.

IMPORTANCE OF WOOL AND SHEEP INDUSTRY

When the $31 million income from this industry is spent in the purchase of goods and services, the total impact on the State's economy is $62 million. An additional $6 million annually comes from sheep revenues to support county, State, and Federal Governments.

Because of its significant economic contribution to the overall economy of Wyoming, the sheep industry must be maintained in a strong position. Such a position can only be attained if the products, wool and lamb, are produced and sold.

One of the major factors governing the quantity of wool and lamb products to be sold is the sufficient control of predators—specifically, coyotes.

CARBON COUNTY, WYO.

Carbon County, Wyo., was once considered the sheep center of Wyoming and was the second largest sheep-producing county in the United States. The large herds of sheep that once existed in the county have decreased from 186,000 head in 1960 to 136,000 head in 1966, a decrease of 50,000 head in a period of 6 years—26.7 percent since 1960. The reduction of the sheep population has definitely affected the economy of Carbon County. Cattle are replacing the sheep; however, there has not been a corresponding increase in the number of cattle.

Sheep and coyotes simply cannot run on the same range. One sheepman in Carbon County has conservatively reported an annual sheep loss to predators in the past 2 years of $25,000 annually. With the cost-price squeeze, the sheep industry is now undergoing, no sheep outfit can survice that large a loss. This is a needless waste.

DECREASE IN WILDLIFE POPULATION

The wildlife population in Wyoming is also decreasing because of increased depredation by predators. Many deer, antelope, and birds are killed each year by coyotes.

A recent report of the Wyoming office of the Bureau of Land Management states—

> the wildlife population of Wyoming was considered to be increasing or static until 1962, with a decline noted in 1963 and 1964. It is interesting to note that these last years were periods of rapid decrease in the effectiveness of predatory animal efforts.

In other words, when the confirmed coyote, and bobcat, kills increased, the antelope population diminished.

Appropriations for Predatory Animal Control

The Federal appropriations for predatory animal control were cut 2 years ago by $350,000. Last year, Congress restored $200,000 of this cut. However, when this amount is spread over 22 sheep-producing States, it does not amount to much for each State.

Last year in Wyoming, the sheep producers taxed themselves for a total of $167,000 for predatory animal control work, to protect their flocks from the menace of these animals. Yet, according to both the United States and Wyoming Departments of Agriculture, sheep losses to predators in 1966 amounted to 118,400 head of sheep, valued at $1.7 million. This represents an increase of 19,100 head, $254,900 over the previous year's losses.

Request for Adequate Funds

In order that the sheep industry may survive and wildlife abound, I respectfully urge that adequate funds be provided for use at the field level in an effective predator control program in Wyoming and other affected States.

Thank you.

Chairman Hayden. I am in entire accord with your view about regulating predators, particularly coyotes.

Senator Hansen. Thank you very much, Mr. Chairman. That is very good news.

STATEMENT OF HON. MARK O. HATFIELD, A U.S. SENATOR FROM OREGON

TIMBER AND FISHERY RESOURCES

Chairman Hayden. Senator Hatfield.

Senator Hatfield. Good morning.

Mr. Chairman and members of the committee, I appear here today in support of appropriations for the continued development of two important natural resources in my State recognizing this is a busy committee and in order to conserve your time I have two prepared statements I would like to submit for the record as if read.

Chairman Hayden. They will be included in the record.

(The statements follow:)

The Oregon timber based industry is caught in a serious log supply demand squeeze. For a number of years the demand for public timber has far exceeded total supply. It was because of this demand situation that I requested during 1966 a survey of the potential of additional unregulated (thinnings, salvage, alder, etc.) timber harvests from the federal timberlands in Oregon. I was advised the potential for these type of annual sales in the National Forests of Oregon was 251.3 million board feet. For the Bureau of Land Management administered lands, the additional annual volume of this type thinning and salvage material was 218.1 million board feet. I am pleased the present budget under consideration includes financing for 140 million feet of this additional BLM sale volume as well as financing to offer for sale the BLM's full allowable cut in Oregon and a major portion of the timber killed in the disastrous Ox-Bow fire. I hope you will consider favorably this budget request. I am concerned, however, as to why the balance, 78 million feet of the BLM total

218 million of annual potential additional harvest reported to me as available, was not included. The representatives of county government in the areas where these lands are located, as well as the timber industry so dependent upon public timber offerings of the BLM are being urged to unravel the reasons for this omission and to make available to me a detailed explanation of this missing 78 million feet. When clarified, I hope you will allow me to return and explain the findings for this omission and the appropriation needs.

In regard to the forest service program of timber harvest, I urge approval of the budget request to sell and administer the full regulated allowable cut during fiscal year 1968 and to increase the current budget proposal to sell only a portion of the total annual potential in unregulated salvage and thinning volume. The current budget includes funds to sell 280 million feet of thinning and salvage to cut 210 million feet of unregulated volume in the West. The total program in the West is 423 million (Region 1, Northern Rocky Mountains, 60 million feet; R-3, Southwest, 20 million feet; R-5 California, 30 million feet; and R-6 Pacific Northwest, 313 million feet). An additional $700,000 is needed to implement the full program. This cash investment in good forest management and timber utilization would be a good long range economic investment if present returns merely equalled costs. Such will not be the case. Sales receipts should exceed by several times the cost of sale preparation and administration.

Forests in Eastern Oregon are threatened with a major bark beetle infestation—accelerated harvesting of lodgepole pine is needed in the Deschutes, Winema and Fremont National Forests. This program should be at approximately the 100 million foot sale level. This need to harvest lodgepole pine and control a major insect infestation is only 62% financed in the present budget request. Certainly as this program is proven successful, the program should receive financing adequate to fully activate the program in fiscal year 1969.

REFORESTATION

Fundamental to offering a high volume level of annual allowable cut from the national forests is the reforestation of the non-forested commercial Forest Service lands in Oregon. These lands denuded by old burns, are high growth potential lands and total 138,500 acres according to a survey completed July 1, 1966. The present rate of reforestation accomplishment on these national forest lands is approximately 8,000 acres each year. The lands, if reforested, would permit an increase in the national forest annual harvest in Oregon by 65,000,000 board feet. I urge the present program of reforestation be tripled to assure elimination of this phase of forest land "non-management" prior to 1975 rather than the present trend date of about 1985.

FOREST RESEARCH

The keystone to higher levels of forest management and timber harvest is founded on sound forest research. A number of total omissions or token budget requests in this field of forest research need reconsideration.

FOREST SURVEY

The forest survey program conducted as a function of forest research, has performed a valuable, and frequently poorly recognized resource analysis function. Its work has been on an extensive basis with reinventories taken every ten years or more. The short supply of softwood logs in the Pacific Northwest necessary to meet the need of the installed manufacturing facilities demands more precise inventory information. More details and more frequent inventories are needed.

Current authority provides a ceiling of $2,500,000 for forest survey activities. The current 1967 budget is $2,100,000. The 1968 budget request provides an increase of $100,000 to a proposed $2,200,000. The Pacific Northwest needs an intensified forest survey with a reduced lapse time before resurvey. I recommend funds be provided for forest survey to the full amount of the authority, $2,500,000 and that the increased funds be assigned to intensifying forest survey activities in the areas of the West in which supply falls so short of equalling industrial demand.

FOREST ENGINEERING

An additional opportunity to increase the supply of softwood logs in the West is by developing a system of logging using balloon and other aerial systems. Currently such Engineering Research is underway. This research, with token financing, has demonstrated the principle. Strong financial support of approximately $600,000 is needed to speed this research.

In the States of Oregon and Washington alone, there are over 6,500,000 acres of commercial forest land that cannot be logged by current methods. (It has been estimated that there is over 29,000,000 acres in the entire West which cannot be logged by present means.) This non-loggable land represents a loss, in terms of allowable annual cut in Oregon and Washington of approximately 840 million board feet. Of this volume, the Forest Service estimates they could recover at least 500 million with a workable aerial system. Approximately 250 million would come from mature timber areas and the other 250 million from thinning of young growth stands.

The increase in allowable annual cut by 500 million board feet would mean a gain of approximately $5,000,000 annually to the owners of this land. About $3,000,000 of this would go to the Federal Treasury from public timber sales alone. Another $800,000 would go to the counties as their share of the stumpage receipts. This increase in cut would, in total, add $100,000,000 annually to the Gross National Product.

FOREST ECONOMICS

Due to the serious inbalance of short log supply and high demand in the Pacific Northwest, the Forest Service announced a "pioneering study" to meet an ever-increasing demand for timber from the National Forests of the Douglas Fir region.

The communities and industries of the Ponderosa Pine region, where log supply also fails to meet installed plant demand, have an equal interest in such a "pioneering study." In fact, almost their entire log supply originates from the national forests, thus this commendable research being conducted in the Douglas Fir region offers hope to communities and timber processors of the pine region. I have been informed the Forest Service believes ". . . that it would be possible to conduct an appropriate study for the pine region without additional appropriations, provided the amounts in the budget for fiscal year 1968 are approved . . ." thus permitting an extension in 1968 of this commendable study to the pine forests (part of the 42 national forests with these supply/demand problems). I urge the approval of the full amount of this item in the current budget consideration.

LA GRANDE FOREST RESEARCH FACILITY

New forest wildlife research facilities at La Grande were considered in fiscal year 1967 and appropriations for design and planning provided. The urgency of providing appropriations to start construction was emphasized with the recent announcement of the planned demolition of the presently occupied facilities under lease only until July 1. No other facilities are available in the La Grande area for this research team. I urge that $350,000 for construction be included in this appropriation to meet the emergency.

BEND SILVICULTURAL RESEARCH LABORATORY

This fine facility is in need of a $200,000 increase in the present budget request. The 1967 appropriation was for $90,000. A similar amount is in the current budget request. This is totally inadequate to meet the research need to combat the threatening insect epidemic in the Eastern Oregon/Eastern Washington areas. Some 400 to 500 million feet of ponderosa pine are threatened in the Blue Mountain area.

In addition, 767,000 acres of lodgepole pine with a volume of 2.5 billion board feet in the Klamath Basin is threatened with a similar bark beetle epidemic. The control devices for this insect control lie in developing silvicultural practices—a research function of the Bend facility.

CORVALLIS FOREST SCIENCES LABORATORY

I urge the appropriation of funds this year to expand this research facility. The productivity of the especially capable staff at this facility is restricted by crowded conditions and the lack of laboratory equipment. Last year funds were appropriated to provide for the necessary architectural and engineering plans for the necessary laboratory addition.

It is especially important that funds be approved this year to provide for the construction of this facility because of the State of Oregon's current budget recommendation of funds for the new State Forestry Education and Research Building, a facility which is planned in close cooperation with the Forest Service. The facilities which the State is constructing are strongly dependent upon the development of the Federal facilities and, of course, the Federal facility is planned with the University building in mind. $2,500,000 is required to construct this research facility. The work of the scientists at this outstanding facility has been and will be of tremendous importance to the forest industry and the economy of the Pacific Northwest.

STATEMENT OF SENATOR MARK O. HATFIELD

Construction has recently begun on a multimillion dollar fishway complex at Willamette Falls on the Willamette River near Oregon City, Oregon. For many years, the Falls has been a serious barrier to anadromous fish migration on the largest and most important salmon-producing stream in the State of Oregon. My purpose today is to request an additional appropriation of $750,000 to allow for economical continuation of the four-phase construction of this $3.6 million project.

In order to apprise you of the importance of this project and give a background to the needs of the resource, I will briefly discuss what has already been accomplished and what is still required. The Willamette River enters the Columbia River some 100 miles from the ocean. It lies wholly within the state of Oregon and is the largest stream in Oregon. Some 20 miles above its confluence with the Columbia, an ancient lava flow has created the Willamette Falls. The Falls has partially blocked the runs of anadromous fish since prehistoric times. Industrial development at the Falls, dating back to Oregon Territorial Days, seriously hinders fish passage. In 1904, the state constructed a fish ladder that proved to be grossly inadequate during low-water flows and is completely inoperable during high water. Because of the erosional configuration of the Falls and industrial usage of water, the present ladder, when operating, serves only a limited area of the total flow. Above the Falls lies about 165 miles of the main stem Willamette, plus approximately 5,000 miles of tributary streams, providing an excellent spawning potential for chinook and coho salmon and steelhead trout.

At present, an average of about 60,000 salmon and steelhead pass above the Falls. With the new ladders at Willamette Falls, we anticipate these runs can be expanded to 300,000 fish. The contribution to the sport and commercial fisheries along the Pacific coast from such runs would approach $4 million annually.

In order to utilize the potential created by this adequate passage at Willamette Falls, the state, in cooperation with federal agencies, has undertaken an extensive salmon liberation program in the waters of the Willamette Basin. Millions of juvenile salmon and steelhead have been liberated into the waters in the past four years. In 1967 alone, 12.5 million unfed fall chinook fingerlings, 7.5 million fed fall chinook fingerlings, 11 million unfed coho fingerlings, 6.5 million fed spring chinook fingerlings, 600,000 unfed spring chinook fingerlings, and 240,000 steelhead smolts have been liberated into the tributary and main stem streams of the Willamette system.

In addition to the liberation of juvenile fish, a total of 5,200 adult coho and 4,300 adult steelhead were liberated into the system for natural spawning. There is great effort and enthusiasm on the part of the fishery agencies as well as the sport and commercial fishery interest to develop and utilize more fully the potential of this river system.

The fish produced in the Willamette above the Falls are captured by commercial fishermen and sportsmen as far north as Alaska and as far south as California. Not only do these fish provide an intensive and extensive ocean fishery, but the commercial and sports fishermen have access to them for about 100 miles on the Columbia River itself, and are then heavily fished in many miles of the Willamette River. Thousands of fishermen concentrate below the Falls at Oregon City to take these magnificent chinook salmon. During the past twenty years, there has been an average of 92,000 man days annually devoted to sport fishing in the Willamette River below the Falls. In addition, fishing interest and angling pressure are increaing rapidly in the smaller tributaries and the upper reaches of the main stem itself. Undoubtedly this will accelerate with the much larger runs.

Although for many years the people of the Pacific Northwest realized the need for adequate fish passage at Willamette Falls, it was not until the start of construction in 1965 that fulfillment of this dream was in sight.

Because of funding problems, the construction was divided into sections or phases. These consist of Phase A, the cul-de-sac fishway; Phase B, the exit structure, counting facilities, and water regulatory structure; Phase C, the complete downstream or low flow ladder in the horseshoe complex; and Phase D, the uppermost ladder in the horseshoe area and filling the wet hole. The most recent cost estimates for the work by phase are shown below. They are the total costs including the private industry share.

	Appropriated	Needed
Plans	$200,000	
Phase A	835,000	
Phase B	759,000	
Phase C		$791,000
Phase D		1,059,000
Total	1,794,000	1,850,000
	$3,644,000	

Approximately half the needed funds have been made available and committed to the project. It is vital that the money for Phase C be appropriated for fiscal 1968 to keep this project on a reasonable construction schedule. A private utility with a plant located at Williamette Falls, Portland General Electric, is paying 16.3 percent of the total construction costs, which will amount to approximately $561,000 under present plans.

Phase A construction began April 4, 1966. It is essentially complete, with final inspection and finishing work presently under way. Work on Phase B will begin approximately April 1 as soon as the water recedes and danger of excessive river flows has passed. The contract allows for 325 calendar days, but the contractor feels the job can be completed in the fall of 1967. With the completion of these first two phases, efficient passage from the cul-de-sac area will be provided for the fall chinook and coho salmon migrating upstream in 1967. However, no assistance from this work will be given to the estimated 75 percent of the fish that will be attempting to utilize the main Falls ladders or the horseshoe fishways.

Included in the construction budget for the Bureau of Commercial Fisheries in fiscal 1968 is $100,000 for construction on the Willamette Falls fishway. This is not sufficient to make meaningful progress on this important project. To date half the money has been provided. Therefore, in order to continue construction of Williamette Falls fishway on a practical and prudent basis and to realize the best value for the dollars expended, I strongly urge the appropriation of $750,000 for fiscal 1968 for use in constructing Phase C. Continuation of a realistic work schedule is only good business. The appropriate amount of private capital is committee and construction costs are rising.

The sooner the project is completed the sooner will the people realize the benefits from the very favorable cost benefit ratio of 3.6 total construction cost to about 4.0 annual benefit.

IMPORTANCE OF TIMBER

Senator **HATFIELD**. One concerns our timber resource and the other our fishery resource. If I may, I shall touch upon the important parts of each.

As you know, Oregon's economy is to a large extent dependent upon an adequate supply of logs reaching our timber manufacturers. The source of much supply comes from publicly held land. As Governor, I urged that action be taken to reach a large amount of unregulated cuts in form of thinning and salvage in order to meet the current demands.

ADDITIONAL APPROPRIATION REQUESTED

I am pleased to note action has been taken and money has been budgeted to make a portion of this type of timber avaliable. In order to bring this program to its full potential, I urge an additional appropriation of $700,000.

Through the cooperation of the Federal Government, the State, and private owners, a program of good forest management has been undertaken in Oregon. Much more can and should be done. Additional timber can be harvested without impairing the recreational potential of our forests.

For example, we are reforesting at about one-third the rate we should. This converts burned over and cut-over land to a productive resource. This activity, if stepped up, can increase the annual forest harvest by 65 million board feet.

AMOUNT REQUESTED FOR RESEARCH

We should pursue our surveying techniques and research facilities and step up the building of access roads. I strongly urge an appropriation of $600,000 for research to improve our ability to log by balloon or other aerial systems.

You have not seen it. We have been doing pionering work along this line which takes a balloon about the size of this room and inflates it with helium and it can lift the logs out of the forest and reduce the necessity for road construction considerably.

FOREST RESEARCH FACILITIES

I urge the appropriation of additional sums to meet the requirements and capabilities of three forest research facilities, one at La-Grande, one at Bend and one at Corvallis. The details are in my prepared statement.

WILLAMETTE FALLS FISHWAYS PROJECT

The Willamette Falls fishways project has been undertaken as a major step in rehabilitation of your animus fish in the Willamette Basin.

The second phase of the project will be completed this fall. The budget before you includes $100,000 for evacuation work, however. if the project is to remain on a reasonable construction schedule, an additional appropriation of $750,000 is required for construction of fish entrances.

I urge that additional appropriation be made.

Thank you very much.

ANADROMOUS FISH PROGRAM

Senator BARTLETT. Senator, if I may, I would assume you are disturbed likewise with the cutback in the amount authorized to be appropriated for the anadromous fish program generally, and a relatively low budget request which was made.

Senator HATFIELD. Yes, I am.

Senator BARTLETT. Do you believe it is important to keep that program going full steam ahead?

IMPORTANCE OF RESEARCH ACTIVITY

Senator HATFIELD. Senator Bartlett, I would certainly agree with your statement. Coming from the State of Alaska, you are every bit aware, if not more so, than we in the State of Oregon, of the necessity of maintaining a real appropriate schedule of research activity to not only preserve this fishery resource, but to guarantee that we have this resource for the next generation and more importantly for the entire world's need of food.

I think sometimes people living in other parts of the country think of the fishery resource along the coast as benefiting only the coastal States. Actually, this great ocean on both sides of this United States represents, in my opinion, a great potential to solve some of the world tensions that result from shortage of food.

Anything we can do in the area of research to preserve a fishery resource has an impact far beyond the coastal States, the United States, and it has an impact, I believe, on the entire world.

Senator BARTLETT. I am in agreement with you.

Thank you.

STATEMENT OF HON. FRED R. HARRIS, A U.S. SENATOR FROM OKLAHOMA

WICHITA MOUNTAIN WILDLIFE REFUGE

Chairman HAYDEN. Senator Harris.

Senator HARRIS. Mr. Chairman, I have a prepared statement, which I will, with your permission, just file with the committee.

Chairman HAYDEN. That may be done.

(The statement follows:)

Mr. Chairman: Once again, I am pleased to call to your special attention a greatly needed appropriation that was not included in the Administration's 1968 budget request for the Bureau of Sports Fisheries and Wildlife in the Department of the Interior. It is an appropriation for the continuation of work begun in fiscal 1966 and 1967 on the Six Year Master Plan for improvement of the Wichita Mountains Wildlife Refuge located in Comanche County, Oklahoma, my home county.

I was happy to see that the President's proposed budget for fiscal 1968 does recommend funds in the amount of $80,000 to construct a new office facility for the refuge, a part of the Master Plan. The Bureau of the Budget recognized that with the completion of the new highway for the Refuge, the annual visitor load will increase appreciably. Although I am extremely happy to see that the

President's proposed budget for 1968 contains this $80,000 item for construction of the new office building, it falls short of adequately providing for the monetary needs to carry out the provisions of the Master Plan for improvements for the Refuge. It is for that reason that I am here today requesting additional funds in the Department of Interior Appropriations Bill.

The annual visitation to this Refuge now exceeds one million persons, and it is predicted that annual visitation will increase to two million persons by 1975. The United States Department of Interior, recognizing the need for improvements in public use facilities brought about by this vast increase in annual visitation, has devised the Wichita Mountains Master Plan for the rehabilitation of buildings, fences, camp grounds and roads, which are now more than thirty years old, and for the construction of new residences and public use and other facilities.

The total development and rehabilitation proposed for this Refuge, the oldest unit in the system of wildlife refuges, is estimated to cost a total of $3,113,900 and will provide much-needed facilities to enable the continued use and benefits available to the general public.

The 59,000-acre Wichita Mountains Wildlife Refuge is dedicated to the preservation and management of big game herds and of providing the opportunity for public enjoyment of this natural area. Visitors throng to the lakes and camp grounds and use the extensive road network to observe wildlife in a natural setting.

Also located within the Wichita Mountains Wildlife Refuge is the world reknowned Easter Sunrise Service facility. This pageant utilizes a permanent physical plant occupying a 151-acre site made available under a long-term permit to the sponsoring, non-profit organization. The annual Sunrise Service, a pageant sponsored by local civic and church groups, attracts a crowd of 35,000 to 50,000 visitors each year. Many people also visit the pageant site, which includes a very attractive chapel, at other times throughout the year. The pageant buildings and scenes harmonize well with their setting and constitute a further attraction for the tens of thousands of visitors to the wildlife refuge.

Recent establishment of a Youth Job Corps Training Camp within the Wildlife Refuge will help with the work outlined in the Master Plan for improvement. However, the youth stationed at the job corps facility will not be able to assist with the heavier construction work which is of priority at this time.

Due to its natural beauty and its close proximity to metropolitan areas in both Oklahoma and Texas, public use is an increasing aspect of the overall requirements of rehabilitation of old, and construction of new, facilities within the complex. The Refuge is located within easy access of Lawton, Oklahoma, Oklahoma City, Oklahoma, Wichita Falls, Texas, Altus, Oklahoma, Duncan, Oklahoma, Chickasha, Oklahoma, and Anadarko, Oklahoma. The combined populations of these cities is in the neighborhood of 510,000 people. The Wichita Mountains Wildlife Refuge is the primary recreational facility available to the growing populations of these cities.

To further illustrate the need for rehabilitation of facilities within the Refuge, I would like to point out the fact that the visitation sometimes reaches as many as 20,000 visitors per day and completely overruns the inadequate facilities which were constructed during the 1930 WPA and CCC days. The present permanent staff of approximately sixteen employees, although very dedicated, find it almost impossible to maintain the 59,000 acres both for wildlife and for increasing public use.

1. Heading the list of priorities for the continuation of construction under the Six Year Master Plan is the need for an appropriation of $500,000 which would enable the completion of work begun in the past two years on the Medicine Park to Cache Gate Roadway. The completion of construction on this highway will decrease serious traffic hazards that now exist and will also afford an opportunity for families to enjoy the beauty of nature by providing them easy access to and through the Refuge. I have personally traveled this highway when traffic was bumper to bumper and when camping, picnic, and observation facilities were filled to capacity. I, therefore, urge the committee to include in the budget the $500,000 needed to complete construction and correct this existing inadequacy in the Wichita Mountains Wildlife Refuge.

2. The second area of priority consists of lake rehabilitation. Many of the thirty-five fresh water lakes within the Refuge are now virtually beyond use

because of aquatic vegetation and siltation. Therefore, the Bureau of Sports Fisheries and Wildlife has proposed a plan to remove sand and siltation from the lakes, to control the growth of aquatic vegetation and to improve beach facilities in order to enhance the use of the lakes for fishing, boating, and swimming. Most of these thirty-five lakes have not received adequate care over the past thirty years due to lack of adequate funds, therefore, I would request that the committee appropriate this year the $125,000 which the Bureau of Sports Fisheries and Wildlife feels is needed to properly rehabilitate these lakes in order to realize their full public use benefits. This job will take about four years, and due to the magnitude of the undertaking, the minimum amount that could be effectively used in any one year is estimated at $20,000. The Bureau of Sports Fisheries and Wildlife also has a plan calling for rehabilitation of swimming beaches. This work is estimated to cost some $95,000 and the minimum that could be effectively utilized in one year is around $10,000.

3. The third priority calls for the construction and rehabilitation of public sanitary and recreational facilities within the refuge. I feel that much of the work to be done in this category could be handled adequately by the members of the Youth Job Corps Camp. Therefore, I would feel that the $75,000 requested for these projects could possibly be withheld at this time.

4. The fourth area of priority involves planning and design for a visitor center complex to serve the refuge. This is an important job. We need to carefully plan and design this facility before requesting funds for construction. With the ever increasing number of visitors coming to the Refuge, it is important that they be given information about the refuge and the many points of interest to be visited within it. This visitor center could, along with the Refuge, become one of the major tourist attractions in the Southwest. The funds required to begin plans for this facility is $75,000. I would urge the Committee to include this amount in the FY 1968 budget.

The total capability of construction is estimated by the Bureau of Sports Fisheries and Wildlife to be $870,000. Inasmuch as construction on this Six Year Master Plan of improvement was begun year before last, and continued last year through an appropriation provided by your Committee, I would like to see the entire amount, less $75,000 under three, to be appropriated this year. I feel it is imperative that we continue our efforts to modernize the facilities within the Wichita Mountains Wildlife Refuge in order that the thousands of people who visit it annually might realize its full public benefit. Therefore, Mr. Chairman, and members of the Committee, I ask that you make available in the fiscal year 1968 the sum of $795,000 in order to enable the Department of Interior to continue its program of rehabilitation and modernization of one of Oklahoma's and America's most outstanding wildlife preservation and public recreation facilities. Your consideration of this request is certainly appreciated. Thank you.

ATTACHMENT TO TESTIMONY OF SENATOR HARRIS

Priority	
1. Scenic highway—Maximum	$500,000
Scenic highway—Minimum	200,000
2. Lakeshore rehabilitation—Maximum	125,000
Lakeshore rehabilitation—Minimum	20,000
3. Swimming beaches—Maximum	95,000
Swimming beaches—Minimum	10,000
4. Sanitary facilities—Maximum	75,000
Sanitary facilities—Minimum	25,000
5. Visitor center design	75,000
Total	795,000

PURPOSE OF WILDLIFE REFUGE

Senator HARRIS. I will excerpt from it briefly. I am here in regard to the Witchita Mountain Wildlife Refuge, which is in Oklahoma and is adjacent to my hometown of Lawton, Okla.

A facility I am interested in, a 59,000 acre wildlfe refuge dedicated to the preservation and management of big game herds and providing the opportunity for public enjoyment of the natural area.

The refuge is about the only recreational facility for a good many rather large cities, Oklahoma City, my hometown of Lawton, and Witchita Falls, and Texas are included, and illustrated the need for the masterplan for the rehabilitation of these facilities primarily for public use.

VISITATION TO REFUGE

I could point out that the visitation to the refuge sometimes reaches as high as 20,000 visitors a day and completely overruns the inadequate facilities there which were largely constructed back during the 1930 WPA and CCC days.

So there is a 5-year master plan which the Department of Interior has put together and during the last 2 years this committee provided funds for that.

ADDITIONAL FUNDS REQUESTED

I am here to talk about the third year, and in this year's budget there was only $80,000 recommended by the administration for the third year of the plan, which will not do anything but provide a new office facility, which is needed.

The entire master plan for this year, if we kept it on schedule, would require an additional $795,000 in addition to the $80,000 item in the budget.

PRIORITIES

I know that the committee is concerned about holding down this budget as much as possible. So what I have done is on that $795,000, in the event the committee feels it could not approve the entire request that would keep the master plan on schedule, I have broken it down with the advice of the Department of Interior into five priorities, one through five, and the first being for the completion of a highway, funds for which this committee has provided during the last 2 years.

That amount is $500,000, and that is even broken down into another segment, a very basic segment of $200,000, which is a part which is needed most.

There are other priorities here, like shore rehabilitation, swimming beaches, sanitary facilities, and the No. 5 priority of visitor center design, a total of $795,000.

IMPORTANCE OF REFUGE

This is an area which is of great importance to the people around those cities there. As I said, it is the only place in that whole area where they can go and have some recreation and in the natural outdoors, and we think it is important we improve these antiquated facilities.

I am grateful for what the committee has done in the past and I hope you will be able to grant some increase over and above the $80,000 in the administration's budget.

Thank you very much.

STATEMENT OF HON. FRANK CHURCH, A U.S. SENATOR FROM IDAHO

SALMON AND STEELHEAD TROUT HATCHERY ON CLEAR CREEK

Chairman HAYDEN. Senator Church.

Senator CHURCH. Thank you, Senator.

Mr. Chairman and gentlemen of the committee, I also have come to talk about anadromous fish this morning and to thank the committee for the help we have received in the past on a very important fish hatchery which is now in the process of being constructed in my State.

I appear here today to respectfully urge that your committee continue to fund the construction of a salmon and steelhead trout hatchery on Clear Creek, a tributary of the Clearwater River in Idaho.

The Clearwater is an integral part of the great salmon spawning complex in the Pacific Northwest. These migratory fish provide a tremendous commercial and sports fishing resource, since they return from the Pacific Ocean to spawn in the cold, clear streams of the inland mountains.

With the construction of dams on the Columbia and lower Snake Rivers, Indian fishing and other factors, these runs have dwindled. Both the State of Idaho and the Federal Government are involved in major programs to restore and rehabilitate these runs. The action of your committee in approving $255,000 in fiscal 1966, and $244,000 in fiscal 1967 for the Clear Creek hatchery is of tremendous importance in the preservation of this resource.

I might say, gentlemen, because of the action of this committee, all of the groundwork and the preliminary reconstruction work of this hatchery has now been completed.

This year the budget does not contain any money for the continuation of the work, and it is in order that the work may continue in a regular way that I come here to plead the case before you this morning.

AMOUNT REQUESTED

An appropriation of $445,000 for the coming fiscal year of 1968 will provide for the major construction phase of the project, and keep it on schedule. This money will be used for buildings, water, sewage and power systems, and other basic construction. After this funding, only $326,000 will be needed to complete the hatchery so that it can begin partial operation in fiscal 1969.

That would be the last appropriation needed to finish the work and would not be needed until next year.

TOTAL COST OF HATCHERY

The total cost of the hatchery will then be $1.3 million, a small price to pay to help preserve a resource which returns an estimated $50 million annually to the three States of Washington, Oregon, and Idaho.

The urgency of keeping the Clear Creek hatchery on schedule may best be explained in an excellent letter which I have received from

Mr. Donald Thomas, chairman of the fish and game committee of the Lewiston, Idaho, Chamber of Commerce. I ask that it be made part of the record.

Mr. Chairman, I again respectfully urge the committee to add these funds to those budgeted for the Bureau of Sports Fisheries and Wildlife.

(The letter follows:)

LEWISTON, IDAHO, *February 25, 1967.*

Hon. FRANK CHURCH,
U.S. Senate Office Building,
Washington, D.C.

DEAR FRANK: As you know, money has been appropriated for the initial phase of construction of the Clear Creek Fish Hatchery at Kooskia, Idaho. If the contracts have not been let, they will be shortly. The first phase of construction will take care of the ponds, pipelines and some related facilities.

The second phase of construction was to have been the main hatchery buildings, domestic water and sewage systems, power plant and other facilities. This would call for an additional appropriation of $445,000 and was to follow the first phase so the building program could be carried on uninterrupted.

The Fish and Game Committee of the Lewiston Chamber of Commerce has been very much interested in this hatchery. While its primary purpose was to be the restoration of the chinook fish runs in the Clearwater watershed, there had also been plans to use it during the critical years of construction of Dworshak Dam to preserve the runs of these wonderful fish into this watershed.

Now, we find that no funds have been included in the Interior Department budget for the continued construction of the project.

The Dworshak Dam project is on schedule and will remain on schedule. Presently the Clearwater steelhead—90 percent of which go up the North Fork are being trapped and transported around the construction area. Their offspring and the offspring from next years trapping program will be able to escape back down the river to return to the ocean. But, the 1969 run will be trapped in the reservoir. Not only the 1969 fish—but our biologists now tell us that they have new evidence that the small fish, instead of remaining in the head water two years, remain three.

Now, it is true that there will be a steelhead hatchery at Dworshak. But the problem that develops here is that this hatchery cannot get into operation until the dam is virtually completed because of the water quality problem. They need the cooler water which they can only get at certain reservoir levels.

So, we have the fish runs from two years and possibly three years that we have no means of caring for unless Clear Creek is kept on schedule. According to the biologists the solution of rearing them in other Federal hatcheries in Montana or possibly Washington is out, in that these are long-run steelhead and if they are raised outside the Clearwater watershed they most likely would never return to the Clearwater River.

The way things stand now, we know that we have one and possibly two years when the steelhead runs will not be cared for. While the loss of a couple years fishing would not be catastrophic, it would continue to reoccur with each cycle of these fish for years and years. Also, we really don't have a surplus of brood stock from which to maintain and rebuild the run and we can ill afford to lose that high a percentage of our remaining brood fish.

We realize the problems involved in getting appropriations for such a project as Clear Creek and the wisdom of keeping down all expenditures that are not absolutely necessary.

At the same time, we also feel that we have a responsibility to preserve as many of the good things of this country as we can. We won't always be at war. And I think that our young men who are now in Asia would feel that we had failed them if we allowed this tremendous resource to be lost.

We respectfully request that you use every effort to get the necessary funds reinstated in the budget to keep the Clear Creek Fish Hatchery project on schedule.

Best personal regards.

DONALD THOMAS,
Chairman, Fish and Game Committee,
Lewiston Chamber of Commerce.

NONBUDGETED ITEM

Senator CHURCH. I want to express my appreciation for the help this committee has given in the past to get this hatchery underway and to keep it on schedule.

Chairman HAYDEN. We thank you for your statement.

Senator BARTLETT. May I ask a question or two there, Mr. Chairman?

Chairman HAYDEN. Yes.

Senator BARTLETT. Is this entirely a Federal undertaking?

Senator CHURCH. Yes, it is.

Senator BARTLETT. Do you know if the Bureau asked for any money for the coming year?

Senator CHURCH. There is no money in the budget this year for the Clear Creek hatchery.

This surprises us very much because of the fact that a half million dollars has already been spent and the initial works are complete, that is, the ground has been secured, the water source is secured, the initial tanks and canals and pipes, and so forth, have been installed.

URGENCY OF PROJECT

Now, we are just at the point of going ahead with the main construction work on the hatchery. The urgency is that we have the Dworshak Dam building which, when completed, will create a high barrier and the hatchery is meant to help alleviate the effects of the dam.

The dam is on schedule, construction continues, and we feel very strongly that if this hatchery does not remain on schedule, the adverse effect on the fish run will be very serious.

Senator BARTLETT. The dams have taken a heavy toll of the salmon runs already?

Senator CHURCH. Yes.

Senator BARTLETT. The feeling out there is everything ought to be done that can be done to counteract this?

Senator CHURCH. That is correct.

A hatchery of this kind will make a significant contribution to the preservation of the fish runs.

Senator YOUNG. Would this deal with salmon?

Senator CHURCH. Yes. The anadromous fish that must come up the rivers to spawn in order to keep this resource alive. The hatchery would raise salmon and steelhead trout and restore and rehabilitate the runs in the Clearwater watershed.

That is why it is so important. That is why, in the past, the committee has given its support to this very fine project.

COMPLETION OF DAM

Senator YOUNG. When will the dam be completed?

Senator CHURCH. The dam is scheduled to be completed in 1973. The major construction is now underway on the basis of a $145 million contract let last year.

Senator YOUNG. When will they start to impound water?

Senator CHURCH. Senator, I understand from Mr. Thomas' letter that the run will be trapped in the reservoir in 1969, although the actual full-scale filling of the reservoir may come later, and 2 or 3 years before the completion date of 1973.

Senator YOUNG. It actually should be completed about that time.

Senator CHURCH. By keeping it on schedule, it would be.

IMPORTANT SOURCE OF SALMON AND STEELHEAD

Senator BARTLETT. Is Clear Creek now an important source of salmon and steelhead?

Senator CHURCH. Clear Creek is a tributary of the Middle Fork of the Clearwater River. The output of the hatchery is designed to replenish the salmon and steelhead in the major streams, such as the Middle Fork, the Main and South Forks of the Clearwater, and the Lochsa and Selway Rivers, and to make up for some of the loss on the North Fork of the Clearwater due to the construction of Dworshak Dam. The entire Clearwater watershed is an important source for these fish.

Senator BARTLETT. As important as it was in earlier days?

Senator CHURCH. No. But this hatchery will help bring it back to its old importance, and the need is urgent.

Chairman HAYDEN. Thank you, sir.

Senator CHURCH. Thank you, Mr. Chairman.

STATEMENT OF HON. FRANK E. MOSS, A U.S. SENATOR FROM UTAH

APPROPRIATIONS FOR DEPARTMENT OF INTERIOR AND U.S. FOREST SERVICE

Senator MOSS. Chairman Hayden and members of the subcommittee, I appreciate this opportunity to testify on Utah's strong interest in adequate appropriations for the Department of the Interior and the U.S. Forest Service. These programs touch us directly and intimately, and are tied in with our future economic progress. We favor as high levels of funding as the overall fiscal picture permits.

I recognize that in recommending appropriations the subcommittee is working under special difficulties this year. The budget demands of the war in Vietnam have necessitated reductions in many domestic programs, and the deferral of special projects in others. We who are dedicated to natural resource development, to conservation, to good land management practices to the expansion of outdoor recreation facilities, to improvement of our national parks and monuments, to the best possible care for our Indian population, and to many other activities under consideration by this subcommittee, find it difficult to accept with equanimity any reduction at all in needed appropriations.

We fear that money cuts may jeopardize long-range objectives. A natural resource destroyed or used up cannot be replaced.

I wish to say, therefore, that the subcommittee has my sympathy and understanding in trying to shape a satisfactory bill for fiscal year 1968. I will try not to add too greatly to your problems. Because of the obvious difficulties which you are facing, I have held my requests for additional funds to a minimum. I am asking for only two increases to the appropriation requests and supporting one other.

BROWSE IMPROVEMENT STUDIES AT BRIGHAM YOUNG UNIVERSITY

First, I ask that $150,000 be written into appropriations for Forest Service research to begin browse improvement studies at Brigham Young University at Provo, Utah.

You will remember that I have come before this subcommittee in the past to ask for planning funds for a Western Browse Laboratory to be constructed at Brigham Young. The Appropriation Committees of the House and Senate agreed to the sum of $37,000 in planning funds in the fiscal year 1967 budget, and we hoped that this would assure an appropriation of construction funds this year.

Although architectural designs and specifications are now being developed for the laboratory, construction funds have not been requested because of the high cost of the war in Vietnam, and we do not know when it will be possible to build the laboratory.

Meanwhile, there is temporary space available at the university to start some of the most urgently needed research activities. The sum of $150,000 could be used efficiently in fiscal 1968 to begin browse improvement studies and provide the nucleus of a considerable expanded program in the area when the laboratory is constructed.

DEPLETION OF INTERMOUNTAIN RANGES

I am sure that the members of this subcommittee are thoroughly familiar with the widespread depletion of our intermountain ranges through heavy livestock grazing. The livestock industry is one of the oldest in the West, and it represents an important segment of our economy. But it has never had enough basic information on management systems to be able to maintain range productivity or to undertake extensive range rehabilitation.

We need to provide this information, and we can do it by establishing a sustained research program using modern facilities and equipment so we can determine more precisely the best grazing management systems and the basic requirements and characteristics of important forage species.

PROBLEMS RESULTING FROM RANGE DEPLETION

Range depletion presents a problem not only for livestock grazing, but in the management of our wildlife. Our wildlife has become one of the most important wildland resources in the Intermountain West, and its importance is rapidly increasing.

In 1960, one-half of the big game harvest of 11 Western States and about one-fourth of that of the contiguous 48 States was on public lands. Browse is a key source of big game food and it is the principal vegetative cover in much of the area. It is necessary that we artificially restore some of the critical areas if we are to maintain even the present game herds in severe winters. If we can replace worthless shrubs with desirable browse species, it would permit greatly increased production of game.

Certain shrubs can also be extremely important in stabilizing soils on eroding rangelands and on sites disturbed during road construction, as well as for screening and general beautification of the landscape.

I understand that there has already been enough observation of variations in growth habits, palatability, disease and insect resistance, and in weather and fire tolerance to indicate that a major research program could show us the way to develop superior planting stock.

SUPPORT FOR BROWSE STUDY

I hope, therefore, that we can make a modest beginning in research on shrubs in the fiscal year 1968 through the appropriation of $150,000 for browse study at Brigham Young University.

My request has the strong support of Director John E. Phelps of the Utah State Department of Fish and Game, of Dr. Vasco M. Tanner, commissioner of the Utah State Park and Recreation Commission, and chairman of the committee on forests and conservation of the Provo Chamber of Commerce, and of the Provo City Corporation, Verl G. Dixon, mayor, Luke Clegg, city commissioner, and Ray Murdock, city commissioner.

CLARKE-MCNARY FUNDS FOR COOPERATION IN FOREST FIRE CONTROL

My second request is that Federal Clarke-McNary funds for cooperation in forest fire control for the fiscal year 1968 be increased by $3 million.

As you know, section 3 of the Clarke-McNary Act authorizes an annual Federal appropriation of not more than $20 million for use in cooperative forest fire control. In fiscal 1967, only $12,834,000 was appropriated for this purpose. The budget request for fiscal 1968 is at the same level. I feel it should be increased to at least $15,811,000.

RISING COSTS OF FIRE PREVENTION

Costs to the State for forest fire prevention increase each year. Salaries are rising and will increase even more as the new wage-and-hour-law schedules go into effect. Equipment costs more, so does general operation and maintenance.

In addition to the rising cost of protection for our forests, the values protected in them and on our watersheds have increased tremendously as our economy has expanded. Water, soil, timber, wildlife, and recreation, plus the intrinsic value of scenery and other esthetics, must all be considered in light of rapidly increasing use of the outdoors by the public.

I am told that at the end of 1965, 519 million acres of State and private land in this country qualified for protection under the Clarke-McNary program. Approximately 472 million acres of this received organized protection, but about 200 million acres was inadequately covered. Some 47 million acres had no organized protection at all.

UTAH LAND NEEDING FIRE PROTECTION

In Utah, we have over 9 million acres of State and private lands which are classified as needing fire protection, and it is estimated that 2 million of these were inadequately covered.

Utah's Federal allotment for the fiscal year 1967 was $74,730. It will not be much more than this if the fiscal year 1968 appropriation for Clarke-McNary funds is held at the same level as 1967. This amount is obviously inadequate, and I am confident that the Federal allocations to the other States are similarly inadequate.

An increase of $3 million will by no means provide the protection our eligible State and private lands require, but it would be a step in the right direction. As soon as our fiscal situation permits, we should be appropriating the full $20 million authorized each year.

SUPPORT OF ADDITIONAL FUNDS FOR WATERSHED PROTECTION AND MANAGEMENT ON PUBLIC LANDS

In conclusion, I would like to support my colleague, Senator Metcalf, in his request for additional funds in fiscal 1968 for watershed protection and management on public lands in our Western States administered by the Bureau of Land Management.

I will not take the subcommittee's time to make a case on this because I know the problem will be effectively and fully discussed by the distinguished junior Senator from Montana. But there is no question in my mind that the level of 1968 request is completely unrealistic, even in the face of the tight budget circumstances we face today.

Not only should the $900,000 cut from last year's levels of appropriation be restored, but there should be an increase over last year's appropriation if we are to keep pace with the development we must have to meet our long-term objectives. I support the Metcalf request for an additional $1.9 million, which would increase this item to $16 million from the budget request of $14.1 million.

Thank you for giving me this time to be heard.

PURPOSE OF BROWSE LABORATORY

Chairman HAYDEN. As usual, you make a very persuasive argument.

Senator MOSS. Thank you, Mr. Chairman.

Senator YOUNG. What is this?

You call it "browse"?

Senator MOSS. A "browse" laboratory, Senator; we have been working on this for some time. As our ranges have been graded, many of them overgrazed, they deterioriate to the point where they can no longer support cattle or game adequately, and they are subject to erosion.

Now, this browse laboratory is to determine how we can maintain the good type of browse on which cattle and big game feed and how we can eradicate the weeds that encroach on the range and replace them with adequate browse.

Senator YOUNG. What is browse?

Senator Moss. Well, it is herbs and shrubs. It is growth that is not grass but it is a shrub, really.

Senator Young. It makes good cattle feed?

Senator Moss. Yes, it does; and big game feed.

Senator Young. Thank you.

STATEMENT OF HON. LEE METCALF, A U.S. SENATOR FROM MONTANA

SUPPORT OF BUDGET REQUESTS FOR INTERIOR DEPARTMENT AND RELATED AGENCIES

Chairman Hayden. Senator Metcalf.

Senator Metcalf. Mr. Chairman, this is Senator Mansfield's statement and mine in support of budget requests for the Interior Department and related agencies, including the Forest Service, for fiscal 1968.

We appreciate the opportunity to state Montana's case for appropriations vital to the West.

I have filed with the committee an extended summary of some of these areas that I would like to testify, but I would like to testify on some of them and have the material I filed included in the record.

Chairman Hayden. That will be done. They will appear on the conclusion of your statement this morning.

Bureau of Land Management

Senator Metcalf. Mr. Chairman, Senator Mansfield and I support the budget request for the Bureau of Land Management. We note that the need for additional investment resulting from the comparatively recent utilization of the vast area of public domain managed by the BLM has recreation and wildlife resources which may at least equal in value the traditional primary concerns of BLM management, livestock, and timber production.

This fiscal year we will spend about 29 cents per acre on the 175 million acres of public land administered by the BLM.

Senator Mansfield and I are joined this year by Senators Bennett, Moss, Burdick, Magnuson, Hatfield, Cannon, Church, Fannin, Montoya, Jackson, McGee, McGovern, Anderson, and Morse, in urging an increase in the budget for the BLM. We believe that the care of our public lands is worth more than the price of a package of cigarettes per acre.

INCREASES REQUESTED

We are concerned in particular with 50,000 acres of headwater land in need of immediate attention. We are, therefore, urging that the line item for "soil and watershed construction" be increased by $2,050,000 over the budget request of $14,072,000, to a total of $16,122,000. In addition, Senator Mansfield and I seek an increase of $230,000 for "Range management," and $510,000 for "Construction and recreation facilities."

Before I leave this item, I should like to point out that we realize some $600 million in annual receipts from a $50,300,000 investment in these 175 million acres of public land. We suggest we reinvest more of the public profits in the public land and get on with the job this next fiscal year.

COOPERATIVE FIRE CONTROL

Senator Mansfield and I are in agreement with the suggestion of the National Association of State Foresters for an increase of $3 million in the program of cooperative fire control.

Senator Moss, who immediately preceded me also supported this proposition. We suggest an increase of $225,000 for research and development after more sophisticated fire-detection system along the lines of "fire scan," but capable of detecting smaller fires.

Mr. Chairman, I was at Smoker Jefferson in Missoula, with Vice President Humphrey, and we had an exciting view of some of this new matter of techniques of fire-control with the infra-red rays. As they fly over the fires they can look down and spot a very small flame that even an observer never found out about.

With additional research and a little money for additional research we will save millions of dollars in fire control and timber that burns as a resullt of failure to observe fires early.

WILDERNESS RESEARCH

Knowledge requires research. Wilderness research is one of the newest and most exciting developments in forestry. We are requesting an increase of $225,000 to be added to the $75,000 in the budget for the development of the wilderness research center at the University of Montana at Missoula.

I have been through the Marshall Wilderness. The trails there in that, one of the oldest wilderness systems in America, are almost like superhighways. Then campsites are developed in very small areas and we have what I call a wilderness slum.

We have thousands of acres of wilderness and a handful of trails and horses and people just use those very small trails so we need an additional concept of how we are going to use this wilderness to preserve the concept of wilderness at the same time permit people to enjoy access to them.

NATIONAL PARK SERVICE

Senator Mansfield and I were pleased with the $10,982,900 budget request of the National Park Service for Yellowstone and Glacier National Parks. Of this amount, $2,150,400 is for Glacier Park and $8,832,500 is for Yellowstone.

It is good to note that in the budget requests for Yellowstone, $2,800,400 is for road and trail construction and improvement. In light of the fact that 1972 will mark the 100th anniversary of Yellowstone Park, we can surely expect a great influx of tourists and this planning for roads and trails now will surely avoid a crash—an unnecessarily costly—program later.

We do have one requested increase for the National Park Service budget. This is for $45,000 for land acquisition and planning for the airport facility at East Glacier, Mont.

That is a facility which has been authorized, and will be constructed at some future time.

ATMOSPHERIC WATER RESEARCH

The budget includes $75,000 for atmospheric water research at the Water Resource Research Center at Bozeman. We are requesting that this line item be increased by $25,000 in order that this research can go forward at the most effective level, $100,000.

GROUND WATER RESEARCH

We also suggest that the budget request for ground water research being conducted in Montana be increased to a total of $132,500. This will be some $5,500 over last fiscal year, but will allow the project at Montana College of Mineral Science and Technology an increase of $8,000, which is needed and justified.

BUREAU OF INDIAN AFFAIRS

Senator Mansfield and I are pleased with the BIA budget request $775,000, for Indian sanitation. However, we urge that an additional $1.2 million be appropriated for Indian health, bringing this line item to a total of $13,900,000. We also request an additional $697,000 be added to the BIA budget for Indian law and order.

This amount, $550,000 would be used for construction of needed jail facilities at Blackfeet and Crow Reservations; the remainder would go to replace the tribal contributions for law and order, release these tribal funds for needed and productive projects and putting the cost where it originally belongs—with the Federal Government.

I might say, Senator Young, in the Dakotas, they do have a jail in the law-and-order programs in the Indian reservations and are paid for by the Federal Government, and we feel that in the reservations of the Blackfeet and Crow we should have the same contribution that is made in some of the other Indian reservations.

MUSEUM OF THE PLAINS INDIAN

The Museum of the Plains Indian at Browning, Mont., has had no attention in its 26-year history. We need $86,000 for improvement, repair, and maintenance. This item is not included in the budget. Senator Mansfield and I are joined by Senator Muskie in suggesting we take some needed action here.

Parenthetically, I will say that Senator Muskie came out to Montana, visited Grace Year Park and visited the Museum of the Plains Indian, and immediately said that it needs some additional appropriations, that this is one of the fine Indian programs in America.

BLACKFEET BETTERMENT

One other Indian item, small though extremely important, is a rehabilitation and betterment project at Blackfeet Reservation. We seek $90,000 not in the budget for the continuation of this work.

BUREAU OF RECLAMATION

Senator Mansfield and I are in complete agreement with the Bureau of Reclamation budget request. We support the $5 million request for continued construction at Yellowtail Dam. At Tiber Dam, the $600,000 request will be used to improve the spillway and raise the dam and dike.

Exactly $340,000 is requested for drain construction at Clark Canyon Dam. The request for $126,000 for the Helena Valley Irrigation District will be used for canal and drain system construction and improvement. Four other units at various sites in Montana request a total of $191,349.

We also support the Bureau of Reclamation request for $1,466,000 for planning in Montana and nine other States.

FISH AND WILDFIRE SERVICE

Senator Mansfield and I are most concerned over the disparity in the budget requests that exist between the cooperative fishery units and the cooperative wildlife units. We urge that the wildlife units be funded at the same level, $40,000, as are the fishery units.

We suggest that four units in immediate need, in Arizona, Montana, Maine, and Missouri, be attended to this next fiscal year.

U.L. BEND

Senator Mansfield and I were extremely pleased when, in February, the Migratory Bird Conservation Commission, of which I am a member, approved a significant addition to the waterfowl refuge system. It is the U.L. Bird Refuge in northeastern Montana. We authorized purchase of some 12,000 acres of private land. This refuge was approved after the budget was prepared.

Senator Mansfield and I propose that we begin the development of this important area in fiscal 1968. We urge the investment of $255,000 in the initial phase of development.

We hope the committee will see fit to provide this initial investment in a development that will make a significant and historic contribution to the conservation of a great natural resource, migratory waterfowl.

Over in the Dakotas, Mr. Chairman, whenever this pothole area that is the breeding ground for ducks and waterfowl in America—we have pased legislation that has provided, in lieu of taxpayments, so that in North and South Dakota now we are able to take care of the necessary purchase of those areas.

CREATION OF NEW WATER BREEDING GROUND

But this "U. L. Bend" is the first example of a can where we have created a new water breeding ground. And we are going to pump water from the dam at Fort Peck up into these thousands of acres and create a new breeding ground such as they have in the pothole area in North Dakota.

This is exhibiting an important new area for breeding ground for ducks and we were fortunate in having these two big ranches offered for sale at this time shortly after the budget was approved.

This will make a historic contribution to the waterfowl propagation.

Senator YOUNG. Would this form a big swampy area or potholes?

Senator METCALF. This will form potholes. This is a grazing area at the present time. The proposal is that we build some dikes and pump water from Missouri River using Fort Peak power and the lowlands will be potholes for breeding grounds for ducks and the higher lands will grow grass and feed for the ducks and we will have the same condition which you have in the Dakotas in your pothole country.

COOPERATION OF FISH AND WILDLIFE SERVICE

Senator YOUNG. That is a good idea. Is the Fish and Wildlife Service working with you on the plans on this?

Senator METCALF. That is right. You see, the Migratory Bird Commission, Mr. Gotschalk, has suggested we purchase this and it has been approved. As I say we had approved the purchase after the budget came in.

Once in a lifetime you get a chance to buy a couple of these big ranches and these came on the market and we have approved the purchase, but we hope that we will have some money for the development of this area.

DEVELOPMENT MONEY NEEDED

Senator BARTLETT. Will the owners hold the property for you for awhile?

Senator METCALF. No. The duck stamp fund has purchased the property. But what we want is some money now for the development of it, the pumping and the Fish and Wildlife Service to install the necessary facilities.

This is the first time, since I have been on the Commission in 7 years that we have created new breeding grounds, new areas. As you know, we drained the potholes and drained the swamps and drained the breeding grounds, but this is the first time we have been able to create new breeding grounds for ducks, especially the redheads and mallards, which are so important in our area.

Senator YOUNG. I am all for you for two reasons, first, because you have two good Senators from Montana, and second because we want you to raise some more ducks out there and maybe not quite so many in North Dakota.

Senator METCALF. I think with our "in lieu of tax bill" we did help you in North Dakota.

Senator YOUNG. Yes, this was helpful. We have many problems yet.

Senator METCALF. Yes, we have real problems but this is the first time we have expanded our breeding grounds instead of draining them.

BOZEMAN NATIONAL FISH HATCHERY

Mr. Chairman, an orderly and planned expansion of our national fish hatcheries will avoid a crash program at some future date and will maintain one of the State's major sport and tourist attractions. Senator Mansfield and I ask that the budget request for the Fish and Wildlife Service be increased to include $230,000 to develop the Bozeman National Fish Hatchery.

GEOLOGICAL SURVEY

We support the budget request for the Geological Survey of $24.5 million to continue the topographical mapping program. Of this, $1,374,000 will be used in mapping Montana. To date only 35 percent of the State is covered by published topographical maps in the 1 to 24,000 and 1 to 62,500 scales. With the approval of this budget request for next fiscal year the Geological Survey estimates that an additional 6,000 square miles of mapping will be published in 1968.

Mr. Chairman, that concludes my summary statement. I ask unanimous consent to file a more detailed and expanded statement for the record.

Chairman HAYDEN. That may be done.

INFRARED SYSTEM OF DETECTING FOREST FIRES

Senator BARTLETT. Let me make a statement and then ask you a question.

You surprised me very much by informing me about these breeding grounds for ducks in North Dakota because I had thought from what the opponents of the proposed Rampart hydroelectric project had to say all of the ducks that breed in North America came from that particular area up in Alaska, but I understand now this is not so.

Can you tell us anything more about this infrared system of detecting forest fires?

Senator METCALF. This is a a very exciting system. They have these infrared heat systems in an airplane. They fly over smoke and fog and they pinpoint the area of th fire. They can detect a very small fire. They can detect a campfire.

Senator BARTLETT. Through fog?

Senate METCALF. Through fog and clouds.

Senator BARTLETT. There is something back at the plane that indicates this?

Senator METCALF. That is right. The difference is the heat comes up through and you can see this little tiny pinpoint of a campfire. The technicians come in, develop the photographs and they find first what ground observers have not located or can't locate because of fog or because or smoke or because of adverse weather conditions.

Then the smoke jumpers fly over to put that fire out, and they put it out long before it would have been detected by other means.

RESEARCH RETURNS

That is one example of the kind of research that we are developing to eliminate some of the costly effects of forest fires. That is why Senator Mansfield and I are urging more research money, because we get hundreds and hundreds of dollars back as a result of this forest research.

INDIAN SANITATION

Senator BARTLETT. Are you and Senator Mansfield recommending a boost in the appropriation for the Division of Indian Health of $1,200,000, or $1,300,000?

Senator METCALF. Indian sanitation, yes.

Senator BARTLETT. Sanitation, what, in Montana or generally speaking?

Senator METCALF. This was in the whole Bureau of Indian Affairs budget.

Senator BARTLETT. But this money, if allowed, would be dedicated to santitation?

Senator METCALF. That is right.

Senator BARTLETT. Thank you.

Chairman HAYDEN. Thank you for your appearance.

Senator METCALF. Thank you very much.

(The supplementary statements follow:)

BUREAU OF LAND MANAGEMENT

I have carefully gone over the Bureau of Land Management budget justification for fiscal 1968. I congratulate the Bureau on a splendid presentation.

The Bureau has stated: "We believe the proposed budget provides *acceptable* levels of management and conservation progress consistent with overall administration goals and requirements."

For the most part Senator Mansfield and I support the BLM budget requests. There are a few items, however, we would like to bring to the attention of this Committee.

On March 1, I asked the Bureau of Land Management to list the needed additional work it could accomplish if funds were available. The Agency has provided me with this information. As I reviewed the budget requests and the additional data from the BLM, it became obvious that the sheet erosion which occurred in this fiscal year threatened to assume gully erosion proportions next year.

The BLM supervises some 175 million acres exclusive of Alaska and the territories. This fiscal year the budget request is for $50,273,200 to administer this public trust. Looking at it another way, it costs us about the price of a package of cigarettes—.29¢ per acre.

SOIL & WATERSHED CONSERVATION

Dr. Milton Eisenhower has estimated that from colonial days until the end of the dust bowl the average depth of America's topsoil was reduced by one half as a result of erosion, mud and water pollution.

This lost soil not only grew no crops but clogged rivers, silted-in dams and harbors, choked aquatic plants, destroyed domestic water supplies and killed enormous quantities of fish. This concerns me. I am also concerned when I see the budget of the BLM being undercut by an erosion of funds. I referred earlier to a sheet erosion which occurred this year cutting $256,210 from the appropriation of 1966. Gully erosion will surely follow if we reduce the 1967 appropriation by $700,000 as this budget requests. We do not want the third wave of conservation to miss that critical and neglected stretch of the conservation beachhead—the public lands. Too long has its tide been at ebb low. Too long has its sea been still. We say the future is today. Yesterday is gone and tomorrow is too late. The budget for 1968 needs attention now unless tomorrow's public lands be like yesterdays and todays.

ADDITIONAL FUNDS REQUISITE

For range management we need an additional $230,000. For construction of recreational facilities an additional $510,000 is required and a minimum of $2,050,000 is essential for soil and watershed conservation. It is this latter item to which I now call your attention.

In 1965 Senator Mansfield and I were joined by 11 Western Senators in a successful effort to provide an additional $3 million to begin an extensive Soil and Water Conservation program on the 175 million acres of watershed lands administered by the BLM.

The 1968 budget estimate for this item is some $1,050,000 less than the 1966 appropriation. This concerns me and it concerns 15 other Western Senators. We must not only continue this conservation undertaking. We must accelerate it.

DEPARTMENT OF INTERIOR YEARBOOK

The Interior Department's new yearbook, "The Third Wave-America's New Conservation," emphasizes the need for man to restore the balance between himself and his institutions on the one hand and his natural environment. Now, at last, the right hand wants to know—and clasp the left."

This is what we propose here by stopping the erosion in watershed funds. With authority, the Interior yearbook states "Land and water resources are inseparable, and watershed improvement programs are basic to the Nation's overall water resource development." The publication further points out BLM's future watershed management involves:

> (1) . . . such as . . . grazing and timber cutting, will be locally adopted to insure that vegetation, soil and moisture requirements are not out of balance with the erosion hazard.
>
> (2) Treatments will be started to stabilize the soil and increase its water-holding capacity.
>
> (3) Water flow originating on and passing through lands administered by BLM will be subjected to controls. Such measures include dams, water spreading and similar steps where gullying and deterioration of the soil-moisture balance are critical.

The budget revisions we urge are entirely consistent with the public land goals outlined by the Department of the Interior for the third wave of conservation.

If we were to spend $2.00 per acre developing the 175 milion acres of public land the cost would be $350 million. This $2.00 represents the average cost per month for garbage disposal. In reality, we will spend about $50,300,000 in fiscal 1967 or about .29¢ per acre. This is appalling when we realize receipts on this $50,300,000 investment in fiscal 1967 are estimated at some $600,000,000. If we were to prorate this income against the acreage of land managed it would equal $2.30 per acre income. This is after we deduct the management cost of $50 million and the payment to states of $70 million.

I propose that we reinvest some of the public profit in the public business. The budget request is for $14,072,000 for Soil and Watershed Conservation. We Senators urge that this item be increased by $2,050,000 to a total of $16,122,000.

The scope of this program is vast. If we could restore 500,000 acres per year, and this we are not doing, it would take us 100 years to restore the 50 million acres in need of immediate attention. We propose that we get on with the job.

CORRESPONDENCE

I ask to have inserted in the record of the hearing at this point the letter which I have sent to various Senators soliciting their support for additional watershed funds. The attached list of Senators have associated themselves with my request. I also ask that the reply I received from the BLM on their budget request be inserted in the record.

We also urge this Committee to consider two additional projects which are planned for Montana and could be completed if funds were made available in fiscal 1968. They are:

Beaverhead Recreation Complex in Beaverhead County	$65,000
Judith Mountain Recreation Area in Fergus County	25,000

The total additional funds needed here would amount to $90,000 and is part of the $510,000 of additional requested funds mentioned earlier for construction of recreation facilities. We urge their inclusion in the appropriation for next year.

(The Letters and List Follow)

MARCH 7, 1967.

Senator CLINTON P. ANDERSON,
Suite 4215, Senate Office Building,
Washington, D.C.

DEAR CLINT: In 1965 you joined me in a request to the Committee on Appropriations for an additional investment of $6 million to accelerate watershed protection and management on the public lands in our Western States administered by the Bureau of Land Management.

Through the help of our colleagues on the Committee, $3 million was added in conference and a total of some $15 million was made available in this fight to save the soil.

As I look at the budget for 1968, I see erosion—of the funds sought for soil and watershed conservation. The request is for $14.1 million, a reduction of some $900,000 from this year.

In sharp contrast is the statement in the budget (p. 569) that "The work of the Bureau (of Land Management) produces revenues . . . deposited in the Treasury . . . for 1966: $366 million, for 1967: $523 million (est.), for 1968: $551 million (est.)."

I propose to submit a strong statement urging more adequate funds to conserve these acres which blanket the vital watersheds of the west. It seems to me that the first step in controlling erosion is to stop the erosion of investment in this vital work.

In fiscal 1968, when the income from BLM land is estimated at $551 million, we propose a total expenditure of $49.6 million.

I hope you will join again in seeking an additional investment in watershed protection and management. I propose to ask the Committee for an additional $1.9 million, which would increase this item to $16 million from the budget request of $14.1 million.

If you wish to associate yourself with my remarks to the Committee when I appear on 21 March, please call Bill Huber on Extension 2651 by 15 March.

Very truly yours,

Affirmative response from each of following Senators who received this letter:

Senator Wallace F. Bennett
Senator Frank E. Moss
Senator Quentin M. Burdick
Senator Howard Cannon
Senator Frank Church
Senator Henry M. Jackson
Senator Gale W. McGee
Senator George McGovern
Senator Mike Mansfield
Senator Clinton P. Anderson
Senator Wayne Morse

MARCH, 7, 1967.

Senator JOSEPH M. MONTOYA,
Suite 2203, Senate Office Building,
Washington, D.C.

DEAR JOE: In 1965, 13 Western Senators, including Senator Hayden, joined in a successful effort to provide an additional $3 million to conserve the soil and water resources on the 175 million acres of watershed lands administered by the Bureau of Land Management.

The budget request for 1968 proposes to reduce the investment in watershed protection to $14.1 million from $15 million. This is proposed despite an overall increase in revenues from these lands to an estimated $551 million in 1968 from $523 million in 1967 compared to a total management outlay of $49.5 million.

Again this year a number of us are concerned with erosion—erosion of the FLM lands which blanket the headwaters of the west and erosion of investment in protection and management of these lands. We will seek to increase the investment in watershed protection to $10 million from the budget request of $14.1 million. While the $16 million total is small, amounting to less than 10 cents an acre, it will show our interest in western watersheds.

I hope you will wish to associate yourself with my proposal, which will be submitted to the Appropriations Subcommittee on Interior and Related Agencies on 21 March. If you wish to do so, please call Bill Huber of my staff on Extension 2651 on or before 15 March.

Very truly yours,

Affirmative response received from each of following Senators to whom this letter also was directed:

Senator Warren G. Magnuson
Senator Mark O. Hatfield
Senator Paul J. Fannin
Senator Joseph M. Montoya

U.S. Department of the Interior,
Bureau of Land Management,
Washington, D.C., March 9, 1967.

Hon. Lee Metcalf,
U.S. Senate,
Washington, D.C.

Dear Senator Metcalf: We are pleased to respond to your inquiry of March 1, 1967, concerning BLM's proposed budget for 1968. We believe the proposed budget provides acceptable levels of management and conservation progress consistent with over-all administration goals and requirements. Enclosed is a copy of our Budget Justifications.

The planned recreation facility construction projects included with the present 1968 budget are:

Little Rockies, 25 family units, 10,000 visitors, $39,000

Two excellent undeveloped campgrounds are located in this outstanding recreation area lying in the Little Rockies north of Zortman off U.S. Highway 191 in Phillips County. The visitors need potable water, sanitary facilities, and family campsites.

Ruby River, Recreation Complex (Ruby Reservoir), 40 family units, 50,000 visitors, $74,000

Twenty campsites and 20 picnic sites are planned on the Ruby Reservoir Lake lying about 5 miles south of Alder in Madison County. The lake and surrounding area provides excellent fishing, boating, and big game hunting for local people and tourists driving through to visit near-by historic Virginia City and Yellowstone National Park. Many people presently camp on the lake shore, and a bad sanitation problem has developed because facilities are not available.

Three other small recreation sites are planned in cooperation with the Prairie County Sportsmen's Association: One is located on Clark Reservoir near Miles City; one is a scenic overlook near Terry; and another is on the South Fork Reservoir. The needed fences, signs and picnic units will cost about $4,000.

In addition, the following recreation projects are planned for construction in Montana and could be accomplished in fiscal year 1968 if funds and manpower were made available.

Project	County	Family units	Cost
Beaverhead recreation complex	Beaverhead	35	$65,000
Judith Mountain Recreation Area	Fergus	16	25,000
Total			90,000

The above funds would add the Deadwood Gulch and Indian Cave Campsites in the Sheep Creek Area of the Beaverhead Recreation Complex. Sheep Creek, near the Montana-Idaho State line, has long been a popular fishing stream to out-of-state visitors as well as the natives of southwest Montana. The stream and its beautiful mountainous surroundings have sanitation and safety problems because of a lack of facilities for visitors.

Two small campsites are planned as part of a recreation complex in the Judith Mountains which are rich in gold mining and military history. The facilities will provide safeguards for historical values as well as visitor necessities.

Examples of benefits of soil and watershed conservation practices are described beginning on Page 22 of our 1968 Budget Justifications. Additionally, Montana recently made a study of a small watershed in the Coal Creek Resource Conservation Area near Terry. Treatment of this 8,000 acre watershed consisted of building 3 water control structures and a 400 acre water spreading system, sloping raw channel banks and planting trees and shrubs, building protective fences and working out a good grazing management system. The benefits realized from this work are estimated to be a 60% reduction in silt discharge, 20% retention of water discharge, and livestock forage is expected to increase about 30%. Recreation use potential has about doubled with increased big game and waterfowl carrying capacity and use of the reservoir for boating and other water sports.

Not all areas respond to treatment in the same way, but conservation work is undertaken when reasonable benefits can be expected.

The chart on Page 24 of the Bureau's 1963 Budget Justifications shows the planned work for 1967 and 1968 and the remaining work to be done.

With regard to over-all conservation needs, this Bureau could also accelerate work in these programs during 1968:

	Tentative 1968 budget	Additional
Title, lease and records service	$5,273,200	$60,000
Land classification and mineral examination	4,658,000	1,040,000
Range management	5,495,000	230,000
Forest management	7,646,700	------
Soil and watershed conservation	14,072,000	2,050,000
Protection	3,598,400	100,000
Cadastral survey	5,100,700	50,000
Construction recreation facilities	1,100,000	510,000

Oil Shale Development Program, $760,000

To initiate work connected with points 1 and 5 of the Secretary of Interior's 5 Point Oil Shale Development Program involving Colorado, Wyoming and Utah. There are three activities involved in this program:

The Title, Lease and Records Service Activity will be involved in processing and adjudication of adverse proceedings against apparently invalid, unpatented mining claims, hearings and appeals.

The Land Classification and Mineral Examination Activity will gather and record data on thousands of oil shale claims, examine the claims and initiate action against those claims believed to be invalid. Multiple-resource planning will also be accomplished.

The Cadastral Survey Activity will provide positive location of mining claims.

A breakdown of funds for this program is noted below in the descriptions of the involved activities:

Title, Lease & Records Service, $60,000

This amount is a portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program. See project description above.

Land Classification and Mineral Examination, $1,040,000

Identification of land and development on needed preliminary plans for recreation sites and areas having historical or archaelogical value; prompt processing of state selections and agricultural land entries. A portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program—$650,000. See project description above.

Range Management, $230,000

To accelerate wildlife habitat management by increased studies, identification of public access needs and cooperation with state wildlife agencies. The remaining management effort would be directed toward mitigation of livestock adjustments and preventing resource deterioration.

Soil & Watershed Conservation, $2,050,000

The additional funds would provide needed investments to improve critical watershed lands; reduce erosion and silt discharge; raise water quality; and assist in mitigation of livestock adjustments affecting dependent livestock industry. One hundred thousand dollars would be used in Montana.

Fire Protection, $100,000

This amount would accelerate replacement of old and worn-out equipment and increase training of seasonal fire employees. Montana would receive $10,000 of this additional amount.

Construction of Recreation Facilities, $510,000

To provide needed expansion of facilities at heavily used campgrounds and provide needed facilities at undeveloped sites now receiving heavy use. One hundred thousand dollars of this amount to provide the facilities needed in Montana as described above.

Cadastral Survey, $50,000

This amount is a portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program. See project description above.

The above amounts include the costs of the necessary administrative support.

We appreciate your continuing interest in the Bureau's programs.

Sincerely yours,

EUGENE V. ZUMWALT,
Acting Director.

FOREST SERVICE

We were disappointed that the Administration did not give more consideration to the increasing demands on our forest and related resources. For example, less than two-thirds of the 10-year program for development of the National Forests, which was sent to Congress by President Kennedy in 1961, is being implemented. The development of these public resources is very important to the economy of Montana and the other Western Public Land States.

The economy of western Montana is particularly dependent on the full development of Federal land. The tendency of use is illustrated by the fact that the timber cut from the National Forests in my State in 1961 was about 480 million board feet, and in 1966 about 800 million board feet. This increase of about two-thirds in Montana in this brief 5-year period compares with about a 45 per cent increase in timber cut from the National Forests on a national basis.

The recreation visits in Montana during the last 5-year period increased from 4.1 million to 6.0 million visitor days. Wtihin this total the use of Wilderness Areas increased from 90,000 to 312,000 visitor days or 246%.

The foregoing statistics are cited to indicate the rapidly expanding demands on our forest resources and their reflection in the creation of new jobs in my State and the influx of tourist dollars in an expanding economy.

Senator Mansfield and I approve the decision of the Administration to give greater attention to the forest road needs in this budget and, in a minor way, to other items for recreation and to timber. We strongly support this budget and would hope that this committee might see fit to add additional funds which would bring the budget closer to the National Forest Development Program.

There is a growing awareness of the need to give more attention to combating poverty in our rural areas. In many cases this poverty coincides with National Forest and other forest areas. This is so because such areas have marginal agricultural lands and the National Forest areas selected were those cutover forests most in need of development. The full development and utilization of the forest resource represents a major attack on the rural poverty situation, which relatively, for the Nation as a whole, is twice as serious in rural America.

STATE AND PRIVATE COOPERATIVE PROGRAMS

The Cooperative Forestry Programs of the Forest Service are not only of importance in Montana but nationally. These support cooperation with the State Foresters in forest fire protection, forest management and processing, and tree planting activities. The appropriation requested for cooperative fire control is $12,834,000. The National Association of State Foresters has requested that this be increased by approximately $3 million to $15,811,000. In view of the high forest fire losses in my State and throughout the Nation, we urge that this item be increased. The States can effectively use this increase to help reduce serious forest fire losses if it is appropriated.

FOREST PRODUCTS UTILIZATION RESEARCH

A small forest products utilization research unit is working in Missoula in cooperation with the University of Montana. This project is responsible for research aimed at improving the efficiency of processes of converting Rocky Mountain softwood timber into lumber, plywood and other panel products, laminated products, and the like. It is the only Forest Service project having responsibility for wood processing research in the western part of the country.

Many important problems must be solved if the western forest industries are to assume their proper place in the economy of Montana and of the Rocky Mountain area generally. Current emphasis is on developing a system of automating and speeding up the complex, expensive, and time-consuming process of drying lumber. The success of such a program, and later the development of other similar efficient processing systems for timber, will be an important factor in the technical advance of the forest products industries in the area and in making them competitive in the national scene. The project needs to be greatly strengthened in the future.

FOREST ENGINEERING RESEARCH

The engineering research project at Bozeman, Montana, is conducting studies in cooperation with Montana State University to improve the efficiency and performance of forestry operations particularly in the harvesting and transportation of forest product raw materials. Pioneer work in development of wood chip transportation by water pipelines, already well advanced, is receiving international interest. This development is expected to lead to continuous flow, low cost delivery of wood in chip form to large industrial complexes and the utilization of large volumes of lower valued timber which cannot justify high exploitation costs. Other studies underway to reduce road construction costs and to improve the efficiency of logging in steep country are component parts of total systems needed to develop rural industries in the Rocky Mountain area. Excellent progress has been made at this new project and goals of savings through cost reductions of many millions of dollars per year are in sight.

FOREST FIRE AND RECREATION RESEARCH

One of the most important Forest Service research activities at Missoula is Project Fire Scan, an exciting application of modern science to better forest fire reconnaissance. This project has developed an airborne electronic system which uses heat-sensing infra-red scanners to map fire perimeters and to provide other essential fire information rapidly and accurately. This new system can "see" fire details at night and through dense smoke when visual methods fail. The mapping phase of this system is already operational and in 1966 a Forest Service aircraft equipped with an infra-red scanner was used with great effectiveness on more than 30 large fires.

However, a second and more difficult phase is to build a similar capability to detect and pinpoint forest fires while they are still very small. Research has already determined that this can be done. The system would consist of a very sensitive scanner, which would report the fire to a control point, where a readout unit would display the information for immediate use. Forest Service scientists are now ready to move into the big and complex job of developing and testing such a complete electronic system. They have told me that a single high-flying aircraft will be able to patrol more than 4,000 square miles in an hour.

We urge that this important and rewarding research be properly funded. An increase of $225,000 would permit the Forest Service to move ahead with fire detection system development.

Last fall I had the pleasure of accompanying the Vice President on a visit to the Northern Fire Laboratory and we were privileged to see its excellent program and competent staff. Just recently the Forest Service moved another group of scientists into a new companion laboratory on the University of Montana campus where fine cooperative relations prevail.

WILDERNESS RESEARCH

The 1964 Wilderness Act broadened the responsibilities of wild-land management. Today Man and his horses are visiting the wilderness areas in increasing numbers. Man's fire control and management measures on adjacent lands are having a pronounced impact on these wilderness lands.

Research in wilderness management includes the following:

1) Fire control
2) Insect and disease control
3) Plant and animal ecology studies
4) Depth studies on wilderness visitors and their use of the wilderness areas with attention to:
   (a) Wilderness maintenance
   (b) Trail sanitation facilities compatible with wilderness
   (c) Enhancing wilderness enjoyment by visitors

One of the most critical problems in the entire field of forest recreation is the need for a sound understanding of wilderness ecology to help guide wilderness management and use. A competent research program at the $300,000 level is needed.

The 7½ million acres of National Forest Wilderness and Primitive Areas and 3 million acres of National Parks in Montana and adjacent parts of Idaho and Wyoming pose a unique and difficult challenge to the task of managing these areas to retain or restore their primeval character.

Vast forest fires, a major force in influencing plant and animal environments, have been sharply reduced in the past 40 years. Elk, once an edge-of-the plains animal, is now a major denizen in several wilderness areas. Insect pests introduced by man, such as the larch casebearer are defoliating vast stands of western larch and white pine blister rust, an introduced disease, is wiping out large and small stands of white pine, limber pine and white bark pine. And, man himself, and his animals are often deteriorating forces. Furthermore, wilderness—its flora and fauna—is not static and unguided changes will in some instances impair the wilderness values.

Research workers from several scientific disciplines have a variety of tasks which call for coordinated effort. Wilderness plants and animals change constantly due to the natural and man-caused processes, the ecological reactions. What are these changes and how may they be influenced?

How has man changed plant and animal succession by his control of fires? We need to know, too, how to effectively influence people so they do not destroy the very thing they seek. How can managers obtain better dispersal of visitors? What are the maximum levels of use in which wilderness values can be maintained? Also, what are the effects of wildlife on wilderness plant communities? What techniques can be used to bring about a balance between wildlife and their habitat? In summary, research is needed on: (1) determination of the ways in which principal plant and animal types interact (ecology), (2) manipulation of plant cover compatible with the wilderness concept, (3) methods to minimize the impacts of human use, and (4) techniques for maintaining a proper balance of wildlife with the environment.

The results of this research will have application throughout all of the Western States and study areas would include several of the States. The scientists would be located in Montana—the heart of several wilderness areas—and in close association with other Federal and University scientists who are conducting research in related ecological and resource problems.

Very little research has been done in this field. Wilderness use is increasing at a rate twice as fast as all other National Forest uses, and many critical and growing problems must be answered in the next few years.

The propossed recreation research budget increase of $75,000 for wilderness research at the Missoula, Montana, laboratory is far short of the $300,000 needed to pursue essential research. I ask that the attached materials, which will elaborate in detail this program, be inserted at this point in my statement.

We urge the Committee to give every favorable consideration to this request and further ask that $300,000 be appropriated for this continuing research.

INFORMATION OBTAINED FROM FOREST SERVICE

The following information was requested and received from the office of Edward P. Cliff, Chief, Forest Service, Department of Agriculture.

U.S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
Washington, D.C., February 16, 1967.

Hon. LEE METCALF,
U.S. Senate.

DEAR SENATOR METCALF: Chief Cliff has asked me to reply to your questions concerning the proposed wilderness program at Missoula, Montana. We appreciate your expression of interest and will answer your questions in the order they are asked.

1. *Question:* How much of the proposed recreation research budget increase is for wilderness research at Missoula?

Answer: Approximately $75,000.

2. *Question:* How would you spend that amount, if appropriated?

Answer: We would start some studies of the impact of visitors on the wilderness environment. This would require us to determine where how many people go—where they concentrate. This would lead to an understanding of the numbers of visitors that might be accommodated without destroying the wilderness environment. We would also make a small start on ecology studies, that is, studies of plant community development, recreation, and change.

3. *Question:* How much is needed to conduct this program of research efficiently and in a reasonable length of time?

Answer: $300,000 would be the most effective level. Very little research has been done in this field. Wilderness use, though low in total amount, is increasing at a rate twice as fast as all other National Forest uses, and many critical and growing problems must be answered in the next few years.

4. *Please elaborate.*

First of all, the 1964 Wilderness Act broadened the responsibilities of the wild-land manager. It focused attention on wilderness so there has been a noticeable increase in use. The Act describes wilderness as "an area where the earth and its community of life are untrammeled by man." Man and his horses, however, are visiting the wilderness, and man's fire control and management measures on adjacent lands have pronounced impacts on wilderness lands. Wilderness management is confronted with several difficult problems which research must answer.

These problems deal with the following:

Fire control and the possible use of prescribed fire as a tool to create conditions favorable to maintaining a wilderness environment.

The place for insect and disease control.

Studies of plant and animal ecology to determine their requirements and interrelationships, and to determine how to achieve an acceptable balancé between wildlife numbers and the wilderness environment.

And studies in depth related to wilderness visitors and their use of the wilderness in order to: (1) maintain the wilderness, (2) develop trail, sanitary, and other needed facilities compatible with wilderness, and (3) enhance the visitor's enjoyment of wilderness.

Sincerely yours,

GEORGE M. JEMISON,
Deputy Chief.

COMMENT OF DR. ARNOLD W. BOLLE, DEAN, SCHOOL OF FORESTRY, UNIVERSITY OF MONTANA

Dr. Arnold W. Bolle, Dean, School of Forestry, University of Montana, Missoula, Montana, offered the following comments regarding the proposed Research Center:

"We in the University are very anxious to have this research program started and to have it located here. Management of wilderness areas has been a very haphazard thing up to this point and we find that we have no basis for the management of these areas, to provide the type of recreation and other use which was intended. We know nothing about the ecology of these areas or what can be expected from our present management methods. Game habitat is disappearing in many of the areas as fire protection prevents the normal succession of burned over shrubby areas. Fire and insect protection is not based on wilderness use but on the general protection afforded all types of forest lands. But, most importantly, there is no basic information on which to develop systems of use by the public. At the present, the trail systems follow old routes which were constructed primarily to get people in and out. They concentrate in certain areas and there are already indications of overuse in some of these areas. Meanwhile, other areas, extensive areas, are getting little or no use.

"We believe Missoula is a natural selection to center this research because of the fact that we are in the center of millions of acres of wilderness area on the national forests, in addition to areas in Yellowstone and Glacier National Parks which are scheduled for inclusion in the wilderness system. We have capable people here and centering the research in this area would help us build a top staff of scientists who would not only develop a sound basis for wilderness management but would give us the best possible staff for the training of students.

"I have some idea of the problems in connection with asking for an increase in the budget at this time, but this is not a major increase and we are certainly going to need this knowledge in the near future. By getting started with it at this time, we'll be better prepared when the great crowds start hitting us."

CORRESPONDENCE

The following communications from the Western Montana Fish and Game Association, Montana State Planning Board, Montana Wildlife Association, Doris Milner, J. Nevin Thompson, D.D.S., John M. Dietrich, will provide the Committee with a representative sample of our mail urging support for this research program.

WESTERN MONTANA FISH AND GAME ASSOCIATION,
Missoula, Mont., February 19, 1967.

SENATOR LEE METCALF,
U.S. Senate,
Washington, D.C.

DEAR SENATOR METCALF: The Western Montana Fish and Game Association wishes to recommend that the Wilderness Research Project of the Intermountain Forest and Range Experiment station of the United States Forest Service be located at the University of Montana, Missoula, and that annual funding of $300,000 be granted.

We will appreciate any assistance you may be able to give in the matter.

Sincerely,

J. GEORGE HUMMEL,
Acting President.

MONTANA STATE PLANNING BOARD,
Helena, Mont., January 18, 1967.

Senator MIKE MANSFIELD,
Senator LEE METCALF,
Representative JAMES BATTIN,
Representative ARNOLD OLSEN.

GENTLEMEN: In February 1966 several letters were exchanged between your offices and this office relative to creation of a Wilderness Research Center. We have just received word from the University of Montana that the U.S. Forest Service is requesting that its appropriation for research include $300,000 to establish a Wilderness Research Program at the University of Montana in Missoula. If this can be brought about, it will center wilderness research for the United States at Missoula.

Because of the importance to Montana to secure this, we would greatly appreciate your efforts and support to get this facility for Montana.

Best personal regards.

Sincerely,

SAMUEL J. CHAPMAN,
Director.

MONTANA WILDLIFE FEDERATION
Missoula, Mont., January 18, 1967.

Hon. LEE METCALF,
U.S. Senate,
Washington, D.C.

DEAR LEE: The Montana Wildlife Federation believes that the proposed research program by the Intermountain Forest and Range Experiment Station at Missoula is necessary to determine what management is possible and desirable to maintain ecological balance in a wilderness environment when subjected to extensive visitation by man.

Missoula is the ideal location for such a program because it is completely surrounded and within short driving distances of five designated wilderness areas, four primitive areas, two National Parks and thousands of acres of unclassified lands which still maintain their wilderness qualities.

The wildlife habitat is presently affected by fire control and grazing of pack animals. Erosion caused by trails and the impaction of areas used for camps are further evidence of man's invasion. We feel that we can best arrive at programs which will preserve wilderness qualities through research.

We hope you will support the Department of Agriculture's request for an additional $300,000 to finance this program.

Sincerely,

DONALD ALDRICH,
President, Montana Wildlife Federation.

HAMILTON, MONT., *January 25, 1967.*

Senator MIKE MANSFIELD,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MANSFIELD: At the annual meeting of the Montana Wilderness Association held in Great Falls this month Dr. Arnold Bolle from the University School of Forestry spoke of the possibility that a research center for Wilderness Management might be located in Missoula. This is an excellent idea and we hope that you will consider the proposal and give it your support so that it may soon become a reality.

We all recognize that the establishment of Wilderness areas carries with it inherent problems of management. A center to handle these special problems staffed with people knowledgeable of and sympathetic with wilderness concepts is much to be desired. The Selway controversy which has taken up the time and effort of many people might never have become a big issue at all had there been some body of informed persons to consider this at the beginning.

Missoula would seem to be a natural location for such a center of inquiry since an excellent School of Forestry and a Forest Service regional headquarters are here, and, in addition, two great Wilderness Areas are close by.

We will certainly appreciate your attentions and support in this matter.

Warm personal regards.

Sincerely,

DORIS MILNER.

WOLF POINT, MONT.,
January 23, 1967.

DEAR SIR: Recently I attended the annual Meeting of the Montana Wilderness Association, at which was discussed the possibility of establishing a Wilderness Research Center in Missoula.

I fully endorse such a proposal and recommend that it be looked on favorably by Congress. If we are to fully realize the vast potential of our Wilderness Areas, both recreational and scientific, proper studies must be conducted by qualified personnel.

I respectfully request your help in this matter.

Sincerely,

J. NEVIN THOMPSON, D.D.S.

CROWLEY, KILBOURNE, HAUGHEY, HANSON & GALLAGHER,
Billings, Mont., January 27, 1967.

Re: Wilderness Research Program.

Hon. LEE METCALF,
U.S. Senate, Senate Office Building,
Washington, D.C.

DEAR LEE: Thanks very much for your prompt reply to my letter of January 17 concerning the above matter.

This past Monday and Tuesday the Board of Trustees of the University of Montana Endowment Foundation met in Missoula, and this matter was discussed. No doubt you have been "memorialized" by each of the other trustees and officers.

In any event, it does appear as though this has some real possibilities, and I will be interested to hear of the outcome.

Again, thanks for your courteous reply.

Cordially yours,

JOHN M. DIETRICH, Jr.

NATIONAL PARK SERVICE

Senator Mansfield and I were very pleased with the budget request of the National Park Service. We note that $10,982,900 is included for Glacier and Yellowstone National Parks. Of this amount, $2,150,400 is for Glacier, an increase of $223,700 over fiscal 1967 and $8,832,500 is the requested appropriation for Yellowstone for fiscal 1968, an increase of $2,230,550.

I point out that $2,800,400 of the Yellowstone Park request is for Roads and Trail Construction and Improvement. This item is very necessary. As you know, in 1972 the National Park Service will observe its 100th anniversary. It will also mark the centennial of Yellowstone National Park, being the first acquisition of the National Park Service. During that year we can expect a heavier tourist influx. It is good planning on the part of the Park Service to look to the future and not be caught short with a crash program as we approach 1972.

AIRPORT FUNDS—EAST GLACIER

Nationwide we see a steady increase in air travel for business as well as recreation. The value of an airport to serve tourists and those with business at Glacier National Park is no longer debatable. The question now is when?

We all know there will be an airport at East Glacier. The Federal Aviation Agency has included the site in its National Airport Plan. The National Park Service has made preliminary studies of the needs and requirements. The Montana Aeronautics Commission in cooperation with Federal and local interests has studied the problem. In short, the time for study has passed. Action is now needed. The action needed is one that will benefit all parts of the nation and is in line with goals of maximum effort at minimum expenditure of dollars.

Senator Mansfield and I have submitted to you, Mr. Chairman, a letter dated 7 March 1967, asking that $45,000 be added to the Department of Interior budget in order to complete essential land acquisition and planning. With the addition of these funds to the construction budget of Glacier National Park, action can be taken that will not delay the final construction of this needed transportation facility.

We realize that the passage of Public Law 89–763 came so late in the last session that it was not possible for the Administration to include this item in the budget. Thus, we feel that all concerned want to take advantage of the savings that will result by initiating this action now while the land is available and before the passage of time results in the inevitable increase in costs.

With the site acquisition funds here requested, we can all be sure that citizens from throughout the land and from all parts of the world will be able to visit this great natural resource via air travel.

ATMOSPHERIC WATER RESEARCH

The Atmospheric Water Research Program of the Department of the Interior is one part of the field of weather modification that is receiving increased attention and expanding financial support by the Congress. The engineering and scientific research effort initiated in fiscal year 1962 with broad Congressional support seeks to determine if by weather modification we can increase the flow into reservoirs administered by the Bureau of Reclamation. The program began with an appropriation of $100,000 to the Bureau in 1962. Congress appropriated $3,750,000 for these research activities this year, when the Weather Research Center at Montana State University at Bozeman received $13,000.

President Johnson recently said of weather modification that "substantial progress has been made . . . but the pace has been slow. To advance the rate of progress, an effort of larger scope and direction is needed both in direct basic research and in developing means to put the knowledge to work." In this same regard, Secretary of the Interior Udall commented recently, "The strength of our Nation in a competitive world will in large part be determined by our ability to manage our water resources including precipitation. This step in water management is a large one . . . the Nation has shown through other scientific programs that it is willing to pay the price to cross new frontiers." Senator Mansfield and I agree that this scientific and engineering research program is indeed a pioneering effort to cross this frontier. When we cross it the material benefits can exceed the investment a thousand fold.

WATER RESOURCE RESEARCH CENTER, MONTANA STATE UNIVERSITY

Montana began moving into weather modification research in 1964 with the formation of the Water Resource Research Center at MSU. Dr. Arlin Super, a meteorologist was added to the faculty in July 1965. He was convinced that the Bozeman area was a fine natural laboratory for weather modification reresearch and he began the development of a research program. Dr. Vincent Schaeffer of the State University of New York, one of the pioneers in cloud seeding, was brought into the Center as a consultant. Dr. Schaeffer confirmed Super's view that the Bozeman area has outstanding characteristics for weather modification research.

In 1966 the Bureau of Reclamation awarded the Center a $24,000 contract to develop a full scale research program to begin in fiscal year 1967. During this initial year of the program, the appropriation was $13,000. Next year the need is for $100,000. The budget includes $75,000 for this item. We will ask that this part of the appropriation be increased by $25,000.

The major emphasis of the research at the Bozeman Center has to do with the downwind effects of cloud seeding. This effort will not duplicate weather modification research in other areas. Some of the instruments required to measure precipitation and establish the natural pattern before cloud seeding commences are already in place. The study will also include an investigation of the effects of weather modification on precipitation patterns and amounts with a study of the effects on the ecology of the research area. This is the only program concerned with the ecological questions which are increasing in the scientific community. Research on the downwind effects of weather modification should provide answers to questions asked when a cloud seeding program comes into an area.

ANTICIPATED PILOT PROJECTS

Montana is one of 17 research and experimental centers in 11 states. The Bureau of Reclamation plans to have 50 such programs operating in the near future at an annual cost averaging $350,000 per project. These 50 "Experimental Projects" cover areas of 100 to 1,000 square miles, last from 3 to 6 years and each cost $1,660,000 per year on the average. These pilot projects will consider the problems of scientific regions.

Montana is an excellent location for such a Pilot Project being in the middle of the largest mountain range area in the United States. By 1980 this area, the Upper Missouri watershed, is expected to have a water supply deficiency and will require a high annual development cost of $4.00 per acre foot or more. Cloud seeding may well be a partial answer to this problem. We are of the opinion that the research program envisioned at the Bozeman Center would be productive with an investment of $175,000 per year and most effective at some $325,000 per year.

Montana State University Weather Resource Research Center is providing concrete evidence of its commitment to research in the area of weather modification by an orderly buildup of staff. In addition to Dr. Super they have added three other scientists to the faculty and are contemplating the addition of another next year.

LETTER OF ROY E. HUFFMAN, VICE PRESIDENT FOR RESEARCH, MONTANA STATE UNIVERSITY

At this point I would like inserted in the record a letter from Roy E. Huffman, Vice President for Research at Montana State University, supporting this request.

MONTANA STATE UNIVERSITY,
Bozeman, Mont., March 3, 1967.

Hon. LEE METCALF,
Senate Office Building,
Washington, D.C.

DEAR SENATOR METCALF: This is to advise you that we have signed a contract with the Bureau of Reclamation for a program of weather modification research during the 1967, 1968 and 1969 fiscal years. Details of this research program were outlined for you in my letter of February 16, 1967.

The contract peovides for funding as follows:

Fiscal year 1967	$13,000
Fiscal year 1968	100,000
Fiscal year 1969	175,000

The contract contains a contingency clause which makes the funding for FY 1968 and FY 1969 dependent upon appropriations for those years.

We believe this research will produce information of great importance to Montana and to the Nation.

Sincerely yours,

ROY E. HUFFMAN,
Vice President for Research.

Senator Mansfield and I feel there is ample justification for the request for $100,000 for fiscal year 1968. We hope the Committee will agree.

GROUND WATER RESEARCH AT MONTANA TECH

The proposed budget increase of $790,000 for cooperative water programs in fiscal year 1968 are justified. Last fiscal year the appropriation for cooperative water research programs in Montana was $127,000. With approval of the budget request this amount will be increased by $5,500 for fiscal 1968.

The fiscal 1968 requests for the four cooperative programs in Montana include:

Montana College of Mineral Science and Technology, $49,000; $8,000 increase.

Montana Fish and Game Commission, 20,000; 2,500 decrease.

Montana State Water Conservation Commission, 42,000; same as fiscal year 1967.

Montana State University, Bozeman, Mont., 21,500; same as fiscal year 1967.

The cooperative program at Montana College of Mineral Science and Technology is requesting an increase of $8,000 while the water program of the Montana Fish and Game Commission would be cut $2,500 from the fiscal 1967 appropriation. This means that the total requested increase for Montana in fiscal 1968 is $5,500.

LETTER OF DR. EDWIN G. KOCH, PRESIDENT, MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY

A letter from Dr. Edwin G. Koch, President of Montana College of Mineral Science and Technology, which I ask to be inserted at this point in the record, will further clarify this request.

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY,
Butte, Mont., February 21, 1967.

Mr. ARNOLD OLSEN,
House of Representatives,
Washington, D.C.

DEAR ARNOLD: Just today I have received a letter from Dr. Charles W. Lane, District Chief of the Geological Survey stationed at Helena, Montana, in which he relates that the estimation of state offerings for cooperative water programs for the fiscal year 1968 are considerably above the matching funds contemplated by the President's budget. Of course, these increased state offerings for fiscal 1968 contain a considerable amount of expansion over previous cooperative programs. My concern in this regard is that our rather limited state program in cooperation with the U.S.G.S. would be jeopardized.

For example, our Montana Bureau of Mines and Geology located here at Montana Tech has been involved with the U.S.G.S. in a 50–50 cooperative project on ground water research in Montana for the past several years. It involves very few people and very little money but is essential to our continued progress in the development of the ground water resources of Montana. We try to maintain about three ground water projects in the state each year. For the coming biennium we have budgeted $49,500 for the first year and $51,500 for the second year. The U.S.G.S. would contribute like amounts to maintain this program for the next two years. I should not like to see this minimum ground water research program in Montana curtailed in favor of expanded state programs in other states.

I understand that the subcommittee on the Department of Interior and related agencies of the House Committee on Appropriations is to begin its hearings on Interior agencies' budget requests on March 2. Anything which you or other members of the Montana Delegation may be able to do in our behalf will be greatly appreciated.

Sincerely,

EDWIN G. KOCH, *President.*

INDIAN SANITATION—P.L. 86–121

The responsibility for the health care of American Indians and Alaska Natives was transferred to the U.S. Public Health Service from the Bureau of Indian Affairs on July 1, 1955, by authority of Public Law 568, 83rd Congress. The Surgeon General established the Division of Indian Health within the Bureau of Medical Services to administer the program. Since enactment of the original transfer legislation, Congress amended the Act by Public Law 86–121. This law authorized the Surgeon General to provide environmental sanitation facilities for Indian homes, communities and lands.

The Public Health Service has endeavored to carry out its responsibilities in this program area in a way which includes maximum tribal participation. As with other activities of the Indian Health Program, the goal is to raise the health of the American Indian and Alaska Native to the highest possible level.

SANITATION FACILITIES CONSTRUCTION ACTIVITIES

The lack of safe water and the inadequacy or absence of human waste and refuse disposal facilities are responsible for the spread of microorganisms causing diarrheas and dysenteries which plague the Indian people and contribute to the rapid and widespread movement of communicable diseases. Real advancement in environmental health services began only in 1959 with the passage of Public Law 86–121, the Sanitation Facilities Construction Act. In addition to construction of needed sanitary facilities for Indians and the training of people to use and maintain them, the environmental health activities of the Division include motivating and educating Indians to desire a better environment. Each construction project is undertaken cooperatively between the Public Health Service and the respective tribe or group in all facets of planning and implementation. We believe many Indians have been motivated by sanitation facilities construction projects to make improvements to their homes at their own expense, particularly housing additions for bathrooms. In terms of labor, money or materials, the Indians themselves have contributed about 30 per cent of project costs.

Since 1961 the Federal government has expended a total of some $36 million in construction of Indian sanitation facilities. These facilities are now benefiting 36,600 Indian families. It is estimated that this represents a completion of about 38% of the needed facilities. We still need to improve sanitation facilities for an estimated 69,000 Indian families. Bear in mind this 69,000 figure represents only the number of identified needs. Undoubtedly, there are many needy families who have been overlooked in the surveys. We would mention, however, that in the near future this appropriation should be brought up to the $16,000,000 level in order that this project can be completed in the minimal time 5–7 years.

Since 1960 the Division of Indian Health has completed a total of 42 sanitation facility projects for Indians in Montana. A total of 3,371 homes have been thus served.

The appropriation for Sanitation facilities for Montana Indians under P.L. 86–121 for fiscal 1968 totals $775,000 to be used as follows:

Flathead Reservation, Camas-Hot Springs project in Sanders County	$150, 000
Fort Peck Reservation, Brockton-Riverside project in Roosevelt County	92, 000
Frazier Wyota project in Valley County	125, 000
Crow Reservation, Crow Agency phase No. 2 in Big Horn County	220, 000
Blackfeet Reservation, Seville-Badger-Fisher project Pondera-Glacier counties	188, 000

With the exception of the Crow Agency project, which is a sewer project, the others are all for individual water and waste facilities.

Public Health Service—Division of Indian Health

HOSPITAL HEALTH SERVICES

The Division of Indian Health will have in operation in Fiscal Year 1968, 51 hospitals and outpatient clinics with an employee/patient ratio slightly higher than in fiscal year 1967. A practical nurse training program associated with Public Health Service Indian hospitals; maintenance of all Indian health facilities consisting of hospitals, health centers, stations, school clinics and staff quarters; increased training of professional and subprofessional personnel and consultant services.

Admissions of Indians and Alaska Natives to hospitals are now 92,000 per year compared with 50,000 in 1955 when the health program was transferred to the Public Health Service. Outpatient visits have more than doubled from 550,000 to 1,300,000 and dental services provided have almost tripled from 220,000 to 571,000 per year.

There are at present 385,000 Indians and Alaska Natives served by the Division of Indian Health. The 1968 allowance by the Bureau of the Budget for this activity is $46,770,000.

INDIAN HEALTH SERVICE IN MONTANA

In Montana the Public Health Department, Division of Indian Health, is serving some 19,950 Indian people. The total number of Public Health Service hospitals and outpatient clinics in operation in the state is 32, and dental services provided during the last year were 26,689. Public Health Service hospital admissions for fiscal year 1966 in Montana were 3,332. Outpatient visits to Public Health Service hospital facilities totaled 46,904; Indian Health Centers had 41,416 visits and Public Health Service hospital satellite field clinics in Montana had a total of 16,652 outpatient visits.

Field Health Services

The fiscal year 1968 Bureau of the Budget allowance of $18,951,000 provides for 273 new field health positions which are critically needed in the program to permit an increased attack on health problems through a preventive medical care program.

The need for this increased request of $18,951,000 for field health activities is evidenced by the fact that infant deaths among Indians are 1.4 times higher than all races in the U.S. Deaths from tuberculosis and gastroenteritis are 5 times higher and incidents of tuberculosis are 7 times higher than for all races in the U.S.

CONTRACT MEDICAL SERVICES

The fiscal 1968 budget estimates an expenditure of $13,906,000 for contract medical services. This figure in our considered judgment is too low. It is some $200,000 short of the 1967 appropriation and realistically this service cost has not decreased but, in fact, increased 20% to 25% as a result of overall medical cost increases and Medicare.

I was informed by the Public Health Service, Division of Indian Affairs, that this decrease came about because it was felt by some that there would be a decrease in Indian Contract Service, since the implementation of Titles 18 and 19 of the Medicare Act, which provides medical services for those 65 and over and indigent peoples respectively. This expected decrease has to date not occurred and is not likely to. I must point out that to date 10 states have not implemented Title 19 and in addition 43% of the Indian population reside in these 10 states. Further, it must be remembered that the Indian is traditionally reluctant in accepting new programs. We know, too, that the great travel distances and or the lack of transportation and, in many cases, the immediacy of medical needs all contribute to the fact that the Indian has not taken full advantage of Titles 18 and 19 of the Medicare Act.

In Montana, contract medical services in fiscal year 1966 totaled $1,362,351. This amount was increased by $154,849 totaling $1,517,200 in 1967. Now we see that the budget estimates for 1968 for these services in Montana have been decreased by $1,200. As we have already noted this amount is far short of meeting our present requirements to say nothing of the consideration for normal growth and service cost increases.

In brief, as a result of the significant increase in medical service costs and the apparent fact that some ten states have not implemented Title 19 (medical aid for indigent families) it would be necessary to increase the budget estimates of $13.906.000 for 1968 by a minimum of $1.2 million in order to preclude a severe reduction in the provision for contract medical service for fiscal 1968.

Senator Mansfield and I vigorously support this requested increase.

INDIAN LAW AND ORDER

When I appeared before this Committee in 1966, I outlined Senator Mansfield's and my position that the Federal government has the responsibility and should pay for Law and Order on our Indian reservations. While this Committee agreed, the other body did not.

We are again this year requesting an increase in appropriation for the Bureau of Indian Affairs to take part in joint Federal-tribal payment for law and order on the reservations.

We are of the opinion that the provision of law and order on Indian reservations is historically the responsibility of the Federal government. Originally this was our policy. Then some 18 or 19 years ago, because of post-war appropriations cutbacks the tribes were asked to pick up part of the cost on a temporary basis. We feel that it is time to re-examine an 18-year-old temporary policy.

It is well known that on some reservations the entire cost of law and order is paid for by the Federal government. On many others the Federal government pays practically all of this cost. At others, a great portion of the cost comes from tribal funds.

For example, at Fort Berthold and Fort Totten in North Dakota and at Sisseton Reservation in South Dakota, the BIA bears the entire cost of maintaining law and order. At Pierre Agency in South Dakota, which administers Brule and Crow Creek Reservations, the Bureau provides $92,000 while the tribe contributes the court income of some $5,000. The Bureau pays $105,000 for law and order at Rosebud Reservation in South Dakota and the tribe contributes court income of $3,000. At Standing Rock Reservation, the Bureau spends $124,000 annually and the tribal court income amounts to $9,700. In Idaho the North Idaho Agency receives $625,000 in BIA funds for law and order and the tribe contributes some $5,500 of court income.

We do not wish to imply that the tribal councils who are willing and able to continue the joint Federal-tribal participation financing program should be discouraged from doing so. But we do point out that the Indian Tribal Councils of Montana could well use their limited funds for more productive and dynamic programs.

At present the only reservation in Montana receiving total support from BIA for law and order is at Rocky Boy, one of the most blighted pockets of poverty in the nation. The tribal contributions at the other Montana reservations total $207,000 a year as follows:

Blackfeet	$45, 000
Crow	62, 000
Flathead	30, 000
Fort Belknap	2, 000
Fort Peck	35, 000
Northern Cheyenne	33, 000

Another item of concern which has come to our attention and which has a place in the whole scheme of Indian law and order is the need of new incarceration facilities at two Montana reservations. The Blackfeet reservation needs a jail to accommodate 30 inmates and at Crow reservation the need is for a facility to handle 40. In addition, each of these facilities would need quarters for a jailer, a court room and a two-car garage.

The Bureau of Indian Affairs estimates that the total construction of these structures at $550,000 which is not included in the budget estimates.

Senator Mansfield and I ask that the BIA appropriation be increased by $697,000 to provide for the cost of Indian law and order at six Montana reservations and to provide funds for construction of badly needed jails at Blackfeet and Crow reservations.

TELEGRAM OF EDISON REAL BIRD, CHAIRMAN, CROW TRIBUNAL COUNCIL

I ask that the following telegram from Edison Real Bird, Chairman, Crow Tribal Council, in behalf of increased appropriations to support this joint Federal-tribal payment for law and order on our Indian reservations.

HARDIN, MONT., *March 13, 1967.*

Hon. LEE METCALF,
U.S. Senate,
Washington, D.C.

MY DEAR SENATOR METCALF: During our discussion wtih Messrs. Reinemer and Huber in your office Friday, March 10, we talked about the cost of law and order on the reservation, as we now pay at least $62,360 annual out of our budget for our law and order activities this we are unable to continue. We feel that if this money could be appropriated for law and order on the Crow Reservation, then this money could go for other much needed development projects that would be beneficial to the Crow people for their social and economic development. I would also like by this letter to request that you place a line item in the Bureau of Indian Affairs appropriation for a new jail and facilities at Crow agency. The Crow tribe set aside $100,000 under resolution No. 62–12 passed and adopted February 2, 1962. We would propose that $100,000 be used in the appropriaiton act as part of the tribes contribution to getting a full law and order facility here at Crow agency.

EDISON REAL BIRD,
Chairman, Crow Tribal Council.

BLACKFOOT INDIAN BETTERMENT PROJECT

This Committee is aware that the budget for fiscal year 1968 did not include an appropriation for the continuation of rehabilitation and betterment work on the Blackfeet Irrigation District. Mr. C. P. Corke, Assistant Commissioner, Division of Economic Development, Bureau of Indian Affairs, has appeared before this Committee and testified that if this project is to be continued, an increase appropriation of $90,000 is required. He also stated that if this project is not continued the 12 present employees could hope for, at the most, from 2 to 6 months of work during the next 12 months. Normally, they are employed for the entire year. Senator Mansfield and I feel there is ample justification for the continuation of this project and ask that an additional $90,000 be included in the Interior appropriation. Of this amount, $75,000 would be expended for rehabilitation and construction of structures and $15,000 for canal extension.

I ask that the letter of Senator Mansfield to the Chairman of the Committee be included at this point in the record. (See page 787.)

MUSEUM OF THE PLAINS INDIAN

Another item we wish to bring to the attention of the Committee concerns the plight of the Plains Indian Museum at Browning, Montana. Only recently this museum was placed under the jurisdiction of the Indian Arts and Crafts Board. For many years the Museum of the Plains Indian has operated on a small and limited budget of some $24,000 per year.

In our letter to the Chairman of this Committee, Senator Mansfield and I detail the history and needs of the Museum. Our concern is that the budget requests for fiscal 1968 do not include any additional funds for the Museum, despite the fact that there has been no conservation work on the exhibits in this Museum's 26-year history.

We think it imperative that at least an additional appropriation of $86,000 be approved in order that the Museum can be renovated and the exhibits improved and added to.

LETTER OF SENATOR MUSKIE

I ask that the letter of Senator Muskie, attesting to the status of the Museum, be inserted in the record at this point followed by the joint letter from Senator Mansfield and me to the Chairman.

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
February 27, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Last year, during a visit to Montana, I had the opportunity to tour the Museum of the Plains Indians in Browning. I was quite impressed by the quality of the exhibits in the Museum, but was equally distressed by the apparent lack of funds for proper maintenance.

This Museum, it seems to me, is unique in that it is one of the few historical representations of an important part of American history. To allow the Museum and its excellent exhibits and artifacts to deteriorate would be a serious and irreparable mistake.

I have discussed this subject with Senators Mansfield and Metcalf and they have informed me that full use of facilities, maximum exposure of the collections and adequate maintenance could be achieved through minimal expenditure. Because they have detailed those sums to you in separate correspondence, I will not repeat the costs.

I would, however, like to be on record as in complete support of adequately maintaining and expanding this facility and its unique art works.

Thank you for your consideration.

Sincerely,

EDMUND S. MUSKIE,
U.S. Senator.

FISH & WILDLIFE SERVICE

When I testified in 1964 and in 1965, I called the Committee's attention to the need for a small addition to the funds for the 31 year-old cooperative wildlife research unit program. Again last year I appeared before this committee and explained in some detail the need for additional funds for Cooperative Wildlife Research and the disparity which exists between this program and Cooperative Fishery Research. The Senate Committee agreed with the position held then as now by Senator Mansfield and myself. The proposal was shelved in the conference committee with the directive that the Interior Department would be asked to report on the appropriation problem and to request equal funding for the Cooperative Wildlife and Fishery Research Units in fiscal 1968. This has not been done. I again appear before this Committee to ask that you will again respond favorably to our request and hoping that the persuasion of the Committee will be used in presenting this needed appropriation matter to the other body.

The Cooperative Wildlife Research program, which is administered through the Bureau of Sport Fisheries and Wildlife, Division of Wildlife Research is a widely respected program which was begun in 1935. There now are 18 units located at land grant universities and colleges. Each unit receives financial support from the state fish and wildlife agency, the land-grant university, the Bureau of Sport Fisheries and Wildlife, and the Wildlife Management Institute.

I will not attempt to detail the progress that has been made under the Unit program. Its history and its successes are well known. The problem that has developed, briefly stated is, that the state support has increased from the original minimum of $12,000 per unit to the present average of about $40,000 a year. This over-shadows the Federal Government's contribution, mainly the salary and travel expenses of the unit leader, a federal employee, which is about $15,000 per unit per year now.

In contrast, the parallel Cooperative Fishery Research Unit program, begun in 1961 and patterned after the highly successful wildlife units, is receiving $40,000 yearly in federal financial support for each of the 20 units.

Many of the fishery units are located at the same universities and colleges as the wildlife units, and this tremendous disparity in federal support is obvious. I might say parenthetically that the reason for this different level of support is lost upon the professional fish and wildlife community. This shortage of funds retards the graduate-level education and research mission of the unit program. Without assistance, the unit leader is forced to devote much of his time to routine administrative details.

Increased federal financial support for the wildlife units was recommended by the International Association of Game, Fish and Conservation Commissioners in annual meeting at Portland, Oregon, in 1965. Last year I asked that the resolution be included in the record of the hearings. The resolution concludes:

"Now, therefore, be it resolved that the International Association of Game, Fish, and Conservation Commissioners urges the U.S. Fish and Wildlife Service to include in its budget request adequate federal financing for the Wildlife Research Units, so as to provide staffing and operating funds equal to those of the Fishery Research Units."

Senator Mansfield and I are most desirous that positive action on this matter begin in fiscal 1968. We believe it is obvious that action here is long overdue. We suggest that the funding begin on a gradual basis.

The Department has cited four units where the workload is especially acute—in Arizona, Montana, Maine and Missouri. We propose that these four units be funded first raising the annual federal contribution for each to $40.000, the identical amount now being obtained by the Cooperative Fishery units.

U L Bend National Wildlife Refuge

Mr. Chairman, as you know, I am a member of the Migratory Bird Conservation Commission, which passes on proposals by the Chairman, the Secretary of the Interior, for additions to the waterfowl refuges within our system of national wildlife refuges. The other members of the Commission are the Secretaries of Agriculture and Commerce, Senator Hruska and Congressmen Karsten and Conte.

At our most recent meeting in February, we approved a significant addition to the waterfowl refuge system. It is the U L Bend Refuge in northeastern Montana. Using funds from the sale of duck stamps and the advance authorized by Congress under Public Law 87-383, we authorized purchase of some 12,000 acres of private land. Most of the rest of the 57,000-acre refuge was already in Federal ownership.

This area has a tremendous potential for development of high quality waterfowl production habitat. It is unique in that it is not an area which must be reclaimed or restored for waterfowl use. It can easily be converted from low quality range land to high quality waterfowl habitat which will make a significant addition to the Central Flyway.

The Bureau of Sport Fisheries and Wildlife plans to develop some 17,000 acres of marsh habitat. Another 11,000 acres will be improved and irrigated for production of supplementary food and cover. Water for the development will come from the Missouri River, Fort Peck Reservoir and by impoundment of natural runoff.

This refuge was authorized long after the budget was prepared.

Senator Mansfield and I propose that we begin the development of this important area in fiscal 1968. We propose the investment of $255,000 in the initial phase of development. Of this, $90,000 would be for topographic surveys, planning and design, $40,000 for an access road to the pumping station and $125,000 for patrol roads and trails, dikes and water controls for impoundments.

We hope the Committee will see fit to provide this initial investment in a development that will make a significant and historic contribution to the conservation of a great natural resource, migratory waterfowl.

NATIONAL FISH HATCHERY—BOZEMAN, MONT.

Mr. Chairman, I was pleased to receive your assurance that a letter jointly signed by Senator Mansfield and me, urging the increased appropriation of $230,000 to develop the National Fish Hatchery at Bozeman, will be included in the record of this hearing (see page 1324).

The specific objectives of this center will be to develop and demonstrate fish cultural methods, systems and facilities for producing quality fish. The facility will also function as an intermediary in applying research information to cold water fish husbandry methods and relating newly developed procedures to the fish culture industry. The fish culture development center is an interesting concept, one which has our wholehearted endorsement and we ask that this Committee endorse this program by providing the necessary money which will permit the application of this testing program.

TOPOGRAPHIC MAPPING FOR MONTANA

The Topographic Division of the U.S. Geological Survey is engaged in an extensive long-range program to provide general-purpose topographic maps of appropriate scale and accuracy for the entire country.

The program began in about 1882 when a general plan was adopted for the production of a standard series of topographic maps. A map series is a family of maps conforming generally to the same specifications or having some common characteristic such as scale. The plan of 1882 has been expanded to meet the needs of a growing nation, and today the National Topographic Program includes several series of topographic maps.

The majority of the mapping to be accomplished in Montana in fiscal year 1968 will be in areas that have never been mapped at either the 1:62,500 (1 inch= approximately 1 mile) or the more detailed 1:24,000 scale (1 inch=2,000 feet). About 34 per cent of Montana has mapping at these scales, 14 per cent at the 1:24,000 scale. Current programs include about 20 per cent of the State.

These maps are necessary for the effective knowledge and evaluation of the Nation's natural resources. Topographic maps are essential to many kinds of work, such as geologic and other mapping activities, development of major dams and reservoirs, communication and highway systems, and the study and application of flood control, soil conservation, and reforestation.

For the sportsman, the hunter or fisherman, topographic maps are a must. The topographic map tells him how many hills he has to climb and how high they are, what rivers he must cross, where there are fire clearings, or low wet marshes. Instead of walking "blind" into strange country, he can plan his hunting or fishing trips thoroughly beforehand.

For the period from July 1, 1967–July 1, 1968, the Geological Survey has proposed a budget of $24.5 million for topographic mapping programs. Approximately $1,374,000 of this amount will be used to advance topographic mapping in Montana.

Senator Mansfield and I are in complete agreement with the budget request of the Geological Survey. We hope the Committee will accept their request in order that we can continue this needed and useful project in Montana and elsewhere.

INCREASES REQUESTED BY SENATORS MANSFIELD AND METCALF

Mansfield-Metcalf requested increases for fiscal 1968

I. Bureau of Land Management:	
A. Soil and watershed conservation increase	$2,050,000
B. Range management increase	230,000
C. Construction and recreation increase	510,000
II. Forest Service:	
A. State and private cooperative programs increase	3,000,000
B. Forest fire and recreation research increase	225,000
C. Wilderness research increase	225,000
III. National Park Service:	
A. Construction and planning increase	45,000
IV. Water research:	
A. Atmospheric water research increase	25,000
B. Ground water research increase	5,500
V. Bureau of Indian Affairs:	
A. Indian health increase	1,200,000
B. Indian law-and-order increase	697,000
C. Museum of Plains Indian increase	86,000
D. Blackfeet betterment increase	90,000
VI. Bureau of Reclamation: Approve budget requests	----------
VII. Fish and Wildlife Service:	
A. Cooperative wildlife research units increase approximately $100,000 to fund 4 units at $40,000 level	----------
B. U L Bend increase	225,000
C. Bozeman National Fish Hatchery increase	230,000
VIII. Geological Survey: Approve budget requests	----------

SUBMISSION OF STATEMENTS AND LETTERS

Chairman HAYDEN. A number of Senators who are unable to be here, as they had planned, have statements which they asked to have printed. These statements as well as a number of letters sent to the committee, will be included at this point in the records.

(The statements and letters follow:)

STATEMENT OF SENATORS ANDERSON AND MONTOYA

NAVAJO IRRIGATION PROJECT

Mr. Chairman, we are pleased to have this opportunity to submit a statement to your Committee in support of funds for various activities under the Bureau of Indian Affairs.

We are concerned that work on the Navajo Irrigation Project continues to lag, and is nearly three years behind schedule, due to inadequate funds for construction purposes.

We support the request for $5.3 million new funds for the project for fiscal year 1968, as a minimum. However, we feel that this amount is entirely unrealistic and should be increased. At this rate of appropriation construction will lag even further and it will be many years more than was anticipated before the Indians will realize any benefit from the project.

This Committee needs no reminder of the necessity for improvement of the economic conditions on the Navajo Reservation. The Chairman and members of the Committee in years past have tried to be helpful in solving some of the Navajo problems, and for this help we are grateful.

Our investment is a substantial one—in time, in money and in resources. We hope these funds can be provided so this project can begin working for the economy of this area in a positive sense.

ALBUQUERQUE INDIAN SCHOOL

This Committee is well aware of the long, hard struggle that we have had in obtaining approval of the proposed new Indian School in Albuquerque. You will recall that a number of the buildings at the present site were condemned by engineers several years ago. It was recommended that some of these buildings be abandoned beginning last year. The situation there is critical and we have delayed far too long now in replacing this plant. Your Committee has been most helpful with this problem, and last year you provided $700,000 planning money. The planning work is done, drawings completed, and the BIA has requested $9,000,000 construction funds for fiscal year 1968. If these funds are approved, we are assured that work can get under way early in the next fiscal year.

Mr. Chairman we support this request for funds and hope that there will be no obstacle to their approval.

MIDDLE RIO GRANDE INDIAN PUEBLO REHABILITATION AND IRRIGATION FUNDS AND MISCELLANEOUS PUEBLOS FUNDS

In past years the Middle Rio Grande Indian Pueblos have been receiving approximately $200,000 annually for farm improvement and irrigation works rehabilitation. In the 1968 budget this money has been completely eliminated.

There was proposed for the budget and deleted, $134,000 for the Middle Rio Grande Pueblos Project. This project is for improvement of the land and irrigation systems of the Pueblos within the Middle Rio Grande Conservancy District. The Pueblo Indian lands are served through the canal system of the Conservancy District. Water comes from storage in El Vada Reservoir on the Rio Chama. There are about 20,698 acres of irrigable Indian land eligible for service by this project.

The money requested is to be used in rehabilitation work designed to consolidate scattered holdings, to provide economical farm units where possible, and improve the irrigation systems of Isleta, Cochiti, and San Felipe Pueblos.

This work is critically needed to improve the economy of the Pueblo Indians since farming is their principal source of income. Much has been said about the poverty problem on Indian Reservations and the Government is continually seeking ways to relieve this situation. It seems inconsistent with that philosophy to delete funds for this purpose from the budget.

Also requested but deleted from the budget as presented to Congress is $93,000 for what is termed "Miscellaneous Pueblos Project." These funds were requested for rehabilitation of irrigation facilities for five different pueblos which derive approximately 60 percent of their income from farming operations. This project has been divided into the following five distinct subproject proposals for Fiscal Year 1968:

Santa Clara Pueblo—Lining of 1.66 miles of main canal with concrete to serve approximately 900 acres of land. This would affect 115 farm families. Cost $20,000.

Taos Pueblo—Replace the concrete lining on 2.0 miles of irrigation ditch. This would benefit approximately 3,500 acres of land and be of assistance to about 100 farm families. The cost would be approximately $30,000.

Nambe Pueblo—Rehabilitation of 2 flumes on the upper Nambe Canal at a cost of $20,000. This would benefit 25 farm families using approximately 425 acres of land.

Jemez Pueblo—Install 2,000 linear feet of 36 inch concrete pipe in critical hillside areas to prevent interruption of water service and to curtail erosion. This would cost $15,000 and benefit 128 families using 1,800 acres of land.

Laguna Pueblo—Drill and equip an irrigation well near the Casa Blanca Canal system at a cost of $8,000. This would provide additional irrigation water to 480 acres of land and benefit 80 families.

We consider these projects costing $93,000 of extreme importance to the Pueblo Indians. The amount of money, comparatively speaking, is insignificant. However, it will go a long way toward improving the basic agricultural economy for over 400 Indian families in the five Pueblos. We urge your Committee to include this item in the appropriation.

Navajo Reservation Road—Crystal to Sheep Springs

The members of this Committee will recall appropriating money two years ago for construction of an all-weather road from the town of Navajo to Crystal on the Navajo Reservation. This was on condition that the State of New Mexico would take over and maintain the road. This was the first leg of a road to connect Navajo with US 666 which leads north from Gallup, New Mexico to Farmington, New Mexico into Colorado.

Last year the Senate approved $2,000,000 contract authority for the Bureau of Indian Affairs for construction of the road from Crystal to Sheep Springs on US 666. In conference between the House and the Senate this amount was cut to $1,000,000. Because of budget restrictions the BIA did not include a request to Congress for this item in the 1968 budget.

This road is vital to the economy of the Navajo Indians. As you know there is a large lumber and wood products plant at Navajo. The completion of this strip of road would provide access to additional timber and assist in opening up new public recreation areas for use of tourists and the general public. It would provide a direct route from Window Rock to Shiprock which would result in a considerable saving in travel time and costs and provide a more direct route to market for some of the Navajo lumber and wood products. It would make available better transportation routes for Navajos living in the country who travel to Navajo to work and to school, in addition to providing a vital link with the Navajo Irrigation Project.

There is no doubt that investment in the road will multiply many times in benefits to this area. The State of New Mexico has agreed to take over and maintain the road if constructed.

Therefore, we urge that your Committee include funds in the appropriation to start construction of this road during Fiscal Year 1968.

We thank the Chairman and members of the Committee for the opportunity of presenting this statement and request that it be made a part of the record of hearings.

Statement of Senator Hart

SYLVANIA TRACT DEVELOPMENT

Mr. Chairman, I appreciate the opportunity of appearing before you in support of funds for items of special concern to me as a representative of Michigan.

On July 28, 1966 Sylvania, an 18,000-acre tract of lakes and forest in Gogebic County of Michigan's Upper Peninsula came into Federal ownership. This acquisition, which I sponsored and your Committee approved, will permit development of Sylvania as a quality recreation area for the benefit of the people of the Midwest. It would not have been possible without the approval and support of officials of Gogebic County.

Gogebic County supported public acquistion of Syvania, despite the immediate impact it would have on the county tax base, because they believed that public owership of Sylvania is in the long term public interest, and because they were confident that development for public recreation which would minimize the tax loss, would proceed at a reasonably rapid rate. I shared this belief.

In my view, the Forest Service budget request does not provide for acceptable development progress in Fiscal Year 1968. I deeply appreciate the problems this Committee faces, but adequate funds to develop Sylvania must be provided to protect the area from uncontrolled use and to keep faith with the people of Gogebic County.

The development work that should be done in Fiscal Year 1968 includes studies, planning and construction of facilities in Sylvania. Funds to cover administration of recreation use in Sylvania will also be necessary. Cost estimates of this work provided me are:

Cost estimates

Studies and plans:	
Area planning alternatives including a resort feasiblity study	$40, 000
Surveys to identify recreation sites, trail and canoe routes, planning of development sites, sewer and water systems, and preparation of an overall management plan	50, 000

Cost estimates—Continued

Facility construction:	
Day use area to accommodate 500 people; boat landings, water and sanitary facilities at 2 lakes	$259, 000
Wilderness type facilities at 37 sites; 1½ miles of trails	94, 000
Administration of recreation use	30, 000
Equipment purchase	12, 000
Total	485, 000

This, it seems to me, is a reasonable program to get Sylvania development underway. Acquisition of this area for public recreation has attracted wide interest. Thousands of people are certain to visit Sylvania starting next summer. Fortunately, the Forest Service has been able to allocate forest road development funds to provide access. Badly needed now are funds to permit a reasonable rate of progress in constructing facilities to provide control and protection, and to administer the heavy recreation use expected.

Of equal importance are adequate funds for studies, surveys, and plans. It would be a mistake to undertake development of this unique property without thoroughly exploring design alternatives, including a resort feasibility study. The Forest Service has a pressing obligation here not merely to provide for protection and use, but to plan development that will take full advantage of the strong attraction of the area and provide an economic stimulus in this part of the Northern Great Lakes Region.

Along with this work in importance is construction of a Ranger Office and Visitor Information building in the nearby town of Watersmeet, Michigan to complement Sylvania. Watersmeet is at the junction of U.S. Highways 2 and 45, an ideal location for the public coming to Sylvania. I am advised that the cost estimate for this facility is $232,000.

Planning	$20, 000
Construction	212, 000
Total	232, 000

This is exclusive of funds for exhibits, furniture and landscaping. I do not believe it is vital that the facility be completely equipped in Fiscal Year 1968 but I believe the planning and construction, estimated to cost $232,000 should be taken care of in Fiscal Year 1968.

I have been advised that the Forest Service budget request for Fiscal Year 1968 includes $300,000 for Sylvania development and $192,000 toward planning and construction of the Office-Visitor Information facility at Watersmeet, a total of $492,000. I strongly urge that the Forest Service Fiscal Year 1968 appropriation be increased by $225,000 so that Sylvania development may proceed at a pace more in keeping with the expectations of the people of Gogebic County and of the citizens of the Midwest who are interested in the development of this new Federal property.

FOREST RECREATION RESEARCH FOR SYLVANIA

The Sylvania Tract is a unique area containing some 18,000 acres of near-virgin forests and waters. There is nothing like it East of the Mississippi. Through continuity of ownership and complete isolation from commercial uses it has been maintained as a vestige of the primitive northwoods environment. It contains species rare or non-existent elsewhere, such as otter, fisher, pileated woodpecker and bald eagle.

Starting this spring, very heavy visitor use is expected, which could easily change forever some of the unique attractions of the area. Research should begin immediately to measure the changes that take place in plant, animal and water resources, to measure visitor reaction to recreational opportunities, and to gauge the economic impact of Government ownership and development. Later, experimental work will be needed to establish management guides.

Because the area is remote and practically unaltered by man, the opportunities for research are impressive. Recreational design studies should be made to provide a wide range of alternative access and transportation systems. Complementary developments should be studied and compared, including facilities for day-use, overnight campgrounds and large resorts on and off the Tract.

Alternative plans should be made for areas of scenic beauty, nature study and other outdoor pursuits.

The heavy use expected will have some adverse effect on the environment. Research is vitally needed to guide management that will safeguard water quality, wildlife habitat, and populations of rare or endangered species of plants and animals. The old-growth forests in Sylvania will require special measures to protect them from insects and diseases when the environment is changed by heavy recreational use. Susceptibility to damage from soil compaction and campfires must be investigated and control measures developed. Safety standards must be studied. Ways must be found for prolonging the life and beauty of the mature trees. Results will be directly applicable to the 33-million-acre area of northern hardwoods, most of which will feel the coming pressure for commercial use.

$75,000 in this year's Forest Recreation Research budget would make possible a start on this important aspect of preserving the extraordinary resources of this area.

FOREST ENGINEERING RESEARCH PROGRAM AT HOUGHTON

As you will remember, Mr. Chairman, your Committee at my request also approved funds for construction of a Forest Engineering Laboratory at Houghton, Michigan. This laboratory will be completed in June of this year.

Since 1961, Michigan Tech has provided office space on campus for an initial forest engineering staff with two engineers.

The Forest Engineering Laboratory at Houghton is one of five such research installations located in areas of critical forestry problems and produces research results with national as well as regional applicability.

The purpose of this laboratory is to find ways to make forestry operations more efficient and economical in the typical northern hardwood stands growing on rolling terrain. Specific subject areas being investigated include methods of harvesting and transporting raw forest products, re-establishing forests, protecting and improving timber stands and watersheds, and providing access to forest land for multiple-use purposes.

For the present, due to staff size and funding, major emphasis has been placed on developing basic information necessary to develop and implement improved harvesting machinery and methods. Basic office and laboratory studies are now in progress. These studies are aimed at improving the efficiency and economics of producing and transporting logs, or where appropriate, processing these logs into chips. Results from these activities have already been presented to industry. Increased funding will allow an even more effective development of this badly needed basic information and a more direct pursuit in applied research. The results of forest engineering research will be of specific interest and use to forest managers and landowners, equipment managers, loggers and machinery manufacturers. Thus, the overall economy of the timber-based industries will be stimulated.

If a broadened program of research is to be undertaken, an additional $300,000 is needed. This increase would allow hiring five additional scientists—one industrial engineer, two civil engineers, one applied physicist, and one wood technologist; and four supporting personnel—one electrical technician, one draftsman, one machinist-welder and one clerk. The remainder of the new funds will be used to purchase and maintain urgently needed equipment and for the operation and maintenance of the laboratory. Studies to be undertaken with the new funds are: development of a process for bark chip separation-segregation that may contribute in lower cost harvesting and transportation of wood to pulpmills; processes for production of pulp chips in the woods; new concepts for improved, more efficient log-making and log-handling systems through time studies and cost analyses of present and innovated logging systems; and reduction of logging costs through off-road mobility studies of felling and skidding equipment. A solution of the bark chip separation-segregation problem alone, for example, could save the industry more than $10 million annually in the North Central States and an estimated $65 million nationally.

When fully staffed, the project will include ten scientists plus supporting personnel. This research team is supplemented as appropriate with graduate and undergraduate students from the University, and some studies are conducted cooperatively with various departments of the University.

LETTERS SUPPORTING REQUESTED APPROPRIATION

I urge your support for $300,000 for this program, and ask that the letters in support of this item from Mr. John R. Riippa, Mr. William S. Ryan, Mr. S. M. Cohodas and Mr. John J. Howard be inserted in the Record.

PORTAGE LAKE LUMBER CO.,
Houghton, Mich., February 6, 1967.

Hon. PHILIP RUPPE,
Longworth Building,
Washington, D.C.

DEAR CONGRESSMAN RUPPE: The U.S. Forest Service, U.S. Department of Agriculture, in June 1967 will complete construction of a Forest Engineering Laboratory in Houghton, Michigan. This will affect the economy of Upper Michigan. I know this is true, for I have been producing forest products for almost thirty years, both logging in the woods and operating sawmills. This is my daily life. I know that we must improve, modernize our operations in the woods and the method of harvesting our pulpwood and sawlogs if we are going to supply the expanding mills in the Upper Peninsula with the timber they need. Another thing, improving our method and rate of production in the woods will mean more cords and board feet produced per man. Therefore, this should mean a better average wage for our loggers.

Now, this spring we will have a new modern building for the development of a forest engineering research program, but research program funds are needed. It is for this reason that I write to you now.

When the forest engineering research program was started at Houghton, Michigan in 1961, program funds were provided for only two scientists. Because of limited quarters and equipment, there has been no increase in scientific personnel up to the present time. If we are to correct pressing regional problems and results brought sooner to the wood user, additional program funds are needed for more scientists and to start equipping the new building. An amount of $300.000 will strengthen forest engineering research to develop more efficient methods for harvesting and delivery of wood to processing plants to develop economical methods and equipment for preparing our sites for planting of better species; and to develop equipment for slash disposal, fire fighting, and applying disease and insect control measures.

We shall appreicate your work in securing $300,000 for forest engineering research program at Houghton, Michigan, so that the expanded program can be implemented without delay. Will you please try to have this information become part of the record of the hearings?

Yours very truly,

JOHN R. RIIPPA.

MICHIGAN BELL TELEPHONE CO.,
Houghton, Mich., February 8, 1967.

Hon. PHILIP RUPPE,
Congressman, 11th District,
Longworth Building, Washington, D.C.

DEAR PHIL: A Forest Engineering Laboratory will be completed at Michigan Technological University early in 1967. This fine new building, built by the U.S. Forest Service, will conduct research on the methods of improving the pulpwood and sawlog harvesting business, and, as a result, will help assure a timber supply for the modern sawmills, paper mills, dimension plants and wallboard plants in the Great Lakes area. This should make us more competitive with areas of wood production outside of the United States.

As I said, the building is nearly built, so now we need money to equip and staff this building, in fact, $300,000. Also, money will be needed each year so the building and staff can carry on research on a continuing basis to the benefit of our industrial climate and to benefit the man working in the woods.

Will you please have this letter read into and become part of the hearing to be held on appropriations of the type?

Sincerely yours,

WILLIAM S. RYAN.

COHODAS-PAOLI CO., INC.,
Houghton, Mich., February 7, 1967.

Hon. PHILIP RUPPE,
Longworth Building
Washington, D.C.

DEAR CONGRESSMAN RUPPE: I like to feel that in my business, the wholesaling of fruits, vegetables and groceries across the entire Upper Peninsula, that I am aware of the economy. An area is healthy if all aspects of business have a sound foundation and if all people receive a fair wage for work accomplished. It seems evident to me that the forest products business is healthy in two out of three areas; namely, the production of timber, (supervised by well trained foresters), and the manufacturing of the forest products at our paper mills and sawmills, (which have all modernized in the Upper Peninsula). However, we can assure ourselves of adequate quantities of the raw material and we can modernize our methods of manufacturing, but if we do not have a system of harvesting the material to assure a supply to the mill, we are in trouble. The Forest Engineering Laboratory that will be completed this spring at Michigan Tech will conduct research on and prove the methods of modernizing and expanding the timber harvesting business, and, as a result, will help establish a better wage for the workmen and assure a timber supply. We have reached the point where we need money to equip this building. Will you please use your good efforts to obtain these funds at the forthcoming session of the House? You may wish to have this letter become a part of the hearing.

Sincerely yours,

S. M. COHODAS, *President.*

HOUGHTON NATIONAL BANK,
Houghton, Mich., February 8, 1967.

Hon. PHILIP RUPPE,
Congressman, 11th District,
Longworth Building,
Washington, D.C.

DEAR PHIL: The U.S. Forest Service, U.S. Department of Agriculture, in June 1967 will complete construction of a Forest Engineering Laboratory in Houghton, Michigan. This will affect the economy of Upper Michigan. We must improve and modernize our logging operations in the woods in the Upper Peninsula and the Lake States if we are going to supply the expanding mills with the pulpwood and sawlogs they need. The new U.S. Forest Service Engineering Laboratory in Houghton will develop methods to modernize our woods operations, providing we give the laboratory the people and equipment they need. We now need research program funds for this purpose, in fact, $300,000.

Will you please tell the Appropriations Committee that it is very necessary that we obtain $300,000 for the forest engineering research program at Houghton, Michigan?

Sincerely yours,

JOHN J. HOWARD.

Pictured Rocks National Lakeshore.—It is my understanding that there is $800,000 in the budget to start land acquisition at this newly-authorized Lakeshore (P.L. 89–668, approved October 15, 1966) plus $144,000 for administration.

The total amount authorized for land acquisition is $6,873,000. I do not need to underline with this Committee that money will actually be saved by moving ahead to acquire the land as rapidly as possible. Rising costs have become a major problem with new parks and lakeshores, and I would urge that we increase this figure by $200,000 to $1 million so as to move vigorously with land acquisition in the coming year.

Anadromous Fish Program (P.L. 89–304).—For Fiscal Year 1968 only $3 million has been requested for this program ($1½ million each to the Bureau of Commercial Fisheries and to the Bureau of Sports Fisheries) although $5 million is authorized.

The Great Lakes states—and specifically Michigan—have been among the strongest supporters of this program. Under it the coho salmon has been introduced into the Lakes. There, this fish has responded magnificently and we have great hopes not only that it will re-invigorate commercial and sport fishing, but that it will help rid the Lakes of our newest fast-multiplying pest, the alewife.

Michigan is prepared to match the largest sum available to any single state under this program—$1 million. The funds are acutely needed to help bring balance to the fishery resources of the Great Lakes.

Mr. Chairman, I request appropriation of the full $5 million authorized under the Anadromous Fish Act.

STATEMENT OF SENATOR COOPER

TROUT HATCHERY, KENTUCKY

I appreciate this opportunity to appear before the Appropriations Subcommittee on the Department of Interior's Budget. I am here today to request funds for the commencement of construction of a trout hatchery on the Cumberland River at the Wolf Creek Dam site in south central Kentucky.

I think it would be helpful to the Committee's consideration of this request if I reviewed briefly the history of this project and its current status in light of the actions taken by this Committee and the recommendations made by the Interior Department's Bureau of Sport Fisheries and Wildlife.

Since 1948 Kentucky has been stocking trout in its streams from hatcheries in other States, primarily from a hatchery in Virginia and one in Tennessee. The first stockings were experimental in nature. But in 1952, a trout fishery was established below Wolf Creek Dam on the Cumberland River at a point near where it is proposed that a hatchery now be constructed. It has been very successful. For the past six or seven years the Governor of Kentucky, the Commissioner of the Department of Fish and Wildlife, the membership of the League of Kentucky Sportsmen and the Kentucky congressional delegation have requested the Department of the Interior to proceed with planning for this hatchery.

In later years I have requested funds from this Committee. In 1965, while the Committee did not provide funds for site planning at that time, the Chairman, Senator Hayden, in a colloquy on the floor, told me that he would give consideration to this request the following year and that he felt the Committee would do so.

BUREAU OF SPORT FISHERIES AND WILDLIFE INVESTIGATION AND REPORT

In March of last year I again appeared before this Committee and requested planning funds to determine the feasibility of establishing a trout hatchery at the Wolf Creek Dam site. Upon the recommendation of this Committee Congress added $20,000 to the Bureau of Sport Fisheries and Wildlife's appropriation for fiscal 1967 for the determination of a suitable site for a trout hatchery in Kentucky.

The Bureau completed its investigation and filed its completion report in December of last year. The Bureau's study, I might add, was aided by the data collected over the past two years by the Bureau in cooperation with the Kentucky Department of Fish and Wildlife Resources.

I am happy to note that in its report the Bureau made the following recommendation:

"Present facilities at the Dale Hollow National Fish Hatchery are not adequate for producing trout required for the Kentucky-Tennessee area. In order to permit production of the trout needed for the area, early action should be taken to construct the needed facilities at either the Wolf Creek Dam site or at the Dale Hollow Dam site."

The Bureau, in consultation with the Corps of Engineers, then reached a decision in January that the new hatchery should be constructed at the Wolf Creek Dam site.

CONSTRUCTION COST

On January 10, I wrote the Bureau's Director, Mr. John Gottschalk, and requested that he furnish me with the construction schedule and cost estimates for the hatchery as soon as these estimates were completed. In his reply Mr. Gottschalk places the total construction cost of the hatchery at $1,452,500. The amount required for Phase I of the construction is estimated to be $233,000 and it is this amount that I am requesting the Committee to add to the Interior Department's appropriation for fiscal 1968.

I would like to note at this point that the Report was not received until late in December and the cost estimates were not available until February of this year—too late for consideration in the Interior Department's Budget for fiscal 1968 as submitted to Congress by the President.

LOCAL INTEREST

In concluding I cannot emphasize too strongly the keen interest that is felt in Kentucky over the prospect of this trout hatchery. Yesterday I received a telegram from Mr. Minor Clark, Commissioner of Kentucky's Department of Fish and Wildlife Resources, which expresses the sentiment in my State for the commencement of this project. The telegram reads as follows:

Senator JOHN SHERMAN COOPER,
Senate Office Building,
Washington, D.C:

At least 360,000 Kentucky fishermen are still requesting funds for trout hatchery established to provide fishing in 628 miles of water. Besides creating such activities, great economic benefits result other than fishing, such as gains for many businesses, including motels, gas stations, etc. Kentucky has patiently waited such appropriations and all people here are looking forward for appropriations to start phase as outlined by Bureau of Sport Fisheries after July 1.

MINOR CLARK,
Commissioner, Department of Fish and Wildlife Resources.

ASSOCIATION OF SENATOR MORTON WITH REQUEST

Finally, I would like to say that Senator Morton, who has been an ardent proponent of the trout hatchery over the past years, is familiar with my statement and wishes to be associated with it. We both appreciate the help this Committee has given in the past and we respectfully urge that the Committee provide the sufficient funds for commencement of Phase I of the construction of the trout hatchery as outlined in the program of the Bureau of Sports Fisheries and Wildlife.

CORRESPONDENCE WITH BUREAU OF SPORT FISHERIES AND WILDLIFE

I would also appreciate it, Mr. Chairman, if the recent correspondence I have had on this subject with the Bureau of Sport Fisheries could be included in the Record at the conclusion of my remarks.

DEPARTMENT OF THE INTERIOR,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C.

Hon. JOHN SHERMAN COOPER,
U.S. Senate,
Washington, D.C.

DEAR SENATOR COOPER: This is in reply to your letter of January 10 regarding a hatchery below Wolf Creek Dam in south-central Kentucky. As requested, we have included a statement specifying the need for the hatchery, along with itemized development requirements and cost estimates.

For the past several years, fishery biologists from the State of Kentucky and our Bureau have been assembling data on the numbers and sizes of trout needed for stocking Kentucky waters. These investigations show that there are 515 miles of streams which need to be stocked with legal-sized trout. An additional 113 miles of tailwaters are also suitable as year-round trout habitat.

Most of the large reservoirs in Kentucky have excellent trout fishing potential, and should be stocked periodically with trout. The use of reservoirs and tailwaters below dams to provide trout fishing is gaining in importance each year, and contributes substantially to the national sport fishery.

Based on management precedures used throughout the Southeast, the current requirements for trout in Kentucky are estimated to be about 150,000 pounds annually. A site for construction of a trout hatchery of this capacity is located below Wolf Creek Dam. An adequate water supply is available from pipes already installed within the Dam.

Outlined below is a program for development of the hatchery, broken down into phases with the latest engineering cost estimates:

Phase I:	
Acquisition of water and land rights, engineering and development	$15,000
Site preparation and rough grading	83,250
Station roads, parking areas, curbing, and gutters	50,000
Storm sewers	19,750
Water supply lines to aerator	65,000
Subtotal	233,000
Phase II:	
Hatchery building	218,750
Equipment storage building	50,000
Aerator building	84,250
Domestic water supply system	37,500
Domestic sewage system	37,500
Underground telephone	4,750
Underground electric system	20,000
Subtotal	452,750
Phase III:	
3 residences	60,000
Oil, paint, and chemical storage building	7,875
Vehicle storage building	42,250
Gasoline and fuel oil storage	10,125
Raceways	153,000
Water supply lines	32,500
Underground electric system	25,000
Outfall drain lines	34,250
Fish cultural equipment	30,000
Subtotal	395,000
Phase IV:	
Raceways	153,000
Water supply lines	32,500
Underground electric system	30,000
Floodlights, aeration, and electrical systems	31,750
Landscaping	50,000
Paving station roads, parking, and service areas	32,125
Fencing	12,375
Fish cultural equipment	30,000
Subtotal	371,750
Total	1,452,500

We are pleased to supply the above information, and appreciate your interest in the Bureau's programs to help manage the sport fishery resources of the Nation.

Sincerely yours,

JOHN S. GOTTSCHALK,
Director.

JANUARY 10, 1967.

MR. JOHN S. GOTTSCHALK,
Director, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, Department of the Interior, Washington, D.C.

DEAR MR. GOTTSCHALKS: Thank you for your letter of December 23 enclosing the report of the Fish and Wildlife Service approving the Wolf Creek dam site for a trout hatchery. I am naturally very happy to have this report and I know that sportsmen all over Kentucky are pleased with the final determination made by the Fish and Wildlife Service.

I am informed that it is the usual practice of the Bureau of Sport Fisheries and Wildlife to prepare cost figures for the construction of the trout hatchery broken down into phases and their justification. I would like very much to have the opportunity to study and review these estimates and I would appreciate it if you would send me a copy as soon as your estimates on construction cost have been completed.

With best wishes for the New Year, I am,

Sincerely yours,

JOHN SHERMAN COOPER.

DEPARTMENT OF THE INTERIOR,
BUREAU OF SPORT FISHERIES AND WILDLIFE,
Washington, D.C., December 23, 1966.

Hon. JOHN SHERMAN COOPER,
U.S. Senate,
Washington, D.C.

DEAR SENATOR COOPER: Enclosed for your information is a copy of the Completion Report, Hatchery Site Investigations, Wolf Creek Dam, Russell County, Kentucky.

As you know, this investigation has been carried on for the past two years by this Bureau in cooperation with the Kentucky Department of Fish and Wildlife Resources, and other interested persons.

We trust you will find the report interesting and useful.

Sincerely yours,

JOHN S. GOTTSCHALK,
Director.

STATEMENT OF SENATOR MORSE

BUDGET REQUESTS SUPPORT AND INCREASES

Our natural resources—especially the soil, water, forests and rangeland—are a part of America's priceless heritage. Even more, they are the bedrock foundation of our great Republic.

All of the agencies receiving appropriations under this bill perform vital work. I support their budget. Even more, I urge certain increases, especially for the Bureau of Land Management and the Forest Service.

BUREAU OF LAND MANAGEMENT

To save the time of the Subcommittee, I ask there be included in the record at the close of my remarks, a letter dated March 9 from the Bureau of Land Management outlining the additional funds this agency could use, effectively and efficiently.

LETTER OF BUREAU

DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANGEMENT,
Washington, D.C., March 9, 1967.

Hon. WAYNE MORSE,
U.S. Senate, Washington, D.C.

DEAR SENATOR MORSE: We are pleased to respond to your request for legislative service concerning information on the Bureau's proposed 1968 budget. We believe the proposed budget provides acceptable levels of management and conservation progress consistent with over-all administration goals and requirements.

You also requested a list of additional amounts, with justifications, which could be used to advance proper conservation, development and management of the resources under the Bureau's jurisdiction. Our tentative allocation of funds to Oregon's principal activities, based on the proposed 1968 budget, and the additional funds which could be used are in the following table:

	Tentative 1968 budget		Additional	
	Total BLM	Oregon	Total BLM	Oregon
Title, lease and records service	$5,273,200	$247,526	$60,000	----------
Land classification and mineral examination	4,658,000	431,000	1,040,000	$40,000
Range management	5,495,000	558,000	230,000	80,000
Forest management	7,646,700	5,464,000	----------	----------
Soil and watershed conservation	14,072,000	1,913,000	2,050,000	1,000,000
Protection	3,598,400	305,000	130,000	15,000
Cadastral survey	5,100,700	403,672	50,000	----------
Construction of recreation facilities	1,100,000	100,000	510,000	110,000

The proposed budget allocations for the Vale District are adequate to permit good progress. Though investments to date are less than originally planned, they have produced far greater benefits than anticipated. Since the Vale District is progressing so well, we feel the needs of other districts command a higher priority than increasing the level of work here.

The proposed budget provides a $560,000 increase to initiate a program of mortality salvage and thinning in western Oregon. The current planned program to offer 140 million board feet of salvage and thinning, in addition to the regular timber sale program and the salvage of timber from the Oxbow fire, is considered the proper level for 1968.

The following is of sufficient need for scheduling at a future date but could not be included in the proposed 1968 budget:

Oil Shale Development Program, $760,000

To initiate work connected with points 1 and 5 of the Secretary of Interior's 5 Point Oil Shale Development Program involving Colorado, Wyoming and Utah. There are three activities involved in this program:

> *The Title, Lease and Records Service Activity* will be involved in processing and adjudication of adverse proceedings against apparently invalid, unpatented mining claims, hearings and appeals.
>
> *The Land Classification and Mineral Examination Activity* will gather and record data on thousands of oil shale claims, examine the claims and initiate action against those claims believed to be invalid. Multiple resource planning will also be accomplished.
>
> *The Cadastral Survey Activity* will provide positive location of mining claims.

A breakdown of funds for this program is noted below in the descriptions of the involved activities.

Title, Lease and Records Service, $60,000

This amount is a portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program. See project description above.

Land Classification and Mineral Examination, $1,040,000

Identification of land and development of needed preliminary plans for recreation sites and areas having historical or archeological value; prompt processing of state selections, and agricultural land entries. Forty thousand dollars of this amount is needed for 20 additional sites in Oregon. A portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program—$650,000. See project description above.

Range Management, $230,000

To provide management needed to improve wildlife habitat on watershed lands Bureau-wide, and installation of management plans and systems to mitigate livestock adjustments and prevent further resource deterioration in Oregon will require $80,000 which is included in the above figure.

Soil and Watershed Conservation, $2,050,000

Needed investment to improve critical watershed lands; reduce erosion and silt discharge; raise water quality and assist in mitigation of livestock adjustments affecting dependent livestock industry. One million dollars of this amount would provide needed investments as cited above in eastern Oregon.

Protection, $100,000

Replacement of equipment and training of seasonal fire control forces, Bureau-wide. This increase would provide $15,000 more to Oregon.

The proposed budget for 1968 provides an increase of $125,000 over 1967, and an additional $10,000 for Oregon. We are conducting a comprehensive fire planning study to better identify protection program increases needed to keep pace with advancements in related land and resource programs and increasing public use. This study should be complete in two or three years.

Cadastral Survey, $50,000

This amount is a portion of the funds to initiate the Secretary of Interior's 5 Point Oil Shale Development Program. See project description above.

Construction Recreation Facilities, $510,000

To provide needed expansion of facilities at heavily used campgrounds and provide needed facilities at undeveloped sites now receiving heavy use. One hundred and ten thousand dollars of this amount to expand the popular Beavertail campground on the lower Deschutes River.

The above costs include the costs of necessary adminitrative support.

We appreciate your continuing interest in the Bureau's programs.

Sincerely yours,

EUGENE V. ZUMWALT,
Acting Director.

I am joining with Senator Metcalf and others in seeking to advance the conservation work needed on Bureau of Land Management lands. The testimony he will present has my full concurrence.

While part of the suggested additional funds are for oil shale, a mineral not yet known to exist in Oregon, I think it important that the work proceed to develop this source of fuel and energy.

SOIL AND WATERSHED CONSERVATION

No program of the Bureau of Land Management has a higher priority, in my judgment, than the watershed work. Great quantities of rangeland comprising these watershed areas of the west are eroding.

I urge a program that does three basic things:

1. Arrests the destruction of the soil and water resource base.
2. Assures grazing use on public rangelands at least at current levels, and preferably at increased levels.
3. Attempts to develop the real potential for multiple benefits these great range resources can give to this generation and posterity.

The budget request for soil and watershed conservation work for fiscal 1968 is $14,072,000. To do the job adequately, the figure should be increased to $16,122,000. This would enable the Bureau to undertake an additional $1 million of urgently-needed rehabilitation work in Oregon.

VALE, OREG., RANGE REHABILITATION PROJECT

I ask the Subcommittee to include in the record and to give careful consideration to an excellent report dated March 8, which I received from the BLM local manager at Vale, Oregon. This is a report he makes to the community and it tells a story of success and accomplishment in rangeland development and cooperation.

REPORT OF BUREAU MANAGER AT VALE, OREG.

DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANAGEMENT,
Vale, Oreg., March 8 1967.

DEAR FRIENDS: About two years ago we gave a report on the amount of work done in each of the units in the district. In this report, we will do the same thing but go into more detail. The reason for making such a report is to bring you up to date and to assess where we stand with the Vale Project.

Generally speaking, we are about ***half-way finished with the Vale Project***, at least in some major work categories. That is to say, we have done about half of the work needed ***to meet the demand of livestock users*** of this federal range. But this needs careful explanation. In some units we are certainly more than half-done, in others considerably less than half-done. Also, the fact that project work is at the half-way mark *does not mean that we have half-way met the deficit in AUMs.* This is so because many rehabilitation projects have not yet entered into the picture. *A two-year lag* in grazing a project from the time that it was completed accounts for this. Another factor is *last year's drought* which has made it doubtful that last year's seedings will be used a year from now.

There are hopeful signs, however. This spring, for instance, all stock in the eastern half of Cow Creek Unit will go on seedings this spring and remains there for about a two-month period before going onto native range. The effect of this on the adjoining native range should be very beneficial. Each spring several new areas are ready for use. But even using these new areas does not meet the demand of a particular area in most cases. The demand, or licensed obligation, will probably be met when the native range used in conjunction with rehabilitaion areas has had a chance to benefit from better management and the rest provided by the use of seedings and brush control areas.

The following table lists ten practices pertaining to range rehabilitation and 16 units in which this work has been done. The figures include work from the fall of 1962 to the end of fiscal year 1967, this June 30.

Adm. unit	Brush control (acres)	Seeding (acres)	Fencing (miles)	Reservoirs	Springs	Wells	Pipeline (miles)	Water troughs	Cattleguards	Test plots and exclosures
Willow Creek	1,100	6,922	38.4	10	11				4	3
Westfall	9,660	24,088	138.1	13	62		25.1	26	54	4
Skull Springs	23,029	3,430	123.5	24	24	1	1.5	3	22	1
Black Butte	10,533	1,281	25.4	4	7				6	
Harper Basin	30,030	26,499	207.1	44	32	3	20.2	25	44	5
Mahogany	43,070	12,815	104.3	46	63				17	2
Cow Creek	20,500	18,605	61.4	11	3	2	32.2	39	21	
Soldier Creek	18,100	17,500	81.5	22	2	3	20.5	21	16	
Jackies Butte		9,011	35.7		1	1	10.4	10	4	
Brown Ridge			7.3	9						
Barren Valley			28.0	3		1				2
Fifteen Mile	18,367	23,959	170.0	26	35	2	18.2	22	24	7
Antelope	35,818	34,160	104.9	34	33	2	67.5	69	19	6
Star Valley			25.4	33		2	.1	2		2
Stockade			54.0	16	1	1			1	4
Sheepheads										
Total	210,207	178,270	1,204.6	293	274	18	195.7	217	230	36

A few comments are needed to explain some of these figures. Brush control for example—we will have actually sprayed (including this spring) about 291,000 acres, but some of this, the difference between this figure and 210,207 has been seeded and is called seeding. The seeding figure is accurate to date, but does not include the seedbed preparation, either plowing or spraying, that will be done this spring. This spring we plan to spray 60,205 acres, but only about 35,000 acres of this will be strictly brush control. The remainder will be seedbed, or in a couple of cases maintenance spraying on existing projects. This year and in the next we will do a little less seeding than done in previous years. But we are increasing the number of springs and reservoirs to be constructed or developed. More effort is going into maintenance work, and there is increased emphasis on wildlife habitat improvement and recreational development.

This coming fiscal year, starting July 1, the work program shapes up as follows:

Brush control	acres	31,000
Fencing	miles	232
Seeding	acres	41,540
Reservoirs	each	69
Springs	do	83
Wells	do	2
Pipeline	miles	47
Cattleguards	each	22
Stock trail	miles	75
Erosion control	reservoirs	10

You may have noted in the list of administrative units the inclusion of two new units, Stockade and Sheepheads. The attached map shows their location. These units have been established by adjusting the boundaries of Skull Springs and Barren Valley Units. The present Barren Valley Unit includes a portion of the former Fifteen Mile winter use area. These administrative unit changes have been made for these reasons:

1. The new Barren Valley unit now includes the old Fifteen Mile and Barren Valley winter range.
2. Some of the old Barren Valley summer area is now included in the Skull Springs unit. This is that portion of Barren Valley that had licensees using both of these units.
3. The remaining portion of the old Barren Valley unit is divided into Stockade and Sheepheads. These areas were divided because Stockade is made up of individual allotments whereas Sheepheads with one exception is a community use area, they have different licensees, and they are better managed individually.

The areas of use, seasons of use, and the licensed use of these areas have not been affected by these changes. Essentially, they can now be better managed.

Another change in unit boundaries concerns the former Black Butte Unit. This area has now been included into Skull Springs Unit and can now be considered an allotment or area of use within Skull Springs. The eastern boundary of Skull Springs has been changed to conform with the fence separating that unit from the Harper Basin Unit. As mentioned above, the south end of Skull Springs has been extended to include a portion of the old Barren Valley Unit.

Another change is in the administration of Brown Ridge Unit and the Whitehorse Allotment of Soldier Creek. The administration of these areas has been turned over to the Boise District, but officially they still remain within the boundaries of the Vale District. The reason for this change in administration is that the users of these areas run stock in both Idaho and Oregon. Administratively, it is better to have them licensed in one state or the other. In "exchange" we have taken over the administration of the Boise District "45" unit to the east of Star Valley. This area was difficult for Boise people to get to.

As mentioned before, there is *increased emphasis on wildlife habitat* improvement in the Vale District. This spring and early summer 20 gallinaceous guzzlers will be installed for big game and upland game birds. These guzzlers are large fiberglass apron-like devices set in the ground to catch precipitation. They hold 1,000 gallons and the deeper portion is covered to prevent evaporation. The guzzlers have been used in many places with good results. Four of them will be installed in the Harper Basin Unit, twelve in the Westfall Unit, and three in the Willowcreek Unit.

Also, 20 small concrete watering devices for game birds will be installed along pipeline systems, principally along the Louse Canyon and Rawhide Springs pipelines in the Antelope Unit. These "bird baths" will have a float valve to control inlet of water, and they will be fenced.

Ten existing reservoirs and 13 springs will be fenced to develop small wildlife habitat areas while still providing water for livestock. Seven new reservoirs and ten springs will be constructed or developed for wildlife use. Of course,when water is developed or fenced provision will be made for livestock use. An example of this is Mud Springs southwest of Vale in the Cow Hollow area. When this spring was re-developed last fall it flowed about 30 gallons per minute. A portion of the spring was piped into two stock tanks. The overflow and remainder of the water goes into a newly constructed reservoir within a fenced area. Another reservoir within the fenced area will be constructed below. Beyond the fenced area water will again be available for livestock.

Another wildlife activity increasing in size is browse and nomad alfalfa seeding. As of now we have 18,000 acres of nomad and 321 acres of browse plantings. Present plans are to seed this year an additional 9,892 acres of nomad and 1,200 acres of browse. Spring seeding of nomad alfalfa by aerial application has proved successful here providing that some rainfall occurs following the seeding. Browse species have been drilled or planted by hand. Two plants have been seeded, bitterbrush and 4-wing saltbush.

We recently made a District-wide compilation of use last grazing season on seedings and brush control areas. The following gives the area of use, the grazing unit, stocking rate, and total AUMs of use made.

Name of project	Grazing unit	Kind	Total use (in AUM's)	Stocking rate (acres/AUM)
North Harper	Harper Basin	Seeding	530	5.5
Page	do	do	598	3.7
Vines Hill	do	do	394	7.6
Winter Springs	do	do	396	5.1
Mesa	Westfall	Brush control	2,107	2.9
Chicken Creek	do	Seeding	504	14.4
Poverty Flat	do	Brush control	523	2.4
Horseflat	do	do	840	4.3
Drip Springs	Skull Springs	do	1,375	3.1
Granite Creek	do	do	668	5.3
Warm Springs	Black Butte	do	1,952	5.0
Morman Basin	Willow Creek	Seeding	752	4.7
Love	do	do	164	7.3
Jaca	Solider Creek	do	894	3.8
Indian Canyon	do	do	1,584	3.2
Gulch	do	do	466	11.7
Soldier Creek	do	do	1,570	.95
Sheep Springs	do	do	507	1.6
Monument	do	do	1,402	3.7
Rock Creek	do	do	658	4.5
Rome	do	do	969	8.0
Brickey Springs	do	do	782	3.5
Mud Flat	do	do	695	.5
Downey Canyon	Cow Creek	do	540	2.6
Hooker Creek	do	do	1,192	3.0
Jordan Valley	do	do	698	3.8
Little Sandy	do	do	882	4.2
Owyhee Butte	do	do	1,247	8.3
Schnable	Mahogany	do	759	2.6
McCain Springs	do	do	543	8.0
Rockville	do	do	574	6.3
Old Maid	do	do	670	2.8
Stickey Joe	do	do	298	2.9
Tableland	do	Brush control	554	4.5
Blue Canyon	do	do	3,737	4.0
Tunnell Canyon	do	do	485	12.2
Bas	do	do	825	4.6
Top	do	do	2,191	4.7
Whitehorse	Soldier Creek	do	2,200	4.7
Steer Canyon	Antelope	Seeding	321	19.0
Andy Fife	do	Brush control	60	59.0
Chimney Creek	do	do	1,025	11.8
Bull Creek	do	Seeding	200	15.0
Battle Creek	do	do	881	10.1
Starvation	do	do	5,416	6.8
Greeley	Soldier Creek	do	1,424	4.2
Total use			47,052	

Name of project	Grazing unit	Kind	Acres
Owyhee Canyon	Cow Creek	Brush control	14,000
Board Corrals	Mahogany	do	4,940
Greeley	Soldier Creek	Seeding	6,000
Little Sandy	Cow Creek	do	3,665
China Gulch	Jackies Butte	do	5,816
Juntura	Skull Springs	do	589
Juniper Basin	do	do	692
Little Valley	Harper Basin	do	691
Cottonwood	Westfall	do	4,465
Creston	Skull Springs	Brush control	3,100
Hope Butte	Willow Creek	Seeding	2,622
Agency Ridge	Westfall	do	294
Double Mountain	Harper Basin	Brush control	5,760
Sand Hollow	do	Seeding	3,300
Harper	Westfall	do	1,155
N. G. Creek	do	do	4,593
Lower Clover Creek	do	do	1,459
Lava Ridge	do	do	1,000
Callahan Springs	Harper Basin	Brush control	11,070
Total acreage			75,211

In addition there may be some light fall use on other projects not listed.

To fool around with some figures—it looks like we now have including projects prior to the Vale Project and those areas not yet ready to be used, enough rehabilitated areas to support possibly 80–90 thousand AUMs (450,000 acres at 4–5 acres per AUM). *If we are a little less than half-done with seeding and brush control work, and assuming twice this acreage, we may have upward to 180,000 AUMs or a little less than one-half of the licensed demand on the public range. And this on 16–20 percent of the total federal range. We expect the native range not treated to increase its carrying capacity through use of these rehabilitated areas and through management. Thus, the total carrying capacity of this land will be greatly increased.*

It's kinda dangerous though to monkey around with figures. They have a way of fooling people. Sometimes things don't work out the way it looks like they ought to. But, we know that crested wheatgrass will grow. We know that native grass comes back when the brush is controlled. We also know that the native range improves considerably if it's given a chance. So, if you accept these speculations the way they are given no one will be hurt (or embarrassed) by it all.

One of the problems that we are faced with (and ranchers too) is the fact that *some units within the District cannot be brought to the stage of development that the present use, non-use and suspended non-use can be satisfied. The areas either do not have the potential for development or the demand is so great that even when developed to full potential there will still not be forage enough to satisfy the needs of everyone consistent with good range management.*

In these cases it is probable that some use will have to be shifted to areas which will come up with an excess of grass. With this in mind, it will take good years, good management, and maybe good luck to satisfy the present demand on this public range District-wide. *But we are taking giant steps in this direction, giant steps to the tune of 70,000–80,000 acres a year plus water and other facilities to better manage the range.*

And now to management. We talk of management systems, better management, and increased management. But what are we talking about? Some may think of it in terms of having to handle cattle more and of increased control. This is not an objective. *Almost all of you practice management of stock and land on your own property to secure the greatest good. This is what we are after on the public range.* To put it on a dollar and cents basis no one can expect a great amount of money to be spent on this public range without attempting to see that these gains are assured and that the job will not have to be done over again in another generation. It is not enough to control the brush and make seedings and then simply use them. We have to use this range better than it was used before. We have to use it intelligently, making use of all the knowledge that we have because there is a greater need for it now and in the future.

Beginning in 1967 the BLM will introduce new emphasis on the management of livestock grazing on public lands. We have initiated a program requiring that all major allotments or areas of use have a grazing management plan in operation by 1975. In this District this means that 104 plans must be completed within the next seven years. Eighteen of these plans are scheduled for completion this year.

This report seems to be one of compilations and tables, but that's what we indicated at the start. Here's another one—*new areas that will be used this spring or fall.* In some cases some use of these areas was made last fall, but this will be the first spring use.

Some comments should be made about the above table. All use figures are based on actual use except for Granite Creek and Bull Creek which were estimated. Some areas were stocked lighter than they might have been due to lack of water—notably Tunnel Canyon, Starvation, and Chimney Creek. Steer Canyon, Andy Fife, Bull Creek, and Battle Creek were used lightly this last fall. The stocking rate given does not necessarily indicate a relative carrying capacity. But even so, it is apparent that there is a considerable difference in the way areas can be stocked. Also, it appears that the way a rehabilitation area will be used may vary from year to year. Good management would be to use these areas as heavily as is practical depending on the growing season, thus saving the native range wherever possible.

Generally speaking, one would expect greater use from a seeding than from a brush control area. But evidently last year was a better brush control year than a seeding year. There was little growth on seedings and in many places little old feed; whereas, on brush control areas there was quite a lot of old feed and in many places a considerable amount of growth. Another factor though, these brush controls were generally located in a better moisture area.

The above figures indicate that *use in rehabilitation projects during this past dry year made a significant contribution to grazing in this District. In many cases these areas were used more heavily than one would like to see them used. But it was necessary to do so. Within a few years there will be many more areas to turn into and droughts will be more easy to get through.*

With respect to the drought of last year—still undetermined is its total effect on 47,350 acres of seeding done a year ago this last fall. The survival of some seedlings is certain, but whether enough will survive plus those that might yet germinate to make a seeding remains to be seen. It does appear that additional protection will be needed. For purposes of this report two such seedings were inspected to see how much germination had occurred since last November when the rains finally came. In one seeding in which no seedlings could be found last summer a surprising number of crested wheatgrass plants were found. Fewer plants were found on the other.

Brush control areas are not so critical. In most areas protected last year there was still fair to good growth and assuming a reasonable grass year this spring they will most likely be ready to use on schedule.

At the present time range rehabilitation projects are carrying the heavy load of obtaining improved conditions on the native ranges. But the successful use of these projects does not eliminate the need for a program of intensified management. Objectives of management can be thought of as site improvement for watershed, soil stability, and forage production. The benefits received from a management plan cannot be expressed only in terms of forage production, however. Other benefits would include flexibility to meet unusual conditions, increased efficiency, and stability in livestock operations. A management plan or scheme takes into consideration the requirements of the plants, the land, the livestock, the game and other uses of the resource.

Completion of a management plan requires close cooperation with the ranchers in collecting data for designing a system and placing it into operation. *Once a system is started does not mean that it will necessarily work to perfection. It is a starting point from which* adjustments may have to be made to come up with a workable plan that will be satisfactory to the rancher and the resource. We will have to keep close records on grazing use in order to determine whether a particular area is under or overstocked. Actual use records plus studies on the ground will determine whether a system is working out or not. We have a new actual use form which will be sent out this season and we request your cooperation in its use.

An event not greatly publicized occurred last December at the Advisory Board meeting. John Archabal, Jr. retired from the Board. Our records of Advisory Board meetings date back to 1937. John was a member of the Board at that first meeting of record held in Burns. He was continuously on the Board up to the time he resigned. This came about as the Jump Creek Sheep Company's grazing privileges were transferred to several individuals in the Jordan Valley area. John Archabal is highly respected by ranchers and BLM.

A well-known conservationist in the Vale District is transferring. Kenny Irons, who for the past few years handled soil and moisture work in the Central Resource Area, is moving to Idaho Falls District to go into lands and minerals examination work. Kenny will be missed by many folks in the Jordan Valley area who came to know him.

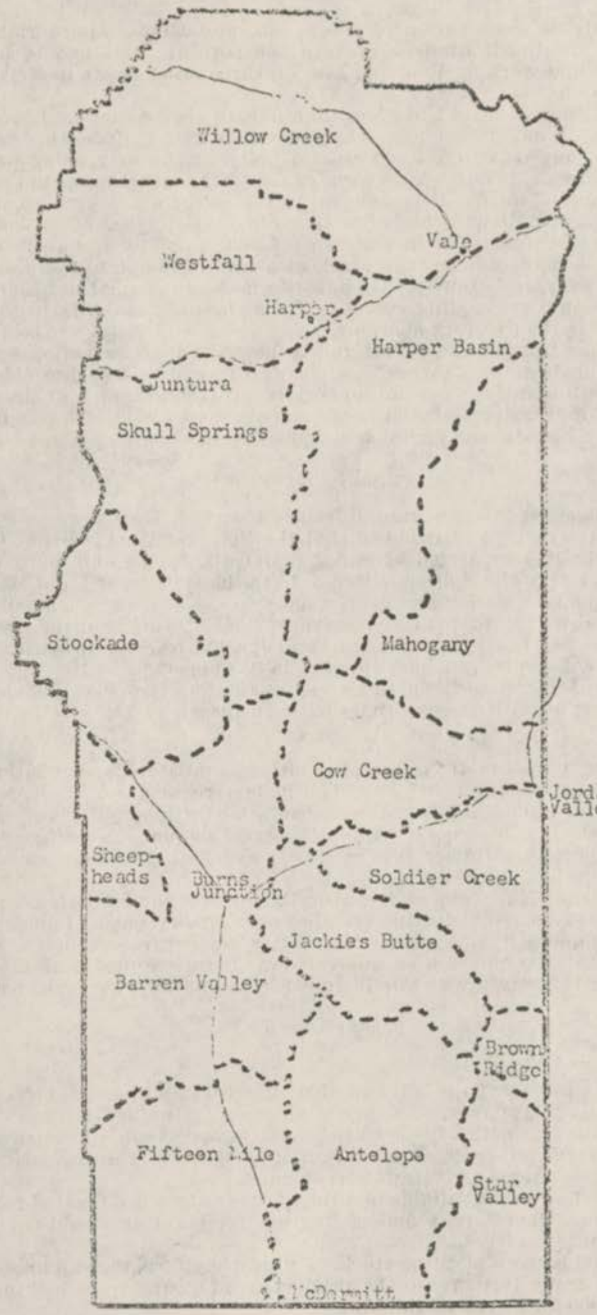
This report reflects Vale Project activities which are of most interest to you, range work and forage production. There are other objectives to the Vale Project. As a matter of fact, this project can scarcely be justified on the basis of forage production alone. The general public viewing this program expects more. Wherever the range is improved soil conditions and the watershed are improved. The lessening erosion and siltation are tangible benefits of the program. The Project is demonstrating on a large scale how this land can be improved and from this standpoint alone the Project is worthwhile. In the coming years the people will probably be taking a good look at what is happening here. This must be a multiple use program and we must show multiple use benefits.

We have not said anything in this report about the weather or outlook for this coming year. After last year a person is a darn fool to predict what's going to happen. We won't, but things sure look a lot better than they did at this time last year. Another thing, we hope this report does what it is intended to do, bring you up to date on what we are doing. I think that it factually presents what we are doing. It does not reflect the entire program, only those activities which we believe are of most interest to you.

Well, so long for now,

MAXWELL T. LIEURANCE,
District Manager.

VALE DISTRICT 1967


Willow Creek
Westfall
Vale
Harper
Harper Basin
Juntura
Skull Springs
Stockade
Mahogany
Cow Creek
Jordan Valley
Sheepheads
Burns Junction
Soldier Creek
Jackies Butte
Barren Valley
Brown Ridge
Fifteen Mile
Antelope
Star Valley
McDermitt

PROJECT RETURNS

It was with the cooperation of the Senate and House Appropriations Committees that additional funds were provided several years ago to launch this special rangeland work at Vale and also on three other areas in Nevada, Idaho and New Mexico.

The report shows that a little less than half of the seeding and brush control work is done. It points out that when the other half is done, this area will be able to carry upwards to 180,000 animal unit months of grazing or half this district's requirements on 16–20 percent of the total federal range in that district.

This program of intense development on the better acres, coupled with intensive management and wise use of native ranges is paying off in conservation benefits, in wildlife benefits, in watershed benefits and in livestock benefits.

Some of this range now carries stock at a rate of one acre to an animal unit month. The average is four or five acres to make an animal unit month. This project has been a resounding success. It has brought stability to the soil and thus, stability to the livestock operator.

One only has to read the report to see how these conservation projects enabled Vale ranchers to weather last year's drought to see the side benefits.

This is an illustrative case in support of my request to provide additional funds for soil and watershed, and range management funds. These funds would constitute wise investments paying handsome dividends.

FUNDING INCREASE

When I supported this program, initially, I agreed these were test programs. They have succeeded. I recommend that the Subcommittee increase this year's funds along the line suggested by Senator Metcalf, by me and many others.

Even more, I urge the Subcommittee to have the Bureau of Land Management instructed to make a dollar and cents report to Congress by September 1, 1967 on the potential for increasing its conservation work throughout the west. I urge that the Bureau of Land Management be instructed to come in with a realistic, overall conservation program next January in its budget.

The Vale project proves the need as well as the fact that it can be done. Now is the time to get on with conservation's basic business.

Timber thinnings and salvage

At this point, I wish to discuss the Bureau of Land Management's timber thinning and salvage program, briefly. The budget request for the coming fiscal year provides for 140 million board feet of additional timber offerings. I strongly support this program because it will start—and I emphasize *start*—an enlarged program of marketing timber previously wasted both in young stands and in older forests.

Bureau of Land Management Director Rasmussen earlier advised me of the extensive review he is conducting on allowable timber cuts. I understand he expects to complete it this year. Thus, this budget represents a good step forward, pending the outcome of this review. I urge approval of the increase of $560,000 for this work, which is included in the nationwide budget request of $7,646,000.

FOREST SERVICE

Reforestation and stand improvement

At present cost level, I am advised that $1 million will treat 4,000 acres for reforesting plus 20,000 acres of pre-commercial thinnings with a resultant increase in timber growth of 6,500,000 board feet per year. At current timber prices, this investment is recaptured in four of five years. This demonstrates that good forestry practices constitute good economics.

I am also advised that available planting stock is already obligated for planned work in Oregon. Therefore, a budget increase for planting would not get additional acres planted to trees.

What we need is more planting stock. I urge, therefore, that an appropriation of $250,000 be made to increase the production of young trees looking toward 1969 and $750,000 for increased thinnings.

Roads and trails

Last year, Congress authorized, and the President approved, the Highway Act with a $170 million authorization for Forest Development Roads and Trails. The budget request will permit obligations totaling only $120 million. I urge that sufficient funds be provided so that the full $170 million can be obligated. I hope that the full authorization be released for obligation. We have been building up a big deficit in road-building on the National Forests. Due to a shortage of funds, many roads are built to inadequate standards. These inadequate standards are attributable in part, to the fact that most of the roads have to be built by timber operators as a condition of timber sale contracts. I have been told that 143,000 miles out of a total of 190,000 miles of existing roads need to be reconstructed. Many additional miles of new road are urgently needed in the future. Timber is becoming more costly to reach since it is in the more rugged and distant country. Also, recreation demands are increasing at a rapid rate. There is a need of greatly increased funding of these roads by the Government to provide a safe and economical road system.

The report of the Senate Public Works Committee last year did an excellent job of stating the case for increased forest road funds as it increased the authorization to the current $170 million.

I can assure the Subcommittee that the best way to save money here is to appropriate the full authorization, or a major portion thereof.

During fiscal 1966, the Forest Service reduced the price of its timber by approximately $55.7 million for road construction which timber purchasers must build. The Forest Service estimates that for fiscal 1967 this price reduction will reach a total of $73 million. This reduces payments to the Treasury. It also reduces payments to local counties for schools and roads because they obtain less by way of Forest Service lieu payments. When timber purchasers have to build the roads they must appropriately temper their bids to reflect uncertainties in road construction and delays in logging the timber. Delays in logging may confront the timber purchaser with market price reductions.

Smaller firms often cannot properly compete for sales where there are large road costs. This means lost revenue to the Federal Treasury.

Recently, the General Accounting Office criticized both the Forest Service and the Bureau of Land Management in several aspects of their timber pricing and bidding. In my view, part of the situation, and a significant part, can be cured by constructing roads to timber sales in advance of the letting of the timber bids.

Currently, the Bureau of the Budget is reported to be reviewing timber pricing and bidding. I am disappointed that when they reviewed the budget for 1968 they missed this opportunity to improve Federal and County revenues and the competitive opportunity for timber firms. I urge a $50 million increase in obligational authority for the Forest Service, or at least a substantial increase in the present authority, with special instructions to increase the use of road contracts in areas of heavy timber demand.

Timber management

There has been a great deal of discussion in Oregon over whether the Forest Service and the Bureau of Land Management are meeting all of their timber selling opportunities.

LETTER OF PACIFIC NORTHWEST REGIONAL FORESTER

I have just received, and consider pertinent enough to ask inclusion in the record, a letter dated March 10, 1967 and attachment addressed to me by the Regional Forester in the Pacific Northwest Region of the Forest Service.

Inasmuch as the Oregon Legislature apparently construes its role to include informing the Congress of the United States, via a proposed Memorial, on the management of the national forests and in view of the Regional Forester's position that, "Many statements in the Memorial are not factually supportable," I take this opportunity to assure that the views of the Forest Service are available to you. I ask that this material also be included in the record relative to this hearing.

As this Subcommittee knows, I have never hesitated to criticize the Forest Service when I thought it was due them. However, and I am sure the Chief of the Forest Service will support me on this, I have always presented the allegations to him, obtained the facts and then advanced constructive solutions.

It is an unfortunate fact that the private timber in Oregon has been heavily liquidated, and thus there is an increased dependence on public timber stocks.

It is even more unfortunate that some people in my state, fortunately a minority, support increased timber sales and upping allowable cuts by questionable devices, but pay little attention to seeking funds for the basics of good forestry—reforestation and stand improvement and roads. Unfortunately, the budgetary councils of the Executive have also been neglectful on funds for these forestry basics.

The Committees on Appropriations have demonstrated again and again their understanding and their constructive interests in forest conservation.

Therefore, I hope that this Subcommittee will not be misled into thinking that the rank and file of active conservationists in the State of Oregon do not understand and appreciate the leadership this Congress has provided in authorizations and funds.

(The letter follows:)

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE, PACIFIC NORTHWEST REGION,
Portland, Oreg., March 10, 1967.

Hon. WAYNE L. MORSE,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MORSE: On March 8 a hearing was held in Salem concerning Senate Joint Memorial No. 2 as proposed by the Senate Committee on Natural Resources. The Forest Service was requested to testify at this hearing.

To keep you informed, I am enclosing a copy of my letter to State Senator Vernon Cook which is the statement that I presented at the hearing. Should you have any questions about my statement I would be happy to hear from you.

Sincerely yours,

J. HERBERT STONE,
Regional Forester.

DEPARTMENT OF AGRICULTURE,
FOREST SERVICE, PACIFIC NORTHWEST REGION,
Portland, Oreg., March 7, 1967.

Hon. VERNON COOK,
Chairman, Senate Natural Resources Committee,
Salem, Oreg.

DEAR MR. COOK: The interest your Committee is taking on the status of forest resources on public lands in the State of Oregon is commendable. Since the forest products industry is the prime industry in the State, it is most appropriate that your Committee be vitally concerned about its economic health. The public land forest resources are now serving and must continue in perpetuity to serve a vital role in furnishing the raw material needed to sustain a prosperous forest products industry, along with other important resources and services inseparably associated with these forests. Your Committee, I am sure, desires that the highest level of management that is practical be applied to the federal forest lands so that these lands will make their maximum contribution to the public welfare. Such an objective is fully compatible with Forest Service objectives in the management of the National Forests.

I want to believe that Senate Joint Memorial #2 is intended to be an objective statement for the express purpose of informing the President and the Congress of the United States of the importance of the federal forests to Oregon's economy and the need to provide a high level of management to these lands. As drafted, I do not think the Memorial serves this purpose. Many statements in the Memorial are not factually supportable. To a reader it conveys a tone of criticism, and is largely negative in that it gives no recognition of past progress or to programs under way.

The following discussion of points in the Memorial are called to your attention:

Page 2, lines 10 to 18: It is stated that Oregon is largely dependent on the federal forests, since they support about three-fourths of the state's standing commercial timber. Although this is true as to present timber volumes, the statement overlooks the fact that 61 percent of the commercial forest land, and less than 50 percent of the productive capacity of the forest land in Oregon is federally owned. The federal forests should not be expected to bear more than its sustained productive capacity in the long run.

Page 2, lines 19 to 23 and Page 3, lines 1 to 3: These statements are grossly exaggerated. According to "Timber Resource Statistics for the Pacific Northwest," PNW #9, the annual mortality for the entire state's commercial forest land was 4.1 billion board feet, International rule. A review of the inventories for National Forest Working Circles shows there is an annual inventoried mortality of 725 million board feet, Scribner scale. Converting National Forest mortality to International rule brings the 725 million up to about 910 million board feet. Thus mortality on the National Forests is less than 25 percent of the state total, and considering that they contain 55 percent of the sawtimber volume in the state, it is hard to understand the Memorial statement that "the salvage of dead and dying timber is far below levels achieved on other forest lands under expert management in this state." A substantial amount of mortality loss is harvested. It is our objective to currently salvage all economically merchantable and accessible material. We do not keep precise statistics of the volume of salvage harvested. In FY 1966 we estimated that 144 million feet of dead and down timber, and 212 million feet of cull material was harvested. All of the salvage material occurring in regular harvest areas is of course removed with the green timber and is a part of the calculated allowable cut. In FY 1966, 484,676 acres were cut on a salvage basis, and we made 242 sales of solely salvage type material. Some of the mortality occurs in material of sizes that is not presently marketable, and other is found in unroaded areas or on steep terrain not susceptible to salvage logging. There is an opportunity for more salvage harvest from the National Forests, but it is not accurate to say that the Forest Service salvage program is "far below levels achieved on other lands."

Page 3, lines 4 and 5: The statement is made that "Programs of thinning on the federal forests lag materially behind the programs on other forest lands under expert management." There may be a few properties in Oregon where a thinning program is applied at a higher level than on the National Forests, but these properties would only represent a fraction of the nonfederal land in Oregon. Without qualifying clarification, the Memorial can be interpreted to reflect that all nonfederal land in Oregon is under "expert management." This is not so. The present language distorts the picture.

In FY 1966 we thinned, released, or weeded 58,221 acres of young unmerchantable timber stands on National Forests in Oregon at a cost of about $1,860,000.

The intensity of management on the Siuslaw National Forest equals or exceeds that of any other owner group for a large administrative unit. On this Forest over 7,000 acres and 100 million board feet per year are being thinned from sawtimber-size stands.

No other owner category in Oregon and Washington has maintained the high proportion of satisfactorily stocked commercial forest land as is found on the National Forests. The Pacific Northwest Experiment Station's 1966 study for Bonneville Power Administration entitled "Pacific Northwest Economic Base Study for Power Markets" shows that on farm lands and miscellaneous private lands, 52.6 percent are unsatisfactory or nonstocked, 40.0 percent of industrial ownerships, and nearly 32 percent of other public ownerships are unsatisfactorily stocked. Only 18 percent of National Forests are in this category.

No other owner category in Oregon has kept hardwood encroachment to the low level found on the National Forests. Based on inventory volumes, the Pacific Northwest Experiment Station's report entitled "Timber Resource Statistics for the Pacific Northwest" shows that farmers and miscellaneous private owners have 22.3 percent of hardwoods, industrial owners 7.2 percent, other public 8.1 percent, while on the National Forests only 2.2 percent of inventory is in hardwoods. In 1933 there were 400,000 plus acres of hardwood types in western Oregon. Today there are 2,457,000 acres. In other words, about 69,000 acres per year, on the average have been converted from highly productive conifer sites to species which grow at only about one-fourth the growth rate of conifers.

It is inaccurate to reflect that the National Forest management program is lagging behind that on other lands in Oregon. However, there is opportunity to step up the thinning program.

Page 4, lines 20-24: It is implied that the Forest Service is only now revaluating the productive capacity of National Forest land. We have had a continuous program for several decades of studying our allowable annual cuts. Each working circle is inventoried every ten years. Following the inventory a new allowable cut is determined to reflect changes such as growing stock volume, growth rates, regeneration period, current timber utilization practices, and other factors that have a bearing on allowable cut. With 36 working circles in the Region, an average of three and one-half working circles are studied annually at a cost of approximately $300,000. Under this program the stated allowable annual cut in Oregon has increased from 2.4 billion to 2.9 billion board feet in the past seven years. This represents a 20 percent increase.

Early in 1966 we undertook, in cooperation with the Pacific Northwest Forest and Range Experiment Station, a study to improve the methods, procedures, and systems used in timber management planning. This study called "TIMADS" is employing the latest management and decision making methods (operations research, systems analysis, industrial dynamics, and econometrics) to develop computer programs to aid in decision making. Already a computer program has been perfected to perform the "area-volume" check of allowable cut calculations. The computer can do this task in seconds compared to the former tedious hand calculations. The most valuable result expected from the TIMADS project is that many more management alternatives can be rapidly examined in detail.

At the request of the Secretary of Agriculture last July, we are undertaking a special study of alternative harvesting and timber management programs for the National Forests of the Douglas-fir region. The purpose of this study is to examine, evaluate, and report on the economic, technical, and social feasibility of alternative programs. When completed the study will show the benefits, costs, advantages, and disadvantages of each of some 19 alternatives being studied.

Page 4, lines 25 and 26, and Page 5, lines 1 to 4: The Forest Service has made valuable use of advisory councils for several years. Each administrative unit above the ranger level has an active advisory council with members representing the broad public interest. The timber study has been presented and discussed with the Regional Advisory Council. It is suggested that this special study now under way in the Douglas-fir region be expanded to include the forests of Eastern Oregon. The study was undertaken in the Douglas-fir region because this is the area of the greatest imbalance between industrial capacity and timber supply. This imbalance is reflected by the intense competition for public timber on the west side as contrasted to the east side. In CY 1966 the bid ratio (the ratio of bids to appraised price) was 1.91 in the Douglas-fir region and 1.49 in the pine region. Likewise, purchasers on the west side overbid appraised prices by a weighted average of $18.12 per thousand board feet, as contrasted to a $5.22 overbid on the east side. Contrasting conditions between the pine and fir forests make it illogical to include both in the same study. The logistics of studying all the west side forests at once are staggering. To attempt to concurrently undertake a similar study on the east side is impractical and uneconomic.

This concludes my comments on Memorial #2. I welcome the assistance of your legislative body to help obtain the resources needed to accelerate intensive management practices on the National Forests of Oregon, but the Memorial as now drafted is of questionable value in accomplishing this objective.

You asked me in your February 15 letter to discuss six specific questions. The following comments are given in numerical order:

1. *Salvage and thinning programs:* There is the mistaken concept that a sharp line separates the regulated allowable cut portion of the total timber harvesting program from other parts such as salvage and thinning. Actually, the practical aspects of timber management require the integration of several categories of material into the regulated allowable cut. For example, since 1962, salvage types of material are a part of the regulated allowable cut when harvested from currently scheduled regulated cutting areas. Such salvage has increase both the allowable and the actual cuts. On the other hand, in some situations saw log material such as lodgepole may be unregulated. Likewise thinnings are sometimes regulated and in other circumstances unregulated. There are variations between forests as to the class of material included in the allowable cut because of differences in marketability, accessibility, multiple-use considerations, and the currency of plans.

Recently, and particularly since early in 1965, undue emphasis has been given to unregulated material. There is no magic in such pigeon holes for segments of the total timber supply. These are management conventions for the practicing foresters' use in administering the forest resource.

The Forest Service policy has been to include in the timber harvest program, to the full extent that funds are available and material can be harvested under sound public management principles, the maximum volume that operators can economically utilize, regardless of regulated status. From two to two and one-half years of allowable cut volume is under contract on a continuing basis.

Less emphasis should be placed on fringe areas such as unregulated material and more on the positive management programs in progress. The actual total harvest has climbed from 2.4 billion board feet in 1960 to 3.8 billion board feet in 1965. The 3.8 billion board foot harvest is 31 percent above the regulated allowable cut of 2.9 billion.

Actual harvest of both regulated and unregulated timber by calendar years since 1960 has been:

[In billion board feet]

1960	2.4
1961	2.6
1962	3.0
1963	3.3
1964	3.4
1965	3.8
1966	3.3

As a bookkeeping item, the unregulated cut has progressively increased from 59 million board feet for calendar year 1960 to 312 million in 1965. This volume includes both merchantable volume from nonchargeable salvage and thinnings as well as substandard timber that does not meet required utilization standards. Because of the slump in the last half of the year, the cut in 1966 will probably be about the same as 1965 or slightly lower

The enclosed graph shows the relationship between the regulated cut, the programmed cut, the actual cut, and the volume sold from 1960 to 1966 for western Oregon, where the supply problems have been most critical. The high volume sold in 1963 resulted from the October 12, 1962, windstorm. The graph shows a continued increase in the programmed cut and, since 1961, the actual cuts substantially exceeding the programmed cuts. Starting in FY 1966 we recognized increased opportunities, because of improved market conditions, for selling additional salvage and thinning material. We requested supplemental financing for this program. By program adjustment some funds were received late in the fiscal year. For FY 1967 we asked for funds to cover a regular timber program in Oregon of selling 3.147 billion board feet, and cutting 3.727 billion. Included in the sell program was 58.9 million of unregulated volume. At the same time we submitted an additional unregulated program for 212.7 million board feet in Oregon. Although the programs were not financed separately, we are funded for the total program. Our current unregulated sell goal for FY 1967 is 276.6 million board feet.

2. *Salvage and thinning potential:* We do not precisely know the full potential, nor the cost, of a salvage, thinning, and intermediate cutting program. These are some of the answers we expect to come up with in the Douglas-fir Supply Study. Since some of these practices were not economically practical until the last couple of years, our older inventories and management plans do not give the detailed data necessary to make firm estimates. Our current program is based on the best judgment of on-the-ground foresters taking into consideration all factors available to them.

We roughly estimate that with complete roading and with intensive management on all National Forest land in Oregon, thinnings, salvage, and other available classes of timber can be expected to contribute additional timber yields by as much as 600 to 700 million board feet. However, this is a broad, long-range figure attainable in the somewhat distant future. Progress from current rates to ultimate levels will be gradually reached and only as we can apply the degree of management necessary. Without investments in high levels of management, such goals are only a dream. The fruits of intensive management cannot be borrowed; the fruits are only there to the extent that applied management justifies. The attainment of ultimate yields are first and foremost dependent on industry's ability to utilize the types and sizes of timber available and willingness to use proper harvesting techniques, and secondly, the public must be willing to make the required investments in roading, reforestation, and forest culture practices.

3. *Insect infestation problems:* Two serious insect infestations are developing in eastern Oregon. Both are the result of attacks by the mountain pine beetle (*Dendroctonus ponderosal* Hopk.). Intensity of each infestation is expected to increase unless some control is achieved.

One infestation is centered in the Blue Mountains area in northeastern Oregon. It includes portions of the Umatilla, Wallowa-Whitman, Malheur, and Ochoco National Forests. Beetles are attacking overstocked immature stands of 50–100 years old ponderosa pine. These stands need commercial and precommercial thinning to improve vigor and growth which will alleviate stand stress and thus reduce susceptibiilty to mountain pine beetle attack.

On these Forests this susceptible type covers 483,700 acres with a volume of two to four billion board feet. A similar situation exists on adjacent private lands.

A market does not now exist for this smaller pine material. It is expected commercial thinning of these young pine stands may be feasible within five to ten years. However, a critical situation exists on an area of 90,000 acres where we cannot wait for commercial opportunities before starting prevention and control action. We expect mortality on those 90,000 acres in excess of 100 million board feet within the next five years.

To reduce stand pressure these areas should be reduced from 60 to 70 percent of normal basal area, thus making available for commercial thinning sales a potential volume of about 200 million board feet just from the critical area. As a market develops, manpower and money will be needed for sales work.

Since commercial markets do not now exist we are requesting insect control and thinning funds of about three million dollars over the next five-year period for these areas to enhance growth potential as well as beetle-proofing. Insect control work will be limited to just a delaying action until the major job of thinning can be accomplished. For F.Y. 1967 we expect to spend about $60,000 on control work as a delaying action until these stands can be thinned.

On the other National Forests of Eastern Oregon there are 845,000 acres of susceptible pine stands in need of thinning, both commercial and precommercial, to avoid a potential beetle epidemic. We are hopeful that if we can make such small thinning material available, that industry will develop profitable methods for utilization; thus accomplishing a part of the needed thinning and insect control work through commercial sales as well as supplying industry with a heretofore untapped source of material.

The second major infestation has occurred in mature and overmature stands of lodgepole pine in the Klamath Basin. The National Forests involved in this area are the Deschutes, Fremont, and Winema. The infestation is also occurring on adjacent private lands.

Mountain pine beetle attacks in lodgepole pine vary somewhat from those in ponderosa pine. Susceptibility in lodgepole pine is largely a function of age and stand condition. Treatment in lodgepole requires scheduling of logging activity in mature and overmature stands. Direct control or individual tree treatment cannot be justified economically. The area of susceptible type within the National Forests of the Klamath Basin is 767,000 acres. This area supports a volume of about 2.5 billion board feet.

Current infestations are expected to result in cumulative mortality of 150 million board feet in the next five years unless an accelerated program of prevention and control is initiated. Ideally, the entire acreage of susceptible type in the Klamath Basin should be worked over, through a combination of partial cutting and clear-cutting, within the next 20 years to alleviate or prevent serious outbreaks. In order to accomplish this, an accelerated cutting program of at least 100 million board feet per year would be needed—at least within the foreseeable future.

The present level of lodgepole cutting on the National Forest lands of the Klamath Basin is about 30 million board feet per year. We are optimistic that if we offer additional volumes, industry will respond by accelerated plant expansion and new development. Accordingly, beginning next year, we are hopeful that we can offer for sale 100 million board feet of lodgepole pine worth about $300,000 in stumpage. If successful, this program will be continued as long as industry is able to absorb this material and the lodgepole stands need accelerated cutting to avoid potential mortality.

4. *Reforestation programs:* Since its inception 60 years ago, the Forest Service has led the way in Oregon in reforestation, demonstrating good husbandry of forest land for all to see. It still is leading the way. The Wind River Nursery

was established in 1910 to produce forest seedlings. Today it produces about 15 million two-year-old seedlings annually that are planted on National Forest lands in Oregon and Washington. Planting of deforested National Forest lands started in 1912 on Mt. Hebo in western Oregon. It is a continuing program on the National Forest lands in this state. Naturally, this program has had its ups and downs, but it has never stopped although it has encountered considerable opposition at times.

Twenty years ago the Forest Service was being subjected to considerable criticism in Oregon for spending good money to plant trees on recent cutover areas. Spokesmen for some segments of the forest industry and some county courts contended that instead of planting we should give nature time enough and she would take care of the job. Time seems to have changed this opinion. The major question now seems to be whether the Forest Service is reforesting fast enough. I agree that an accelerated program would be desirable.

Now as to the record of what has been accomplished and what needs to be done. We can best understand this if we consider it under two broad categories: (1) reforesting areas that have been deforested by timber harvest, and (2) reforesting areas that have been deforested by wildfire. Our major tree planting and seeding job each year is the recurrent one of reforesting timber harvest areas where needed. As an illustration: In FY 1966 we planted or seeded about 46,000 acres of National Forest land in Oregon. About 37,000 acres were on recently clearcut timber sale areas. The remaining 9,000 acres were mostly on areas that had been deforested by wildfire, some recent but mostly in years long past.

In FY 1966, timber sale cutting had been done on some 848,000 acres of National Forest land in Oregon. This total included all types of cuttings—salvage, thinning, partial harvest cutting, and clear-cutting. Only about six percent of the total area cut, or some 48,000 acres, had been clearcut. It was in this same period that we planted or seeded the 37,000 acres of clearcut lands. The remaining 11,000 acres of clearcut included lands that had satisfactory natural reforestation or were expected to reforest naturally. Our policy and practice is to promptly reforest timber harvest areas that need planting or seeding. Fortunately, Congress has provided the Forest Service with authority to finance this work out of timber sale stumpage. This authority was included in the Knutson-Vandenberg Act of 1930. It is limited to reforesting and doing timber stand improvement work on timber sale areas cut over.

We do not have similar authority to use timber sale receipts to work on other deforested areas. Work on other than timber sale areas is financed directly by Congressional appropriation. An item of "Reforestation and Timber Stand Improvement" is included in the budget for National Forest Protection and Management. In FY 1966 the portion of this item allocated to the Pacific Northwest Region was $2,115,200. About 65 percent of this was spent on the National Forests in Oregon.

Your letter asked for information on accomplishments dating from the 1950's and current needs. Acreage accomplishments for the last 12 years and total to date by source of funds are shown on the enclosed table.

You will note that progress in reforesting other than timber sale areas was very slow prior to F.Y. 1961. At that time a real start was made by Congress in financing the program for the National Forests. Some may recall that this was a 10-year work program presented to Congress in 1959 by President Eisenhower and resubmitted in 1961 by President Kennedy. It was designed to bring the National Forests into a high state of productivity. When data for this program was put together some years previously, we estimated, based on earlier extensive surveys, that there were some 487,000 acres needing reforestation in the National Forests of Oregon.

As we were able to move into an accelerated reforestation program, our field personnel made a detailed survey of each deforested area. They found that most of the area previously classed as deforested was stocked with enough small trees that planting was no longer justified. In many cases the conifer trees were over-areas were eliminated from the backlog of areas needing reforestation, since they topped by brush and would need release to grow into a productive forest. Other areas were eliminated from the backlog of areas needing reforestation, since they were found to be too sterile or rocky to justify the expense. The net area found in need of reforestation in 1965 was 138,500 acres. At current rate of progress it will take about 15 years to reforest this backlog. It would be desirable if the financing for this work could be stepped up to at least double the current rate.

The National Forests of Oregon also support three-fourths of a million acres of young stands in need of precommercial thinning for optimum timber production.

5. *Relation of reforestation to allowable cut:* You asked for my comments on the relation of the reforestation program to timber offering.

As explained earlier the allowable annual cut is based on what the resource base will support on a sustained basis. Deforested land doesn't contribute anything to the allowable cut. Productive land contributes in proportion to its site, type, stocking, and age class. Each acre reforested adds to the base and is reflected in an increase in the annual allowable cut at the next recalculation. The amount or contribution may vary from about 200 board feet per acre per year to upwards of 1,000 board feet for the best sites. Thus, assuming an average annual growth of 500 board feet, a cost of reforesting of $100.00 per acre, and average stumpage value of $20/MBF, the investment in reforestation is liquidated in 10 years.

Further investments in reforestation, in release of overtopped trees, in precommercial thinning, and in other aspects of forest tending, will pay off in increased allowable cuts and timber harvest.

6. *Douglas-fir Supply Study:* As stated earlier, we do not believe it would be advisable to extend the Douglas-fir timber supply study to Eastern Oregon at this time. It would delay by several months the study on the west side, where a much greater demand for raw material by industry exists.

There is no precedent for a study of this kind. There is a tremendous amount of detailed planning, fact finding, searching for, and assembling supporting data, and other preparatory work which is extremely time consuming and must necessarily precede an evaluation of the situation. Study outlines and detailed work plans must be prepared before such a study can start. This phase alone required many months for the Douglas-fir Supply Study. Any change in area would seriously delay completion of the present Douglas-fir Supply Study. We agree that eventually such a study should probably be expanded to all forests in Region Six, or perhaps to other regions if it is found to be worthwhile.

The Forest Service views the study as a means for developing principles and techniques for application to other regions and possibly the entire National Forest system.

We see no advantages in having direct participation by outside groups at this time. Until a study procedure is developed and meaningful data assembled, such participation could only hinder orderly progress. When the study has been completed, outside groups and all interested people will have ample opportunity to review it and offer comment.

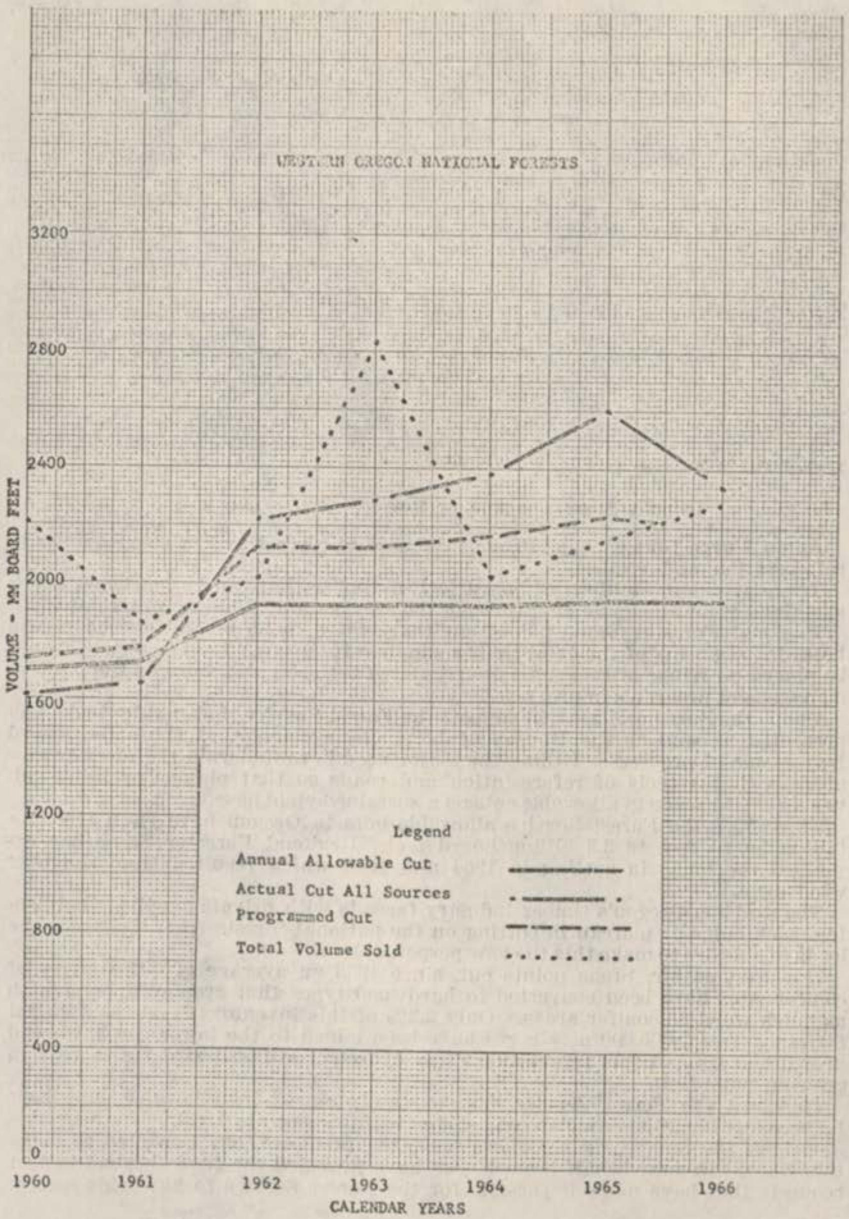
The fact that the Douglas-fir Supply Study is under way has been given wide publicity in the news media. Interested individual foresters and representatives of industry groups have inquired about and discussed the study outline with the Division of Timber Management staff members. The Region Six Forest Service Advisory Council has been given detailed information at regular meetings, and has had opportunities to present pertinent recommendations. This group consists of 15 highly respected and responsible people representing a broad spectrum of strong public interest in the National Forests and includes several members from the industry.

On December 12, 1966, a detailed description of the project was made to the Portland Chapter of the Society of American Foresters. The Society of American Foresters includes foresters from all fields—industry; education; federal, state, and local governments; and many independent forestry consultants. The SAF is to forestry as the AMA is to the medical profession.

The Douglas-fir Supply Study is a detailed study of comparative costs and returns of 19 alternative courses of action to increase timber supplies from the National Forests of the Douglas-fir region. The study will consider the prospective inputs and outputs by decades over the next 80 years, and the expected stand structure, growth rates, and sustained yield capacity at the end of that period. Included in the variables are five different rotation periods, three levels of forestry practices, and three levels of road development. Evaluations will be made of the impacts of the various timber alternatives on other forest resource values, including recreation, wildlife, fisheries, soil, and water. Also, evaluation will be made of the effects on the regional and national economy. This is a brief synopsis of the study. I will be pleased to cover more details if you wish during our discussions.

Sincerely yours,

J. HERBERT STONE,
Regional Forester.


WESTERN OREGON NATIONAL FORESTS
VOLUME - MM BOARD FEET
3200
2800
2400
2000
1600
1200
800
400
0
1960
1961
1962
1963
1964
1965
1966
CALENDAR YEARS
Legend
Annual Allowable Cut
Actual Cut All Sources
Programmed Cut
Total Volume Sold

Acres of reforestation (planting and seeding combined) national forests in Oregon, by years

Years	Appropriated funds (P. & M. and other)	Stumpage funds (K-V)	Total
Previous years	[1] 37, 241	45, 035	82, 276
1955	790	11, 639	12, 429
1956	1, 345	12, 243	13, 588
1957	1, 128	19, 182	20, 310
1958	1, 248	16, 362	17, 610
1959	2, 208	24, 211	26, 419
1960	2, 199	33, 454	35, 653
1961	[2] 16, 177	32, 755	48, 932
1962	[2] 15, 037	30, 903	45, 940
1963	9, 996	39, 192	49, 188
1964	10, 319	35, 060	45, 379
1965	9, 302	31, 886	41, 188
1966	8, 305	37, 408	45, 713
Total	115, 295	369, 330	484, 625

[1] Mostly accomplished by CCC and other emergency programs during 1930's and early 1940's.

[2] The high P. & M. accomplishment in 1961 and 1962 included reforesting of the large burns of the 1959-60 years, mostly by aerial seeding.

BUDGET SHORTCOMINGS IN REFORESTATION AND ROADS

Again I urge your consideration of the need to correct budget shortcomings in reforestation and roads.

There are many millions of board feet of timber that can be marketed under sustained yield allowable cuts through the salvage and thinning programs.

Regional Forester Stone points out that "there is no magic in such pigeon holes for segments of the total timber supply. He urges, "Less emphasis should be placed on fringe areas such as unregulated material and more on the positive management programs in progress."

I hope the Subcommittee will support the Forest Service timber sales budget as presented as well as the Bureau of Land Management's. I think the record here is one of progress. I think the major need is to underpin the forestry program with the tools of reforestation and roads so that planned, sensible advances can be made in allowable cuts on a sustained yield base.

Since 1960 the Forest Service allowable cuts in Oregon have risen from 2.4 billion board feet to 3.3 billion board feet. Regional Forester Stone has explained the bulge in cutting in 1964 and 1965 which resulted from the 1962 windstorm.

The problem Oregon's timber industry faces is with private supplies diminishing, each bulge or plateau in cutting on the national forests from a catastrophe leads to a desire to make this the new perpetual level.

However, as Mr. Stone points out, since 1933 an average of 69,000 acres of conifer sites have been converted to hardwood types that grow only one-fourth as much wood as conifer areas. Only 2.2% of this inventory is on the national forests. Over 2,000,000 new acres have been added to the lower use hardwood growing areas and this represents a loss of over 1 billion board feet a year in growing potential.

However, the Forest Service has constantly raised its allowable cuts, kept its lands reasonably productive and stayed within sustained yield.

I think the Subcommittee knows what the facts are, but I wanted to make this Record in your behalf because you have provided the funds beyond budget requests that have made it possible for the Forest Service to have this record.

FORESTRY RESEARCH

The research program of the Forest Service is of paramount importance because it provides the means for protecting and increasing the yields of our Federal forests. It preserves and enhances an asset of enormous value to our nation.

I support the budget requests for Forestry Research, but I wish to emphasize that additional funds are needed immediately on these Oregon forest research projects.

(1) Bend, Oregon-Silviculture of Mixed Conifer Type

The forestry research at Bend deals with the silvicultural problems of the mixed conifer type. A modern forestry laboratory costing $231,000 was built at

Bend several years ago. Currently the staff consists of three scientists and three support personnel. The future research at this location will be concerned with developing management methods to sustain and improve the yield of conifers in the mixed conifer type including white fir, western larch, Englemann spruce, Douglas-fir, and lodgepole pine. To carry on research dealing with these tree species, the projected program provides for a staff of eight scientists and an equal number of support personnel. It is estimated that an additional $200,000 could be used to effectively support research on high priority problems.

With reference to this project, Robert W. Chandler, publisher of the *Bend Bulletin* has made these salient comments:

"I am once again writing in behalf of the programmed implementations of the U.S. Forest Service Silviculture Laboratory at Bend.

"As one interested in the economy of this section of Oregon, I am intrigued with the prospects of capturing the current $50 million per year gap between current and potential timber production on the 20 million acres of commercial land in eastern Oregon and eastern Washington—most of it in eastern Oregon.

"As a person with confidence in the future, I am fascinated with the possibilities that will come with new strains of trees, with application of chemical fertilizer and with development of ways to use wood wastes in the forest to enrich the soil.

"And, as a user of the forest landscape for personal enjoyment, I am aware of the magnitude of the recreation resource of our forests.

"In prospect, of all the opportunities for eastern Oregon to grow, none has greater potential than the one to intensively manage our forest lands. The vehicle for developing the scientifically sound management guidelines is the Bend-based silviculture project. But, the assignment to develop such guidelines for all categories of forest from prime timber lands to isolated wilderness areas is an impossible task for the present small staff of scientists.

"In elaborating on my personal points of view, I am mindful of your own interest and that of many other public and industry leaders who are familiar with the relationship of forest land resources to the development of eastern Oregon. Collectively, we must be successful this year in obtaining the necessary funds for getting on with the job of assuring maximum use of these lands."

The Western Wood Products Association, a very responsible timber organization of Oregon has adopted this resolution:

"Whereas, the current budget expenditure for the Forest Service Silviculture Laboratory at Bend, Oregon is $90,000 per year, and

"Whereas, the current program of the Laboratory is inadequate to serve the needs of the public and private timberlands located in Eastern Oregon and Eastern Washington, and

"Whereas, an adequately financed timber management research program promises to evolve land and timber management practices that promise the doubling of the current rate of timber production on public and private timberlands, and

"Whereas, current timber production on public and private timberlands is inadequate to meet the economic needs of the forest products industry based in Eastern Oregon and Eastern Washington.

"Now therefore be it resolved, that the Oregon and Washington Forest Practice Committees in joint session recommend that the Western Wood Products Association urge the Congress that the annual budget for the Bend Forest Service Silviculture Laboratory be increased. This is necessary to function effectively.

"Resolution adopted February 10, 1967."

(2) *La Grande-Range and Wildlife Habitat Laboratory*

At this location, the Forest Service research program places emphasis on problems relating to the improvement of wildlife habitat and livestock ranges. The scientists now doing research at La Grande are using space in an old hotel building which is to be demolished soon. In fiscal year 1967, Congress appropriated $28,000 to plan a modern laboratory. The plans for this laboratory will be completed in May 1967.

Funds for construction are not included in the fiscal year 1968 budget. A site for the proposed laboratory has been provided on the campus of Eastern Oregon College. Construction could begin in fiscal year 1968 if funds are appropriated. The estimated cost for construction of the laboratory is $350,000. An additional $100,000 is needed for a headhouse-greenhouse facility. I urge, most respectfully, the approval of this amount.

The Oregon Association of Soil and Water Conservation Districts supports the construction program for the La Grande Laboratory. Its President, Stanley R. Christensen, Jr., wrote to me on March 14, 1967 stating that the Association adopted a resolution to that effect last November. He added:

"The OACD has long advocated support and expansion of basic and applied research on soil, water, range and wildlife habitat relationships. This resolution pertains in particular to the laboratory facility needed for range and wildlife habitat research in the Pacific Northwest. The forest and range watersheds of Oregon are valuable grazing lands for livestock and game, and are also some of our most important water producing areas. The Forest Service now has a staff of eight scientists working on range and wildlife habitat problems at La Grande, Oregon, but their efforts are limited by inadequate research facilities.

"We wish to express our appreciation for your efforts in securing $28,000 planning funds for this laboratory last year. Our District Supervisors from Northeast Oregon had the opportunity to see the plans and model of the proposed building at their meeting in La Grande on February 28. We understand that the final plans will be completed by May 1, 1967.

"On behalf of OACD, I urgently request your consideration of this resolution and the appropriation of $350,000 for construction in fiscal year 1968."

The City Council of La Grande adopted a March 8 resolution supporting the request for construction funds. The resolution states:

"Whereas the United States Forest Service proposes to establish at La Grande on a site at Eastern Oregon College a Forest Service Research Laboratory for range and wildlife habitat, and

"Whereas planning therefor has been completed through the use of funds previously appropriated by the Congress and construction funds are needed to proceed with the project, and

"Whereas the construction and operation of said laboratory will be of inestimable benefit to the State of Oregon, Washington and Idaho, and particularly to the large portions of those states devoted to livestock range and wildlife. now, therefore,

"Be it hereby resolved by the City Commission of the City of La Grande, Oregon:

"That the City Manager of the City of La Grande be, and he is hereby, authorized and directed to advise the Members of Congress from Oregon of the interest of the City in the construction of said laboratory and the need for the appropriation of funds for construction, and to request those Members of Congress to make every effort to obtain an appropriation for construction of said laboratory immediately.

"Dated at La Grande, Oregon, this 8th Day of March, 1967."

(3) *Corvallis-Disease, Insect, and Genetics Programs*

The first stage of a research laboratory was completed at this location in 1963. Planning for a second stage was funded in 1967 and is progressing rapidly. The research program at Corvallis stresses fundamental biology and ecology of forest diseases and insects which are aimed at developing new methods of control. Closely related is research dealing with pesticide residues in forest soils and water. Research concerned with silviculture of coastal and mountain forests and breeding superior strains of Douglas-fir is centered here too. Small increases for the pest control and for the genetics research are provided for in the fiscal year 1968 budget. It is important that these research efforts be accelerated. A nationwide increase of $560,000 has been asked in the Forest Service genetic research program. The insect and disease research could use effectively an increase of $150,000 and the genetics research could be stepped up by $100,000, making the total increase $810,000. Such funding would make it possible to resolve some of the difficult problems confronting forest managers in the Northwest.

AERIAL LOGGING SYSTEMS

The fiscal year 1968 budget provides for an increase of approximately $90,000 to accelerate development of aerial logging systems. Such systems when fully developed should make it possible to harvest timber more economically. The limited research already underway has shown that aerial logging can possibly reduce by 50 percent the mileage of roads now required for timber harvest. In addition to the substantial savings in investment of roads, aerial logging in the Douglas-fir region could increase the timber harvest by over 500 million board feet from areas now considered inaccessible. To fully implement engineering research on aerial logging methods will require an increase of $500,000 annually. Such funding is needed to bring aerial logging into full operational use.

I thank the Subcommittee for its consideration of the items listed above which are of great importance to the resource development of Federally-owned lands in Oregon and other western states.

Summary—Interior and related agencies appropriations, fiscal 1968 (recommendations of Senator Wayne Morse)

BUREAU OF LAND MANAGEMENT

Program	Budget request, fiscal year 1968	Amount recommended by Senator Morse
Soil and watershed conservation	$14,072,000	$16,122,000
Timber thinnings and salvage in western Oregon—increase	560,000	560,000
FOREST SERVICE		
Reforestation and stand improvement	$17,640,000	$18,640,000
Roads and trails improvements	120,000,000	170,000,000
Forest research programs (Oregon):		
Bend Silviculture Laboratory—additional research	0	200,000
La Grande Range and Wildlife Habitat Laboratory	0	450,000
Corvallis Disease, Insect, and Genetics Laboratory—additional research	560,000	810,000
Aerial logging systems—additional research	90,000	500,000

East Glacier, Mont., Airport

LETTER OF SENATORS MANSFIELD AND METCALF

U.S. Senate,
Office of the Majority Leader,
Washington, D.C., March 7, 1967.

Hon. Carl Hayden,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

Dear Mr. Chairman: Late last year, P.L. 89-763 was enacted. It authorized an increase of $1,500,000 in the $2 million fund authorized previously for the National Park Service to help develop airports in or near National Parks and other recreation areas.

We cosponsored this legislation, which was aimed at a new airport near Glacier National Park. A new airport at East Glacier, Montana, will make a substantial contribution to Montana's expanding tourist economy, in addition to providing for emergency service and administrative needs of Federal agencies, including the Forest Service.

Although most of the land required is already in Federal ownership, there are some small parcels which should be acquired as soon as possible. There is no money in the budget request for fiscal 1968 for such purchase. We urge that you consider the addition of $45,000 for land acquisition and planning of the East Glacier airport to the construction budget of Glacier National Park.

Very truly yours,

Mike Mansfield,
U.S. Senator.
Lee Metcalf,
U.S. Senator.

LETTER FROM NATIONAL PARK SERVICE

Department of the Interior,
National Park Service,
Washington, D.C., March 10, 1967.

Hon. Carl Hayden,
U.S. Senate, Washington, D.C.

Dear Senator Hayden: In response to Mr. Eaton's letter of March 9, we are pleased to furnish information relating to the proposal to develop airport facilities in the vicinity of East Glacier, Montana, to serve Glacier National Park.

Enclosed are two copies of a briefing statement dealing generally with the subject of airport construction as it affects this Service. Detailed cost estimates of specific airport proposals are shown, including those for the East Glacier proposal. The proposed East Glacier airport is estimated to require a total of $1,345,687, including $40,000 for land acquisition. Remaining costs are estimated at $1,305,687, including costs of plans, surveys, and supervision of construction. An advance appropriation of $5,000 is an anticipated requirement for site surveys, preliminary construction plans, etc. Of the total costs, it is estimated that $707,368 would be chargeable to the National Park Service and $638,319 to the Federal Aviation Agency. If $45,000 were appropriated for the 1968 fiscal year, presumably the Service would require appropriation of the remaining $662,368 for the 1969 fiscal year. The FAA would be required to finance approximately $638,319 for the 1969 fiscal year. Generally speaking, the FAA contribution is approximately 50 percent of the total cost.

Our plans must conform to those of the FAA. The latter agency must determine the projected availability of their authorization for the State, and we are writing to them in this connection, with the request that they inform you directly in this matter.

The Montana Aeronautics Commission recently reaffirmed its intent to sponsor the East Glacier project, including the assumption of maintenance and operation responsibilities upon completion of construction.

The proposed East Glacier airport site is on the National Airport Plan, as required by the Act of March 18, 1950 (16 U.S.C. 7a). The Secretary of the Interior recommended the airport be developed when seeking approval of P.L. 89-763. The acquisition of land is authorized specifically by Section 2 of the Act of March 18, 1950.

Section 6(a)(1) of the Land and Water Conservation Fund Act of 1965 (P.L. 88-578) authorizes the use of those funds "* * * for the acquisition of land * * * *within* the exterior boundaries of areas of the National Park System * * *" (italic supplied). Accordingly direct appropriation to the Service from the general fund of the Treasury would be required for acquiring the privately owned lands needed for the East Glacier project lying outside the park boundaries. The Service formerly budgeted for land acquisition under the title "Construction," and provision for land acquisition was included in the wording of the appropriate text. If acquisition funds were added to the 1968 appropriation bill, as suggested by Senators Mansfield and Metcalf, it is believed the appropriation text should be revised to include the underscored portion of the wording as shown: "* * * and the acquisition of *land and* water rights * * *."

Sincerely yours,

A. CLARK STRATTON,
Acting Director.

DEPARTMENTAL STATEMENT

Section 1 of the act of March 18, 1950, authorized the Department of the Interior to participate in the development of airport projects in or in close proximity to National Parks, National Monuments, and National Recreation Areas, along with State or local agencies and the Federal Aviation Agency. As of October 31, 1966, of the $2,000,000 contained in the authorization, $1,695,000 had been allocated for the National Park Service share of four airports, leaving a balance of about $305,000 as follows:

1963 fiscal year—Tusayan Airport, Ariz. (Grand Canyon NP)	$880,000
1966 fiscal year—Supplemental interagency agreement for terminal building (Tusayan Airport)	30,000
1963 fiscal year—West Yellowstone Airport, Mont	735,000
1964 fiscal year—Wright Brothers National Memorial, N.C	45,000
1965 fiscal year—Grand Teton Airport, Jackson Hole, Wyo	5,000
Total appropriated	1,695,000
Balance	305,000
Total authorized	2,000,000

An amendment to the act of March 18, 1950, P.L. 89–763 approved November 5, 1966, authorizes an increase of $1,500,000 from $2,000,000 to $3,500,000. Specifically mentioned in the Departments' report on the bill were proposed projects at Grand Teton National Park, Wyoming, and Glacier National Park, Montana.

At Grand Teton (Jackson Hole Airport), a 1965 FY appropriation of $5,000 provided for initial planning necessary to prepare a preliminary proposal. The total cost of this project is now estimated at aproximately $1,178,365 of which $539,744 would be borne by the National Park Service. It is expected that the balance will be contributed by the Federal Aviation Agency. It is expected that Teton County and the City of Jackson Hole, Wyoming, will pay the costs of operating and maintaining the airport.

At East Glacier, Montana, the construction of an airport facility is estimated at $1,345,687, of which about $707,368 would be contributed by the National Park Service. This will provide for use by feederline commercial aircraft and for emergency operations and administrative needs of the National Park Service, the Forest Service, and other Federal agencies.

Another project proposal of long standing and having high priority, is the Everglades City Airport, adjacent to Everglades National Park. The facility as proposed by Collier County, Florida, would require a construction amount of about $205,000, of which the National Park Service's contribution of $57,000 is included in the 1968 fiscal year program.

At Glen Canyon National Recreation Area, the Page Airport is operated by the Bureau of Reclamation. Bonanza Airlines is replacing its present fleet of jet-prop aircraft with the Douglas DC–9. This plane requires a minimum runway length of 5,000 feet at sea level, which is 500 feet longer than the present runway at Page. The FAA estimates $330,000 will be required for improvements to serve the new type plane, 61 percent of this cost to be provided by FAA. The Service has included $68,500 in the 1968 fiscal year program to provide its portion of this cost.

Balance, previous authorization	$305, 000
1968 fiscal year—Page Airport, Ariz. (Glen Canyon NRA)	68, 500
1968 fiscal year—Everglades City Airport, Fla. (Everglades NP)	57, 000
Subtotal	125, 500
Remaining balance	179, 500
New authorization	1, 500, 000
New balance	1, 679, 500
Current proposals not budgeted:[1]	
Jackson Hole Airport	539, 744
East Glacier Airport	707, 368
Subtotal	1, 247, 112
Free balance	432, 388

[1] Other proposals, estimated NPS costs and areas to be served are for Big Bend National Park, Tex. ($256,438); Yellowstone National Park (Gardiner, Mont.) ($117,858); Glen Canyon National Recreational Area, Ariz. and Utah (Halls Crossing, Utah, no estimate); Fort Vancouver National Historic Site, Wash. (no estimate); and Crater Lake National Park, Wash. (Diamond Lake, no estimate).

LETTER FROM FEDERAL AVIATION AGENCY

MARCH 20, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Mr. A. Clark Stratton, Acting Director of the Department of the Interior, National Park Service, wrote you on March 10, 1967, about this Agency replying directly to you on the matter of an airport facility in the vicinity of East Glacier, Montana.

The proposed program of the National Park Service would conform to program scheduling of this Agency considering the projected availability of appropriations under the Federal Airport Act. Public Law 89–647, approved October 13, 1966, amended the Act by authorizing appropriations of $75 million for each Fiscal Year 1968, 1969, and 1970.

Although we have this authorization we are not in a position to make an advance commitment of these funds for any specific project until an appropriation is approved and an annual program formulated. The program is prepared on the basis of requests filed each year by sponsoring agencies. Because these requests exceed many times the funding available, each project is carefully evaluated to assure that the most urgent requirements of the national airport system are taken care of.

It is true, as Mr. Stratton mentioned to you, that the East Glacier Airport site is in the National Airport Plan. The Agency, therefore, does recognize the requirement of the airport and will certainly give careful consideration to any request filed by the Montana Aeronautics Commission under the anticipated 1969 Program.

The funds apportioned for use in the State of Montana have in past years been sufficient to meet its aviation needs. In fact, the State is historically a "low use" apportionment State where sponsor requests seldom evidence a need for the full amount apportioned to the State under the provisions of the Act.

Sincerely yours,

William M. Flener
(For Chester G. Bowers,
Director, Airports Service).

Forest Service Laboratory, Delaware, Ohio

LETTER OF SENATOR LAUSCHE

United States Senate,
Washington, D.C., March 17, 1967.

Hon. Carl Hayden,
Chairman, Senate Appropriations Committee,
Washington, D.C.

Dear Senator Hayden: I am fully cognizant of the fact that for economy reasons, the Bureau of the Budget necessarily did not include for funding for fiscal 1968 many worthwhile public works and other Federal projects. In the interests of economy, I have no quarrel with the action of the Bureau of the Budget. Should your Committee, however, during its deliberations take action to fund projects not recommended by the Bureau of the Budget, it is only fair that the Committee consider very important unfunded projects in Ohio.

I refer, in particular, to the Forest Insect and Disease Research Laboratory, Forest Service, U.S. Department of Agriculture, located at Delaware, Ohio.

In the spring of 1966, Congress appropriated $72,000 for fiscal year 1967 to prepare architectural and engineering plans for an expansion of the Forest Service Insect and Disease Research Laboratory at Delaware, Ohio. This appropriation was recommended by the House and Senate Subcommittee on Appropriations for the Department of Interior and Related Agencies. The plans authorized will be completed late in 1967. Thus, construction contracts can be let during fiscal year 1968 or as soon thereafter as funds become available.

Firm estimates of construction costs have been made; $950,000 will be required for the additional laboratories and supporting facilities now being planned.

The Forest Service, as authorized by the Congress, constructed the existing Delaware Laboratory during 1959–1960. This Laboratory was designed specifically for research leading to new and improved methods of controlling serious forest and shade tree insects and forest tree diseases. When constructed and occupied, the facility was adequate for the research program and staff assigned to it.

Subsequently, public interest increased sharply in better control methods for forest and shade tree pests, especially in nonchemical methods. In response, the Congress authorized pest control research program increases. A part of these increases was allotted to the Delaware Laboratory. This resulted in serious overcrowding, inefficient use of scientists, makeshift laboratories in trailers and temporary buildings, and inability to install and use the most modern scientific instruments for intensive research. In fact, some promising new research attacks cannot be followed without the facilities being planned because they involve the use of chemical and physical materials that endanger other research as well as the scientists themselves.

To provide for more rapid and effective application of research discoveries, the Forest Service recently located a Pest Control Zone Office at the Delaware Laboratory. The expansion being planned includes offices, laboratories and other facilities needed by this group of technical specialists to obtain prompt application of control systems developed by research.

The existing laboratory with the planned expansion, provides for research on some of the most serious pests of our forest and shade trees in the eastern United States. For example, responsibility for all Forest Service research on control of oak wilt is assigned here. This disease is potentially one of the most serious tree diseases in our Nation. It is a constant threat to the oak forests that make up approximately one-half of the forest cover in the eastern United States. Furthermore, the Delaware Laboratory is headquarters for research leading to control of the Dutch elm disease. This disease has already wiped out many of the beautiful elms that graced the streets of our cities and it is constantly spreading over the eastern United States. Scientists at the Delaware Laboratory have developed a control system that will hold losses to a few percent per year. However, the methods are costly, difficult to apply, and are not entirely effective. New research in progress promises to provide sharp improvements and eventually eliminate the havoc wrought by this disease. Thus, the work at the Laboratory is contributing significantly to individuals, communities, industries, and forest landowners throughout the eastern United States.

Construction of the Laboratory addition being planned will increase the number of contributions now being made as well as make them available at a more rapid pace.

Sincerely yours,

FRANK J. LAUSCHE.

MARINE GAME FISH RESEARCH LABORATORY, PORT ARANSAS, TEX.

LETTER OF SENATOR YARBOROUGH

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
March 16, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Appropriations Subcommittee, Committee on Appropriations, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I wish to recommend for favorable consideration by your Committee a FY 1968 appropriation of $200,000 for continuing construction of the Marine Game Fish Research Laboratory at Port Aransas, Texas. Planning and construction of this facility has been undertaken under auspices of the Bureau of Sport Fisheries and Wildlife of the Interior Department. This project was initially funded for FY 1966 with an appropriation of $100,000 and for FY 1967 with an appropriation of $198,000. These appropriations, which represent 20% of the total estimated cost of this project, have allowed planning and site preparation to proceed in an orderly fashion.

There are several compelling reasons for approval of this requested $200,000 appropriation at this time. (1) The proposed facility will conduct research which is of inestimable value to approximately 1.5 million salt water sports fishermen who use the Gulf of Mexico coastal waters. (2) The $398,000 already appropriated has allowed preparations to proceed to the point of construction. Failure to provide the requested $200,000 at this point may jeopardize work already completed and would certainly undermine what has been a carefully planned project about to enter its most critical construction phase.

It seems to me that having committed considerable public funds to this project already, we should proceed to its completion. I hope that your Subcommittee will find it possible to add this appropriation to the Interior Department Appropriation bill.

With best wishes,

Sincerely yours,

RALPH W. YARBOROUGH.

CONCLUSION OF HEARINGS

Chairman HAYDEN. The hearings on the appropriation bill for the Department of the Interior and related agencies are concluded; and we will now adjourn, subject to call of the Chair.

(Whereupon, at 11:10 a.m., Tuesday, March 21, 1967, the hearings were concluded and the subcommittee was recessed subject to the call of the Chair.)

ADDITIONAL MATERIAL FOR THE RECORD

Clerk's statement: Pursuant to directions received from the chairman of the subcommittee the following material will be printed in the record.

BUREAU OF LAND MANAGEMENT

LETTER FROM SENATOR MCGOVERN

APRIL 3, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Appropriations Subcommittee, Senate Appropriations Committee, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I am enclosing four documents which Senator Clinton P. Anderson and I would appreciate your putting before your subcommittee. They constitute a request to include in the appropriations of the Bureau of Land Management, for management of lands and resources, the sum of $730,000 to permit the initiation of a much needed research effort.

The documents enclosed include a statement which Senator Anderson had prepared for presentation to your subcommittee and an exchange of correspondence between him and the Bureau of Land Management in regard to their research needs. The latter includes a letter written to the Bureau of Land Management March 9 by Senator Anderson, the Bureau's reply of March 17, justifications for the research proposed prepared by the Bureau at the Senator's request, and the Bureau's estimates of the first year and total cost of the research work proposed.

Please assure your subcommittee that the initiation of this look into the adequacy of research on arid lands management problems came from several of us in Congress from the arid lands states. For the past year numerous agencies in the Departments of Agriculture and Interior have been cooperating in a comprehensive report on resources in the Black Hills area in South Dakota and Wyoming at my request. There is considerable Bureau of Land Management land in this area. The completed study reflects an urgent need for improved watershed management practices in the area, which includes a great deal of BLM land. It also foresees a tripling of recreation use of the area, making increasingly urgent BLM research and preparation for such recreational use, and for maintenance of wildlife as well as improvement of grazing opportunities.

In discussion of various findings of the Black Hills study in this regard with colleagues from the Western States I learned that they, too, were concerned with similar problems. Senator Anderson kindly offered to take the lead in surveying the needs and formulating a proposal. His statement and correspondence with the Bureau of Land Management ensued.

My own interest in intensifying arid lands research is multiplied by my concern about world food problems. Thirty-five percent of the land of the world is arid, including vast areas in India, Pakistan and other countries where food supplies are critical. A considerable part of any research in the United States on arid and semi-arid lands will have worldwide applicability and value, and add to our country's ability to assist many of the developing nations of the world. The results of any research and development work on arid and semi-arid land management problems will accordingly have both domestic and foreign relations values.

I have reviewed arid and semi-arid lands research by agricultural agencies. This valuable research is oriented toward agricultural production problems, rather than the larger management problems which confront the Bureau of Land Management. The research now being proposed is not duplicatory but will supplement any ongoing work.

I am transmitting this material on behalf of Senator Anderson and myself because of his absence in New Mexico. We both regret that a misunderstanding on our part in regard to the subcommittee's hearing schedule makes it necessary to submit this request in this manner, rather than to appear before the subcommittee. If the committee desires further information, we will be happy to provide it.

Sincerely yours,

GEORGE MCGOVERN.

STATEMENT OF SENATOR ANDERSON

Mr. Chairman, several members of the Senate from the arid western states have long been concerned with improving the management of our arid and semi-arid lands for grazing and other uses. I have been looking into the Bureau of Land Management's need for studies of improved land management methods, which would also help private owners. I appear today to propose an increase in the appropriation for management of lands and resources in the 1968 fiscal year budget for the Bureau of Land Management in the amount of $730,000 to undertake some very much needed studies.

These funds are critically needed to augment the cooperative research program fundamental to the management, development and conservation of the arid and semiarid lands of the United States. The Bureau of Land Management administers a vast 150 million acre public land province of aridity from the western reaches of the Great Plains to the foothills of the Cascade-Sierra Mountains. These arid lands are those areas with substantial mean moisture deficiency, including the semi-arid lands, according to accepted geographical classification.

My own home State of New Mexico has over eight million public domain acres within this expanse of aridity. In New Mexico there are additional millions of acres of arid lands in other ownership. My distinguished colleagues from the great States of Nevada, Arizona, and California, South Dakota and North Dakota, Colorado, Wyoming and Montana, Utah, Idaho and Oregon know well of what I speak. The problems in deriving and applying resource conservation principles are immense but they are solvable. There is a challenge to develop techniques and sound data—and we must face and answer this challenge. Initially, we must start with a specifically oriented and sustained research program. The Bureau of Land Management in our view is the agency to carry out cooperatively this program with western research institutions. It administers much arid and semi-arid land and thus needs to be in a position to apply new techniques and knowledge. Also, it has a long history of cooperation with private and state agencies that administer similar lands. Working together they can meet the need to conserve that thin mantle of soil so vital to our western watersheds and the growing population of our West.

The distinguished geographer, Dr. Gilbert F. White, of the University of Chicago, writing on arid lands states, "The rapidly spreading invasion of dry sectors of North America during recent years reveals that new factors are shaping man's view and use of this diversified territory of thin soils, sparse vegetation and highly variable climate. Their consequences and the conditions which bear on decisions as to new uses are less apparent."[1]

The reasons for this troublesome uncertainty involve the great variation in altitude, land form, and length of day. Arid lands have in common three characteristics—mean deficiency in moisture, large variability in rainfall from year to year, and uncertainty as to the character of next season's weather. Closely associated with high risk and persistent uncertainty is the delicate equilibrium of climate, soil, vegetation, and water which makes this vast physical environment especially susceptible to drastic changes in the path of even man's minor modifications in vegetal cover and water flow.

One way to overcome uncertainty is a thorough research appraisal of the factors which play such a significant role in human decisions affecting the resources of water, air, soil, plants and animals in the arid regions. We have not adequately funded suitable cooperative research even though the Federal Government itself holds in its domain over 150 million arid acres.

Our amendment will speed the progress we must make.

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[1] Darling, F. Fraser and Milton, John P., Editors. *Future Environments of North America.* Natural History Press, p. 172.

This research, directed at our domestic arid land problems, can have worldwide value. A third of this planet's lands are arid. Whatever we can learn about arid land use and management on our continent can have value worldwide in the impending food and population crisis.

WATERSHED PROTECTION AND EROSION CONTROL

The arid and semi-arid lands of the United States sweep from the Great Plains region to the Cascade-Sierra Nevada ranges in the west. They exclude the higher elevations of the Rocky Mountains and lesser mountain masses. It is these higher elevation islands that yield most of the water. The lower elevation arid zones yield most of the natural pollutants in the form of sediments and salinity.

Intensive arid land agriculture depends upon irrigation water. Now, urbanization and industrial development create increasing demands for water. Major research efforts are underway on these higher elevation watersheds and on problems related to more efficient use of water at points of consumption. But research on the soil and vegetation resources on the heart land of the West—its arid lands—has been inadequately financed in the past because of a too commonly held belief that these arid lands were of low value.

An understanding of the water-yielding potential of the arid and semi-arid zones in the western United States now is becoming vital. Because of relatively low total precipitation, some think it unlikely these zones will yield any substantial increases in water for agricultural, urban or industrial uses. It is known that much of the water yield derived from these arid lands is all too often received in a relatively short span of time and is frequently laden with sediment and charged with inorganic pollutants. Thus water quality is of real concern as well as reduction in reservoir storage capacity due to sediment disposition.

We need to accelerate efforts to determine inventory, analysis and land management techniques to secure the benefits these lands can give.

One major deficiency is that so little has been done to develop methodology for evaluating and planning watershed protection and development programs on arid lands. Programs are now carried out on an opportunity basis.

A moderately intensive technique known as the Hydrologic Soil-Cover Complex methodology has been developed and is widely used in the humid and semi-humid regions of the United States and with fine results. However, experimental data and knowledge of the hydrologic characteristics of small arid land watersheds are practically nonexistent. To apply the method requires research and study to obtain data on meteorological, soils, and vegetative influences in relationship to topographical and geological factors applicable to typical small arid land watersheds. Selected representative areas only would need to be studied. The increased appropriations will start the organized development of the Soil-Cover Complex technique for western arid lands.

ARID LANDS RECREATION STUDIES

Here is another area of need. For example, it is estimated that there are 15 million acres of the public lands alone—located in the desert regions of the Southwest that contain a vast array of primitive, natural, historic, archeological and unique scenic values that must be preserved. By reason of physical, climatic, and ecological factors, these desert lands differ from other public lands. The recreation resources must be managed under practices and techniques that are different from other lands.

These desert lands exhibit different land forms, vegetation and climatic extremes depending on geologic origins, latitude and general moisture distribution. They constitute a vast reserve of open space which, because of their fragility, pose particular management problems.

Ground cover varies from completely barren looking—but alive desert—to pinion-juniperwoodland. The way much of this land lies it gives an unobstructed and thrilling vista across the vastness of the West. Some high plateaus and mountain areas receive sufficient precipitation to support forest growth. These mountain ranges are scattered throughout the desert region like little humid islands in a rolling and sometimes jagged expanse of dry land. These form one of the factors which influence the pattern of man's attraction to the desert.

The appreciation of desert living is as old as man. Here in America it has developed with such rapidity during the past three decades that large numbers of people have migrated to the Southwest's desert areas. Increased leisure and mobility plus air conditioning have made the desert environment a sought out place for home and leisure. Coincident with this increase in desert population has been the rapid growth of West Coast cities. These two population trends have brought an increase in recreation pressure on the desert landscape which is causing serious types of deterioration. Areas of historic and archeological importance are being spoiled, fragile ecological balances are being disrupted, and litter and debris are causing deterioration of the charm of the wide open spaces.

Experts tell me there is a lack of balance in desert use. Some areas are overused while others are neglected. I also know there is a wide variety in the interests which pulls people to the desert in increasing numbers. But little research has been done in analyzing the variety of demand in the different fields of interest, or in estimating the quality of total demand and then channeling it properly into suitable areas. These areas ought to be located, inventoried and evaluated. Only through a study of demand, coupled with a proper inventory and evaluation of types of areas, can adequate planning, development and management of desert areas be accomplished. Such studies are the quickest and best way to assure that the desert can be efficiently used without destruction, for public recreation and education. For those of us who know the desert, know it isn't a desert really until man destroys the charm it has.

Techniques for accomplishing desert recreation demand are not perfected; however, a methodology has been partially developed. The increased appropriations will provide the means to improve the technique for projecting accurate estimates of future recreation pressures at specific locations and geographical areas showing potential. Use of such a technique will enable public land managers to assure proper capital investment in the right areas and provide for the distribution of use of the desert recreation resources so as to preserve its character.

This is a program for quality of environment and it needs our attention now.

EFFECTS OF FIRE AND ARID AND SEMIARID LANDS

Private and public land managers of land in the arid and semi-arid zones of the West are seriously handicapped because of a lack of knowledge relating to the physical, economic and social effects of fire.

Wild fires play a large role in the semi-arid and arid zones. Because of the dryness of the cover fires can sweep clean hundreds of thousands of acres every year. Uncontrolled fires affect water quality and quantity, hunting and fishing, natural beauty and scenic drives and views. These fires pollute the air and endanger property and lives. There is no question that a substantial impact occurs from such fires on the inherent properties of soils, vegetation, water, recreation and other social values associated with these lands. At present, land managers cannot accurately measure that impact in physical, economic or social terms, thus compounding the difficulty and complexity in making investment decisions and applying management programs. The social and economic effects of fires are becoming more and more apparent as the Nation expands its efforts to obtain a more livable and enjoyable environment. Programs for public recreation, natural beauty, water pollution and erosion control, and control of air pollution are being greatly intensified because of pressing public needs.

There has never been a comprehensive study to determine with adequate preciseness or relevancy, the physical, economic, and social effects of fire on the communities and the lands and resources which make up the arid and semi-arid zones in the West. Objective judgments must be based on a sound foundation of knowledge, which is not at present available. Collateral studies and research have been devoted almost entirely to the more moist forest lands, and even these studies are limited in scope to rather small geographical areas.

The increased appropriations we recommend will initiate a comprehensive study and research program, instituited to measure the physical, economic and social effects of fire on the various types of lands and resources which make up the western arid and semi-arid zones. The fire research would not be limited to wild fires because fire wisely used is a tool of management. In some situations, I hope it can be shown that fire, properly used and controlled, can benefit and enhance the value and management of arid and semi-arid lands and resources.

EVALUATIONS OF GRAZING MANAGEMENT SYSTEMS AND EFFECTS OF GRAZING ON RELATED RESOURCES, INCLUDING WILDLIFE

The approximately 150 million acres of public arid lands can potentially produce more forage for wildlife and livestock. The diverse vegetation complexes also have direct and significantly important relationships to watershed management, recreation and scenic beauty. It is important that the ecological interrelationship between plants, domestic and wild grazing animals, and man be thoroughly understood in order for these forces to be directed for the good of man and the conservation of the resources.

Historically, the grazing has been thought of as the most universal usage of the arid province. Significant usage for grazing will continue in the future—but adoptions and modifications are occurring.

Recently, the Bureau of Land Management embarked on a progressive program of range and wildlife habitat management and rehabilitation. The program incorporates known basic principles of good land use but still has far too little underpinning in the form of specifically adapted and tailored techniques for the diverse arid land types. Such knowledge is paramount if the influence of intensive range land management and habitat manipulation on the animals and related resources is to be practiced in a timely and fully sound manner.

The basic underlying resource for forage, soil protection, wildlife habitat and food is the vegetation complex. But vegetation is sparse in the arid province and the soils are thin and climate severe. It is essential that physiological requirements of major grass and browse species be researched to determine their reaction to grazing influence. Grazing systems must be developed, and adapted to local situations, for vegetation types in the arid province. Measurements of the effect of such systems in economic terms on forage, watershed, livestock, wildlife and recreation also is required. The research I would hope to augment would also involve the extent to which wildlife grazing is destroying its own habitat—why—and what might be done about it in the fragile arid zones.

Research takes time and thus the program we are suggesting is one which will give adequate and vitally needed knowledge in the best possible time.

In fairness to the Committee we have sought not only the first year cost but data on the study time involved and the total cost.

We hope the Committee can and will authorize the first year start on these four basic lines of arid land research.

LETTER FROM SENATOR ANDERSON

MARCH 9, 1967.

Hon. BOYD RASMUSSEN,
Director, Bureau of Land Management, Department of Agriculture,
Washington, D.C.

DEAR MR. RASMUSSEN: I have been discussing with a number of people the need for a program of arid land research. Enclosed is a proposed draft statement for the Committee on Appropriations which outlines the four lines of research that seem to be of the highest priority.

I would appreciate it if, as a legislative service, you would examine the statement and advise me whether these are the four lines of arid land research which you think are of highest priority. For each one which you think falls in the category can you provide me with a brief justification and cost estimate including the estimated duration of each project, the first year cost, and the total cost.

It would be my expectation that the major share of these funds would be used for contract research with qualified institutions such as New Mexico State University. It would be my further expectation that a concentrated effort would be made to rapidly disseminate and apply the results of this research to all of the arid type lands intermingled with the public lands your agency administers.

May I have a response at your earliest convenience, but no later than March 15, 1967.

Sincerely yours,

CLINTON P. ANDERSON.

LETTER FROM BUREAU OF LAND MANAGEMENT

DEPARTMENT OF THE INTERIOR,
BUREAU OF LAND MANAGEMENT,
Washington, D.C., March 17, 1967.

Hon. CLINTON P. ANDERSON,
Chairman, Committee on Aeronautical and Space Sciences, U.S. Senate, Washington, D.C.

DEAR SENATOR ANDERSON: In accordance with your request of March 9 and as a legislative service to you, there are enclosed brief justifications for each of the four lines of arid research indicated by you. Unquestionably research is needed in all.

There is considerable need for such research and only limited knowledge available. Within these constraints and the time limit set in your letter there are also enclosed our best estimates of the cost and time span required for each type of research.

The budget now pending before the Appropriations Committee is our best estimate of a balanced program which can be undertaken within existing budgetary limitation. Research which this Bureau has undertaken has been largely in conjunction with Universities and Experiment Stations and is expected to continue in this manner. Results are made available promptly for application in related areas.

If the Congress should provide funds for this desirable effort it would be expected that New Mexico State University would be requested to participate, together with other qualified institutions.

Your proposed draft statement is returned. Slight suggested revisions are entered on it.

Your interest in this program is sincerely appreciated.

Sincerely yours,

JOHN O. CROW,
Acting Director.

DEPARTMENTAL STATEMENT

1. HYDROLOGIC SOIL-COVER COMPLEX STUDY

The water-yielding potential of the arid and semi-arid zones in the West is becoming increasingly vital. Much of the water yield from these arid watersheds is received in a short period of time, such as in flash floods, and is commonly polluted with sediment and inorganic matter.

Although major research has been undertaken to study water yield on more humid area watersheds, research on the western arid land watersheds has been inadequately financed in the past.

The research work has been greatly deficient in the development of a methodology for planning and analyzing watershed protection and development programs on arid lands. A technique called the Hydrologic Soil-Cover Complex Methodology has been developed and is used for evaluation of humid and semi-humid land watersheds. However, the necessary data and knowledge of the hydrology of small arid land watersheds to apply this method do not exist. Research is required to obtain data on climaticological, vegetative and soil interaction with topographical and geological conditions of small arid watersheds. Research would be undertaken on sample areas to collect the required data.

2. ARID LANDS RECREATION DEMAND STUDY

In the Western desert regions, there are about 15 million acres of public lands administered by the BLM. These lands contain numerous areas of primitive, natural, historic, archeological, and scenic interest which should be preserved. A recent increase in recreation pressure on desert lands is causing serious deterioration of the historical and archeological values and disrupting ecological balances.

There is insufficient research about the reasons people seek desert recreational experiences. Additionally, we lack estimates of the total demand for desert recreation. In order to plan, develop and manage desert areas for recreational use, information about the quantity and types of desert recreation uses is required.

A beginning has been made in developing a desert recreation demand prediction methodology. Funds are needed to improve the partially developed technique and to widen the applicability of its use to larger geographical areas. Use of this technique will enable public land managers to estimate recreation demand at specific locations to determine proper capital investment and to assure proper location of facilities.

3. EFFECTS OF FIRE ON ARID AND SEMIARID LANDS

The effects of fire on arid and semi-arid lands of the West are largely unknown, even though wildfires play a large role in the economics, community life, and physical condition of the land. Uncontrolled fires affect water quality and quantity, recreation, natural beauty, and grazing. Fires cause air pollution and danger to property, human life and animal life. Fires affect the inherent properties of soils, vegetation and water, sometimes resulting in massive erosion and flooding.

Funds are needed to initiate a comprehensive research program to study the physical, social and economic effects of fire on the lands, resources and communities. The results of this research will aid land managers to more accurately assess the impact of wildfires on the resource in making investment decisions and operating resource conservation programs.

4. EVALUATION OF GRAZING MANAGEMENT SYSTEMS AND EFFECTS OF GRAZING ON RELATED RESOURCES

Grazing has traditionally been thought of as the most universal use of arid and semi-arid lands. However, the diverse vegetation complexes have direct and important relationships to watershed management, recreation and natural beauty.

The Bureau of Land Management has embarked on a progressive program of range and wildlife habitat management and conservation. It is important that the ecological interrelationships between vegetation, domestic and wildlife grazing, and man be more thoroughly understood in order to implement an effective program.

Grazing systems need to be developed, and adapted to local situations, for the vegetation types in the arid and semi-arid areas. The physiological requirement of major grass and browse species must be researched to determine their reaction to grazing forces. Measurement of the economic effects of such systems on forage production, water yield, and wildlife and recreation uses are required. The research might also involve the extent to which wildlife grazing destroys its own habitat and means of preventing this in the fragile arid lands.

Cost estimates and duration of the 4 lines of research

Study research	Study period (in years)	Estimated cost	
		1st year	Total
Hydrologic soil-cover complex	8	$345,000	$2,300,000
Recreation demand	6	73,000	325,000
Fire effects	8	156,000	525,000
Wildlife-livestock grazing systems and habitat	10	156,000	1,050,000
Total		730,000	4,200,000

The first year cost estimates broken down by Budget Activities is as follows:

Management of lands and resources appropriation

2. Resource Management, conservation and protection:	
(a) Land classification and mineral examination	$70,000
(b) Range management	150,000
(d) Soil and watershed conservation	330,000
(e) Fire protection	150,000
5. General administration	30,000
Total	730,000

BUREAU OF INDIAN AFFAIRS

Letter from Senator Jackson

U.S. Senate,
Committee on Interior and Insular Affairs,
April 3, 1967.

Hon. Carl Hayden,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

My Dear Mr. Chairman: Each year, beginning in fiscal year 1963, the annual Appropriations Act for the Department of the Interior has contained langauge under the heading "Tribual Funds" to the effect that:

> "* * * funds derived from appropriations in satisfaction of awards of the Indian Claims Commission and the Court of Claims shall not be available for advances, except for such amounts as may be necessary to pay attorney fees, expenses of litigation, and expenses of program planning, until after legislation has been enacted that sets forth the purposes for which said funds will be used: * * *"

Very recently, in connection with judgments awarded by the Indian Claims Commission to the Southern Ute and the Flathead Tribes, the Department of the Interior advised our Committee that no additional legislation was required to distribute the judgment because of special statutory authority enacted many years ago which was still controlling. The Interior Committee disagrees with the Department's position. In the case of the two tribes mentioned, the Department of the Interior was requested to submit special bills (S. 1191 and S. 1177) authorizing the Secretary and the tribes to use their judgments. These bills have been considered, reported, and were passed by the Senate on March 13.

It is quite probable that in the future the Department will again try to avoid the limitation in the annual Appropriations Act. In order to make it absolutely crystal clear that any and all judgment funds are not to be advanced except for attorney fees and the like, until further legislation is enacted setting forth the purposes for which the funds may be used, we recommend that the following language be adopted by your Committee as a substitute for the existing provision in the fiscal year 1968 Interior Appropriations bill:

> "*Provided further*, That nothing contained in this paragraph or in any other provision of law shall be construed to authorize the expenditure of funds derived from appropriations in satisfaction of awards of the Indian Claims Commission and the Court of Claims, except for such amounts as may be necessary to pay attorney fees, expenses of litigation, and expenses of program planning, until after legislation has been enacted that sets forth the purposes for which said funds will be used:"

This proposed amendment was prepared by the Senate Legislative Counsel's office. I believe it would not be subject to a point of order on the Floor, and its adoption by the Congress would emphasize this Committee's firm position that the use of all Indian judgments for tribal purposes will continue to be subject to close scrutiny prior to expenditure.

Sicerely yours,

Henry M. Jackson, *Chairman.*

BUREAU OF OUTDOOR RECREATION

Statement by New York Conservation Commissioner

The Department of the Interior has requested an advance appropriation of $32 million to the Land and Water Conservation Fund to be allocated entirely to federal agencies. The Bureau of Outdoor Recreation has recommended that the advance appropriation be increased to $72 million to permit the allocation of an additional $40 million to the states. The proposal of the Bureau of Outdoor Recreation would permit total allocation from the Land and Water Conservation Fund for the 1968 fiscal year as follows:

Federal purposes—$77 million ($45 million recommended by the President plus $32 million from the advance appropriation)

State purposes—$105 million ($65 million recommended by the President plus $40 million from the advance appropriation)

On behalf of the State of New York, I would like to recommend approval by Congress of the $72 million advance appropriation recommended by the Bureau of Outdoor Recreation.

An advance appropriation of $72 million would permit an apportionment to New York State for the 1968 fiscal year of approximately $6.1 million.

During the Congressional debate over adoption of the Land and Water Conservation Fund Act of 1965, the annual apportionment under the Act to New York State was estimated at $6.5 million. New York State used the annual $6.5 million figure in planning its future programs to be financed partly with grants from the Land and Water Conservation Fund.

Moreover, the State of New York developed a financing proposal of its own, known as the "Next Step" bond issue, in the amount of $200 million to supplement the annual grants from the Land and Water Conservation Fund. This $200 million bond issue was based on the assumption that the annual federal grants would be approximately $6.5 million. The bond issue was approved by the people of the state at the general election of 1966 and is now in effect.

Although all of the recreation planning in New York State during the past three years has been based on annual apportionments from the Land and Water Conservation Fund in the amount of $6.5 million, the fact of the matter is that the annual apportionments have never come close to such a figure. The table below gives the apportionments to New York State during the past three years:

1965	$601, 610. 00
1966	4, 928, 780. 00
1967	3, 734, 894. 00

Disregarding the initial 1965 apportionment, it is obvious that during the past two years the apportionments to New York State have been more than $4 million less than anticipated.

Because the annual apportionments have been considerably less than anticipated and because the "Next Step" bond issue has not been available until the present time, New York has postponed a statewide publicity and educational campaign intended to advise municipalities in the state of the availability of recreational grants-in-aid. Despite the postponement of this campaign, the municipalities of the state have submitted requests for aid that have exceeded all available federal funds. By statute, New York State has allocated 50 per cent of each year's apportionment from the Land and Water Conservation Fund to state use and 50 per cent to municipal use. As of this date, both approved state projects and approved municipal projects have exceeded available federal funds so that both the state account and the municipal account are in a deficit position. The total deficit at the present date is approximately $100,000. Moreover, many of these projects have been approved for their initial phases only and it is certain that subsequent phases will require additional grants from the Land and Water Conservation Fund.

It should be kept in mind that the states have the year in which a federal apportionment is made plus two more fiscal years in which to obligate the apportioned funds, yet at the present time, with three months remaining in the current fiscal year, New York has committed every cent which has been apportioned and has even incurred a $100,000 deficit.

The fact that some states have not used all of the funds apportioned to them is not troublesome in view of the fact that they have a total of three fiscal years in which to obligate each year's apportionment. The tardy states still have adequate time to obligate their apportioned funds.

I would like to emphasize that New York is not objecting to the advance appropriation of $32 million for use by federal agencies. We have no objection to the purposes for which this advance appropriation reportedly is to be used. We do feel strongly, however, that an advance appropriation for federal purposes should be matched on an annual basis by advance appropriation for state purposes in the proportions prescribed by the Act.

The situation in New York is particularly critical because of the adoption of the "Next Step" bond issue. The adoption of this bond issue has resulted in a great deal of publicity for both federal and state recreational grant-in-aid programs. It is our belief, confirmed by reports from the field, that we are about to receive a deluge of applications for recreational assistance. An increase in our annual federal apportionment would enable us to honor more of these applications and to reject fewer than we will otherwise be able to do.

GEOLOGICAL SURVEY

LETTER FROM SENATOR KUCHEL

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
March 20, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Interior Department Appropriations,
U.S. Senate, Washington, D.C.

DEAR CHAIRMAN HAYDEN: The State of California long has participated actively in co-operative investigations into water problems, as I know you fully appreciate, and is fearful that the amount of monies proposed for such research activity by the U.S. Geological Survey for Fiscal 1968 is inadequate and unrealistic.

I am attaching a copy of a letter from the Director of the Department of Water Resources, urging an increased sum for this purpose, to meet the availability of non-Federal entities to finance such important studies. I hope that the capability of the Survey to carry on projects at the recommended level is being examined closely in connection with consideration of the pending Budget requests, because I feel that energetic activity in this field is imperative for the fast-growing Western region and that benefits are commensurate with expenditures.

With warm regards,
Sincerely,

THOMAS H. KUCHEL.

LETTER FROM CALIFORNIA DEPARTMENT OF WATER RESOURCES

MARCH 15, 1967.

Hon. THOMAS H. KUCHEL,
U.S. Senator, Senate Office Building, Washington, D.C.

DEAR SENATOR KUCHEL: We have been informed by the Council of State Governments that significant reductions have been made in the amount allocated in the President's budget to the United States Geological Survey for cooperative federal-state water resources investigation programs. We urge you to assist in obtaining adequate federal funding for this work.

We understand that the United States Geological Survey initially requested $14,700,000 for fiscal year 1967–68 to match the funds offered by the states, counties, and municipalities to support cooperative water resources investigations and that this sum was reduced to $13,740,000 while offerings by the states and local governments have increased to an estimated $15,223,800.

This Department has included in its budget for 1967–68 the sum of $772,755 for support of four cooperative water resources investigations under the United States Geological Survey program. These are: surface water flow measurements, ground water investigations, sediment data collection, and surface water quality data collection. This state appropriation, like the federal appropriation, requires that the funds be expended on a matching basis. It is not known whether the proposed $960,000 reduction in the budget for the Geological Survey will reduce the amount available for California programs. That is possible, however, and such reduction could seriously affect these vital programs.

In addition to the Department's programs, there are at least two dozen other state, county, and municipal agencies participating in cooperative water resources investigation programs. Although we do not have sufficient information to calculate the precise amount budgeted for these programs by all state and local agencies in California, it is estimated that a total of $1,165,000 has been budgeted by California agencies for expenditure in fiscal year 1967–68.

Our concern is not limited to the impact of the reduction on the program within California. We have a very real interest in the collection of water resource data in the other western states. The basic data which these programs develop is essential to future resources planning on a regional basis. The desire of the various state governments to participate in these programs reflects their recognition that any resource development project whether constructed by federal, state, or local government, requires a sound long-range data collection program.

Because of the importance of these cooperative water resources investigation programs to this Department, the State, and the western states as a whole, we ask that you support an increase in the United States Geological Survey's appropriations for these programs to the originally budgeted $14,700,000 and preferably, to the estimated $15,223,800 offering by state and local governments.

Sincerely yours,

BILL GIANELLI, *Director.*

LETTER FROM SENATOR BYRD

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
March 23, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee on the Department of the Interior and Related Agencies, Senate Appropriations Committee, Washington, D.C.

DEAR MR. CHAIRMAN: I am enclosing a letter which I received today from Professor Paul H. Price of the Geological and Economic Survey of the State of West Virginia.

He presents such a good statement in support of the appropriation of funds for the International Hydrological Decade that I feel the subcommittee should have the benefit of his views.

With best wishes.

Sincerely yours,

ROBERT C. BYRD,
U.S. Senator.

LETTER FROM WEST VIRIGINIA GEOLOGICAL AND ECONOMIC SURVEY

MARCH 22, 1967.

Hon. ROBERT C. BYRD,
Member, U.S. Senate,
Washington, D.C.

DEAR SENATOR BYRD: It has been brought to my attention that Senate hearings are now underway to consider funds for the International Hydrological Decade.

Inasmuch as you are a member of the Senate Appropriations Subcommittee on Interior and Insular Affairs which is considering the program, I would like to state my approval to you.

Apparently, two points in particular are being questions: (1) Why should the IHD be undertaken now? (2) Why does the program have to be international?

The answer to the first question is that it should have been started sometime ago. Every year that we delay this important work of coordinating and correlating hydrologic research, eliminating duplication of effort, and training hydrologists brings us closer to the time when water problems become acute and dangerous for the people of the World. Now is the time to begin preventive measures and IHD is the initial step.

The answer to the second question is straightforward, two-thirds of the World's people have practically no hydrological advice available to them. For the sake of these people, more selfishly, for self protection, our knowledge of hydrology, its problems and cures, must be put on an international basis.

I hope these few observations will give you more insight into this very important international program of conservation.

Sincerely yours,

PAUL H. PRICE,
Director and State Geologist.

LETTER FROM NATIONAL ACADEMY OF SCIENCES

MARCH 28, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR SENATOR HAYDEN: I am writing in regard to the budget request for the International Hydrological Decade, which is being presented by the Geological Survey of the Department of the Interior. Since your Committee is now examining the Geological Survey budget, I would like permission to present the

Academy's reasons for supporting the Decade request at a time like this when other commitments on the part of this nation deserve such serious consideration.

First, it should be recalled that the Geological Survey is presenting the IHD budget request on behalf of all federal agencies and the hydrological community and not as an additional program of its own. In this, the Survey is acting for the Department of the Interior because Interior "assumed the responsibility for submitting a consolidated budget request for the IHD program for all involved Federal agencies," as stated in a letter of January 26, 1967, from Mr. Phillip S. Hughes, Deputy Director of the Bureau of the Budget.

The Academy supports the activities of the IHD because the program has scientific merit, because it comes at a time when water problems are becoming increasingly critical everywhere, and because the United States stands to gain more than it expends by participating in this international cooperative investigation of the world's water resources. With nearly 100 countries collecting and analyzing water phenomena in a coordinated way, and all countries agreeing to exchange the information they obtain, it is possible for each country to draw upon a far larger pool of knowledge and experience than it would be able to do from within its own borders.

It also is pertinent that nearly all of the funds appropriated to the IHD will be spent in the United States and that the IHD program does not duplicate any on-going activities. Rather, it is concerned with new work, accelerating or extending on-going or neglected projects, encouraging objective evaluation of mission-oriented activities, and providing coordination where it otherwise has not existed.

I sincerely hope that the United States can support prompt and meaningful participation in this important international program.

Sincerely yours,

FREDERICK SEITZ, *President.*

BUREAU OF MINES

LETTER FROM SENATOR CLARK

U.S. SENATE,
Washington, D.C., March 28, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee on the Department of Interior and Related Agencies, Committee on Appropriations, U.S. Senate.

DEAR SENATOR HAYDEN: The highly successful research blast furnace, operated by the U.S. Bureau of Mines, at Bruceton, Pennsylvania, has been ordered closed for lack of funds. This has been a joint blast furnace operation, with funds contributed in about equal amounts by the Bureau and as many as 22 iron and steel companies.

Recently, however, some of the larger firms, particularly those with their own research and model blast furnace facilities, have withdrawn from the project. The annual cost of the program, including both Federal and private contributions, has ranged between $1,432,000 in 1963 and $958,000, in 1967.

According to estimates I have received, full scale operation with normal down time for maintenance and alterations would require at least $1,244,000 for fiscal 1968. Because of the withdrawal of the larger companies, the total amount available from private sources for the next fiscal year is an estimated $450,000. The Bureau spent about $500,000 a year on the blast furnace program.

Although the scope of the project's activities were limited, the research results have been most impressive. For the American iron and steel industry, the findings have been helpful in its battle with foreign import competition. New technology devised by the Bruceton laboratory has saved the industry as much as $5 a ton on pig iron, which has been reflected in the industry's net income and in at least $60 million in additional Federal revenue in income taxes.

I should like to urge for the committee's consideration full Federal funding of the necessary research activity in blast furnace operations at the Bruceton laboratory. It seems to me this effort is too important for the national economy through continued technological advances, to leave to haphazard funding.

I am informed that there are sufficient funds available in the Bureau to repair the blast furnace during the balance of fiscal 1967. The assurance of Federal funds after July 1, 1967, would permit the blast furnace to retain its staff of skilled operators.

Copies of statements on behalf of employees at the laboratory and the companies which participated in previous research programs are attached.

Thank you very much for your consideration of this matter.

Sincerely yours,

JOSEPH S. CLARK.

BUREAU OF SPORT FISHERIES AND WILDLIFE

STATEMENT OF SENATOR ALLOTT

Mr. Chairman, as you know, last year the Senate approved my request to increase the funding of the Colorado Cooperative Wildlife Research Unit at Fort Collins, Colorado to $40,000 per year, a level comparable to the Federal support of the Cooperative Fisheries Research Unit. Other cooperative wildlife research units which the Senate authorized funding at the $40,000 level include: Missoula, Montana; Auburn, Alabama; Logan, Utah; Moscow, Idaho; Amherst, Massachusetts; Orono, Maine; Stillwater, Oklahoma; and Mississippi State University.

During the Senate-House conference on the Fiscal Year 1967 Interior and Related Agencies Appropriations measure, the funding level was reduced with respect to cooperative wildlife research units to approximately $15,000, with the following recommendation:

> "The conferees are in agreement that a review and analysis of the funding for the various cooperative wildlife research units shall be made by the Department and that the 1968 budget estimate shall provide uniform funding for these units at a level commensurate with the needs."

I am informed that the Department complied with the above recommendation of the Conference Committee and proposed funding at the $40,000 level; however, I understand that the Bureau of the Budget disapproved the proposal of the Department with respect to all of the cooperative wildlife units except the one in Ohio, and reduced the budget request to the $15,000 level. Only Ohio has succeeded in obtaining $40,000 in annual Federal support.

Colorado's Cooperative Wildlife Research Unit has had a significant record of achievement; however, its Federal funding level has remained essentially the same as it was when the unit was first established twenty years ago—$15,000. As the program has developed, with increased needs and increased costs, funding at the same 1947 level is unrealistic and it would seem not to be in accordance with the previously mentioned recommendation of the Conference Committee.

Colorado, like many other states, has both a Fishery and a Wildlife Unit, with the same major cooperators participating. The main difference is that the Federal contribution to the Fishery Unit is sufficient ($40,000 annually) to provide for two scientists (the unit leader and an assistant leader), together with some operating funds. The need for an additional professional, as assistant leader, to share the load of research administration, and directing the graduate students in the wildlife unit is general well recognized, and as the workload has grown over the past 20 years, this need has become urgent.

Other major cooperators have significantly increased their contributions, for example: the State Game, Fish and Parks Department has voluntarily increased its contribution by nearly 400% over what it contracted to contribute when the unit was first established. The University has also substantially increased its contribution. Only the Federal contribution has failed to take into account the increased demands on the unit by remaining the same over the past twenty years.

In light of the recommendation of the Conference Committee last year, and the fact that these wildlife research units are not being funded at a uniform level despite the Department's recommendation that Federal funding for all the units be raised to the $40,000 level, I respectfully request that the Subcommittee increase the appropriation and Federal contribution to the Colorado Cooperative Wildlife Research Unit to $40,000 for Fiscal Year 1968.

LETTER FROM SENATOR MUSKIE

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
March 23, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
U.S. Senate, Washington, D.C.

DEAR CARL: Last year I wrote you concerning the need for inclusion of funds in the amount of $85,000 in the Interior Department Appropriations bill for preliminary engineering work on the establishment of the new Atlantic Salmon fish hatchery at Green Lake, Hancock County, Maine.

Funds were not included in the fiscal year 1967 appropriations but I do hope that they will be approved this year. The amount required for the engineering work has expanded to $100,000. Moreover, the Department of the Interior has expressed its intention to restore the Penobscot River in order that it may support salmon. This important objective will require the establishment of an additional Atlantic Salmon hatchery. Continued delays would only have the result of increasing the cost of the project and pushing back the final completion date of the Penobscot River restoration project. Any help you can extend in securing inclusion of these funds would be most appreciated.

With all best wishes, I am,

Sincerely,

EDMUND S. MUSKIE,
U.S. Senator.

LETTER FROM SENATOR JORDAN OF IDAHO

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
March 23, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee for Interior,
Senate Appropriations Committee,
Washington, D.C.

DEAR CARL: I appreciate the opportunity to call to your attention the need for funds in connection with the construction of a fish hatchery on Clear Creek, a tributary of the Clearwater River in Idaho. The Middle Snake River Basin, of which this area is a part, encompasses some of the richest fish and wildlife resources in the United States. The dams that have been constructed between this site and the mouth of the Columbia River have fish passage facilities but is also necessary through artificial propagation, to supplement the natural reproduction of salmon and steelhead trout.

This hatchery is located near the Middle Fork of the Clearwater River at Kooskia, Idaho. A site selection was made based on studies started in 1962 when $50,000 was appropriated for a feasibility study. An additional $475,000 was appropriated for fiscal years 1966 and 1967. It is now necessary to appropriate $445,000 for fiscal year 1968 for the next phase of construction. When completed the entire hatchery operation will cost $1.3 million. The migratory fishing resources for Idaho alone average $50 million a year and if we can stabilize and improve this resource, revenues will increase and this wonderful outdoor sport can be expanded so thousands of additional people can enjoy it.

This is important to the State of Idaho and to the entire Northwest. I respectfully request that the sum of $445,000 be approved by your committee for for the Bureau of Sport Fisheries and Wildlife to continue construction of this fine project. Thank you.

Sincerely yours,

LEN B. JORDAN,
U.S. Senator.

STATEMENT OF SENATOR MUSKIE

Mr. Chairman, the Cooperative Fishery Units program was authorized by Public Law 86–686 (74 Stat. 733) approved September 2, 1960. This program was established: "to facilitate cooperation between the Federal Government, colleges and universities, the States and private organizations for cooperative unit programs of research and education relating to fish and wildlife and for other purposes."

Congress has been very receptive to this cooperative research program as a practical example of creative federalism at work. The first State fishery unit was authorized and funded by Congress in fiscal year 1962 and by December 31, 1966, 23 units had been established.

Unfortunately, the first 12 State units authorized before 1965 were initially funded at $30,000 annually. Subsequently, seven of the 12 and the 11 more recently authorized State units have been funded at $40,000 annually.

Five State cooperative fishery units—Idaho, Louisiana, Maine, New York and Pennsylvania located at the State university in each State—continue to be funded at the $30,000 level annually. The inadequacy of the $30,000 annual Federal budget is apparent since it finances only the salaries of the unit leader, assistant unit leader, and minor incidental expenses. An increase of $10,000 to the $40,000 level of the other State units would provide support to three graduate students at each of these State units and permit the purchase of equipment and supplies for research projects.

This discrepancy in Federal funding in the State units was called to the attention of the Appropriations Committee last year. The Conference Report (No. 1538 for Fiscal Year 1967) stated: "The conferees are in agreement that a review and analysis of the funding for the various cooperative wildlife research units shall be made by the Department and that the 1968 budget estimate shall provide uniform funding for these units at a level commensurate with the needs."

Although the review by the Bureau of Sport Fisheries and Wildlife of the funding of these units supports the position that all State cooperative fisheries units should be financed at the same basic level of $40,000 annually, the Interior budget request for fiscal year 1968 provided for no increases for these five State units.

The total amount of money involved in the requested increase in the budget for the Bureau of Sport Fisheries and Wildlife is relatively small—only $50,000, which would be divided equally among the five State units in Idaho, Louisiana, Maine, New York, and Pennsylvania.

This increase was not reflected in the 1968 budget despite the specific directive in the conference report. While the amount is small, it represents a vital element in building effective continuing Federal-State cooperation in this and other fields. Minimum levels of support are required to maintain the vitality of these State units which carry out programs developed cooperatively with the universities and State fish and game departments to meet both State and national objectives. Such cooperative efforts represent effective examples of creative federalism and justify Congressional support. I have advised both the Senate and House Appropriations Committees of my interest in supporting an increased appropriation of $10,000 for each of these five underfunded State cooperative fishery units, and I will continue my support of this relatively small but significant budget item.

NATIONAL PARK SERVICE

National Park Service Statement

ADDITIONAL LIVE ELK TRAP INSTALLATIONS AT YELLOWSTONE NATIONAL PARK

As a result of the growing elk management problem at Yellowstone National Park, a management program has been instituted, as described in the enclosed statement. An effective wildlife management program at Yellowstone National Park requires additional emphasis on live-trapping as one part of the total program. To implement this facet of the program, an additional trap installation is needed at locations on Upper Lamar River and on Blacktail Creek to enable trapping operations at higher elevations not previously included in the program. The two additional traps plus augmented support activities will provide every reasonable effort to accomplish herd management, reducing to the minimum any requirement for direct reduction of elk in the park.

The estimated fund requirements to provide for the additional traps and augmented support activities are as follows:

Management and protection appropriation:	
Personnel compensation: GS-11 biologist, wildlife technician and supporting services	$16,500
Equipment operation:	
Aircraft (helicopter and fixed wing)	28,000
Ground and oversnow equipment (pickups, trucks, snowcat, weasels)	5,150
Total	33,150
Supplies and materials (hay, rope, tools, etc.)	1,900
Travel and transportation of persons	2,000
Other direct expenses (telephone, shop expenses, etc.)	600
Total, management and protection	54,150
Maintenance and rehabilitation of physical facilities appropriation:	
Maintenance of elk traps	2,800
Construction Appropriation: Portable live traps (2 @ $15,000) (Upper Lamar River and Blacktail Creek)	30,000
Parkway and Road Construction (Liquidation of Contract Authorization) Appropriation: Access roads	3,160
Total	90,100

LETTER OF FEDERATION OF CITIZENS ASSOCIATIONS OF THE DISTRICT OF COLUMBIA

MARCH 24, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Subcommittee,
Senate Appropriations Committee.

DEAR SENATOR HAYDEN: I am submitting this letter and attached exhibit for inclusion in the printed Hearings of your Subcommittee relating to the appropriation of FY 1968 for the Interior Department, National Park Service—Wolf Trap Cultural Park.

I object to the appropriation of any funds for this proposed Wolf Trap Cultural Park for any purpose such as is contemplated by the National Park Service and the Department of the Interior for the following reasons:

1. It is the public policy of the Administration to discourage non-essential expenditures of Federal funds during fiscal year 1968. There is no demonstration of the need for Wolf Trap Cultural Park. On the contrary, the legislative history clearly shows the project to be of a local nature and demonstrates no present or future need.

2. The Federal funds being sought should be obtained from private sources. The legislative history shows that over $1.5 million is to be obtained by gift for the construction of an amphitheater. By reducing this highly inflated and completely unrealistic sum, the Federal funds requested by the National Park Service and the Department of the Interior could be deleted. For example, a covered amphitheatre was recently constructed for the Detroit Symphony Orchestra for less than $300,000. The National Symphony Orchestra is currently building a larger covered amphitheater at Columbia, Maryland for less than $600,000.

3. The project depends upon FAA acquiescence and support for the opening of Dulles Airport Access Highway to local traffic. Once opened for the Wolf Trap Cultural Park at a cost of several millions of dollars, the precedent will have been established for the opening of the Dulles Airport Access Highway to other communities along its route, all at further cost to the taxpayers. The position of the FAA, which has been strongly opposed to opening the Dulles Highway to local traffic, should be made clear before your Appropriations Committee provides any Federal funds for the Wolf Trap Cultural Park for any purpose.

I am,

Respectfully,

JOHN R. IMMER, *President.*

THE WOLF TRAP CULTURAL PARK IS A BAD DEAL FOR THE FEDERAL GOVERNMENT AND FEDERAL FUNDS SHOULD NOT BE PROVIDED FOR IT

I speak for the Federation of Citizens Associations of the District of Columbia, a representative body of 20,000 citizens organized into 38 local groups or associations, which devotes its efforts to the creation of a better life for the residents of the District of Columbia and for the Greater Washington area. We all have a particular interest in Federal appropriations since we are all taxed to provide them. When Federal appropriations in any field, including those for cultural and recreational activities, are fairly drawn, and have a purpose of benefitting all of our people, not just our own members, then we support it. We are not in support of, and have never supported, cultural and recreational, or any other projects, benefitting only an elite few. When we see a wasteful and totally needless appropriation we feel it is our duty as citizens to expose and oppose it.

A very phony project is now pending in Congress, and it will cost the taxpayers of this nation many millions of dollars—it is known as the Wolf Trap Cultural Park, and it is a wolf trap as far as the taxpayers are concerned.

We have studied this legislation very carefully. We have investigated a history of repeated promises and private failure which led to its sponsors and proponents taking the step of seeking legislation to secure Federal appropriations. The Wolf Trap Cultural Park will become an enormous burden on the Federal treasury; it will create monstrous traffic jams in a quiet suburban area of Virginia; it will force the opening of the Dulles Airport Road at a cost to the taxpayers of the nation of many millions of dollars to provide access roads to that highway for a number of Virginia communities; and it will set up a shaky, private organization as the permanent ward of the Federal Government at public expense. For these and other reasons we are opposed to the Wolf Trap Project as a boondoggle. We recorded our opposition in writing with the subcommittee of the House Interior Committee. We were denied the right to testify at the subcommittee hearings. Indeed, we could not find out until the last minute when and where these so-called hearings would be held. Small wonder! Even Congressman O'Brien of New York, a leading member of the full committee, could not find out about the hearings even though he asked about them in advance and asked to testify. Congressman Mathias of Maryland, who has demonstrated a deep interest in progressive cultural legislation, had the same trouble. He couldn't find out about the hearings until after they were over.

What goes on here? Why must a project for a so-called cultural park be handled like a clandestine operation?—so secret that even conscientious Members of Congress cannot themselves find out what goes on. The cloak-and-dagger atmosphere is preserved by the refusal of the subcommittee to print the hearing record and make it generally available. Buried inside that record is the revealing clue, furnished by the privately engaged counsel of the Wolf Trap proponents. Asked about an unpublished contract between the private owners of Wolf Trap and the Interior Department, this was the reply: "There are certain things that are confidential."

Congressman George Fallon of Maryland is one of the most respected of our legislators. He is Chairman of the powerful House Public Works Committee and he is not given to extravagant statements. Here is part of what he told the House about the Wolf Trap Cultural Park after he dug out most of the facts from beneath the sham of confidential arrangements. Congressman Fallon said:

"It is a bad deal for the Federal Government. I do not agree that it would be a gift. If it is a gift, it has too many strings attached to it. It would be in direct competition with the Kennedy Cultural Center, Constitution Hall and many other privately owned and operated cultural endeavors in and near the metropolitan area.

"This is an attempt to get Federal funds for what essentially is a private enterprise. It is a flagrantly unbalanced contract, with the scales weighted against the Federal Government."

The gift that is not a gift, the deal that is a bad one for the Federal Government originates from a proposal of two Fairfax County landowners to give one hundred acres of Wolf Trap Farm to the Interior Department. Except for an amphitheatre, which would be donated, the Federal Government would have to pay for all improvements, for adequate access roads, for about fifty percent more land and for annual administration and maintenance. One of the donors, the American Symphony Orchestra League, Incorporated, would remain in permanent occupancy of five acres of the park located right in the center of it. There is a reverter clause in the confidential contract that under certain conditions would allow the donors to take back the property after the United States had improved it.

The background of this amazing transaction gives the proof to Mr. Fallon's charges: That we are faced with an attempt to get Federal funds to develop a private enterprise, with the donors remaining in substantial control and occupancy of the land after it is conveyed to the Government.

For five years the donors have been urgently trying to develop a cultural office and facilities at the Wolf Trap property through private means. In June 1961 Mrs. Jouett Shouse announced the gift of 38 acres of her Wolf Trap Farm near Vienna, Virginia, to the American Symphony Orchestra League, Incorporated, for a headquarters. The League corporation promised to raise by public subscription $1,500,000 in order to improve the site with roads, bridges, buildings, water and sewage disposal.

Under the guidance of Broadcast Music, Incorporated (BMI), the TV-radio industry sponsored a nationwide, intensive and long-range campaign to raise the funds from the general public. The campaign was a dismal failure, as the League corporation regretfully reported to its members. Given the freedom to give voluntary support to the project, the American people voted a decisive NO.

Meanwhile, the League has been unsuccessfully trying to get its gift landscape removed from the Fairfax County tax rolls, a maneuver it now hopes to accomplish through Federal intervention. Wolf Trap for some time had been offered as a gift to the county, but later that proposal was withdrawn.

In the light of this history, the real intent of the Wolf Trap project becomes clear. It covers an ingenious and semi-secret plan to salvage a private failure through a so-called gift to the United States. A real gift would cost the American people nothing. When Andrew Mellon gave us his priceless art collection, he also paid for every penny of the cost of the National Gallery to house it, and the Gallery was placed where every resident of and every visitor to the Washington area can easily reach it. When Elizabeth Coolidge gave the Coolidge Auditorium to the Library of Congress, she paid all the bills and included a bequest of an endowment to maintain it and produce programs in it.

Not so with the Wolf Trap deal. Here the Government will have to spend millions to make the site usable and give it proper access. Despite the claims that have been made for it, Wolf Trap is not 13 miles from the White House, but about 20 miles over the most likely road routes. It is directly served by only one narrow road, a rural route, Virginia 676. This is a meandering country lane with several one-way wooden bridges. Its narrow width is controlled by a new overpass, bridging Dulles Airport Highway but providing no access to it. The director of the National Park Service has admitted that effective use of the proposed facilities by 7,000 people at a time—all coming in private automobiles—will require access to the Dulles highway. Based on the understandable policies of the FAA, as endorsed by Congress, such access is extremely unlikely. Even if it were to be authorized, the connections would cost several millions.

This will be no bargain, but a burden. It will be an extra burden to the good people of Fairfax County, whose land taxes must rise as Wolf Trap is removed from the tax base, and who will find all of their roads in the area tied up in monumental traffic jams when the proposed facilities are in use.

Even if the Wolf Trap project were a good one—which it isn't—there is no proper need to consider it in this session of Congress. The Interior Department has neither plans for nor possibility of getting a Wolf Trap appropriation before adjournment. Therefore, the proposal should be held over for the next Congress, when proper, open hearings may be held with due notice to all interested parties. Only in this way can Congress get the full facts and legislate with wisdom.

The only pressure for immediate consideration of the bill arises from another of the novel conditions of that unpublished gift contract. The offer, which was made only in June, specifies that this Congress in this session must approve this project in its present form, or the deal is off. It is a bald take-it-or-leave-it proposition—something that has no place in this or any other Congress. On this ground alone, the Wolf Trap deal should die.

FOREST SERVICE

MAMMOTH VISITOR INFORMATION CENTER—LETTER TO SENATOR KUCHEL

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE,
Washington, D.C., March 17, 1967.

Hon. THOMAS H. KUCHEL,
United States Senate.

DEAR SENATOR KUCHEL: This is in reply to your March 14, 1967, letter requesting answers to specific questions relative to the status of the Mammoth Visitor Information Center in the Inyo National Forest.

1. What portion of the $25,000 appropriated for planning in FY 1967 has been spent?

Answer: Of the $25,000, the present obligation is $17,215, leaving a remainder of $7,785, which will be expended before June 1, 1967.

2. Have plans been developed for the construction of the Mammoth Visitor Center?

Answer: Planning has been completed on the amphitheatre and related structures; the Visitor Center building, utilities, roads, and parking areas are in working drawings. Final plans for these will be complete by June 1, 1967.

3. If so, can you supply me with a breakdown of the estimated costs of the Mammoth Visitors' Center as planned?

Answer: A breakdown of the estimates is as follows:

Mammoth visitor information center

VIS Building:	
Audio-visual room, reception, and display	$184, 100
District Ranger office	66, 400
Total	250, 500
Amphitheater and related structures	66, 000
Walks, landscaping, and sprinkler system	66, 000
Electrical distribution, sewage and water	35, 000
Inspection and contract administration	20, 000
Contingency	8, 500
Forest Land Management Appropriation, Subtotal	420, 000
Roads and Trails Appropriation,[1] Subtotal	60, 000
Grand Total	480, 000

[1] Proposed for construction from road and trail appropriation over 2 fiscal years.

4. How much money is requested by the Department in the FY 1968 budget for the Mammoth Visitors' Center?

Answer: There are no funds provided in the FY 1968 budget for the construction of this facility.

5. If funds were provided for the Mammoth Visitors' Center in FY 1968 would the Department be in a position to proceed with the construction of the Center?

Answer: The Forest Service would have the capability to construct this facility if funds were provided.

Sincerely yours,

A. W. GREELEY,
Associate Chief.

GEORGE ROGERS CLARK RECREATION WAY—LETTERS FROM SENATORS DIRKSEN AND PERCY

U.S. SENATE,
COMMITTEE ON BANKING AND CURRENCY,
March 23, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Subcommittee, Senate Committee on Appropriations, New Senate Office Building, Washington, D.C.

DEAR MR. CHAIRMAN: We would like to take this opportunity to express our interest in and support for an appropriation of $260,000 to begin engineering and recreational surveys for the proposed George Rogers Clark Recreation Way in southern Illinois.

As you know, Congress declared in Public Law 88-657 that "the construction and maintenance of an adequate system of roads and trails within and near the national forests . . . is essential if increasing demands for timber, recreation, and other uses of such lands are to be met." We respectfully submit that the George Rogers Clark Recreation Way is fully qualified under the 1964 Act and that it should be considered a priority project.

In some counties in southern Illinois as many as a quarter of the population are on public welfare. Job opportunities are lacking and the population has been declining. Yet, studies have shown that the proposed George Rogers Clark Recreation Way would produce direct annual expenditures in a single year of about $8.5 million and that by 1976, the 29 counties of southern Illinois could expand their tourist and recreation business by an annual expenditure from tourists of $123 million. This would create in southern Illinois 6,000 new jobs, 70% of which could be filled with people living in the area.

Because the proposed recreation corridor would serve the dual purpose of opening up the vast recreational facilities of southern Illinois to large numbers in the nearby urbanized areas as well as giving an important initial boost to the economy in the area, we feel that it is indeed worthy of Federal assistance at this time.

Neither one of us believes that now is the time to overly burden an already overburdened budget. However, with the war in Vietnam and other exepnses at an all-time high we believe that it is more important than ever to establish fiscal priorities. Projects that can be begun with a modest amount of federal funds used as federal seed money to attract greater expenditures of private funds should, we believe, receive priority. The private sector of the economy can provide a sound basis for prosperity in southern Illinois if only the government will lay the foundation with good roadways and recreational potential.

We would appreciate your consideration of our request when the Subcommittee makes its decision on this matter.

Sincerely yours,

EVERETT MCKINLEY DIRKSEN.
CHARLES H. PERCY.

STATEMENT BY MAYOR OF ROSICLARE, ILLINOIS

Mr. Chairman, members of the Committee, I am Otis Lamar, Mayor of Rosiclare, Illinois. I also represent Hardin County, Illinois in region 9 of the Illinois Tourism Commission.

We in Southern Illinois are working to develop recreation—tourism as an economic resource for our area. Through such area-wide organizations as the Shawnee Hills Recreation Association, of which I am an active member, we are seeking to improve the social and economic use of the land, to reduce unemployment and underemployment, and to make our area a better, more attractive place to live.

During my many years in the hills of Southern Illinois, I have watched the development of the Shawnee National Forest. Checchi and Company, Washington, D.C. in their study entitled *The Economic Potential of Tourism and Recreation in Southern Illinois* has this to say about potential markets for tourism, "In our opinion, the three most significant developments underway that will benefit Southern Illinois are the Interstate Highway System, the creation of new water impoundments and the consolidation of the Shawnee National Forest. The latter two developments offer many additional opportunities to strengthen the tourism and recreation potential of Southern Illinois."

The creation of new water impoundments and the consolidation of the Shawnee National Forest are two developments I wish to talk with about today.

Tourism has a great potential for our area which is very near the nation's population center. Forty-nine million people live within a day's drive of Southern Illinois, and 6 million are within 150 miles.

We recognize that all of the area's potential cannot be developed overnight—perhaps not within the next decade. However, we do want to move forward, year by year, and step by step toward the ultimate goal of full development which will benefit millions of people.

In line with Checchi's study, I want to recommend some specific development projects of lakes and lands within the Shawnee National Forest. I ask that these sums be added to the Fiscal Year 1968 budget of the Forest Service, U.S. Department of Agriculture:

$260,000 for the George Rogers Clark Recreation Way. Studies by Southern Illinois University, Checchi and Company, the Illinois Department of Business and Economic Development and others have already demonstrated that this project is economically feasible.

For your further study, I am submitting a copy of a brochure *George Rogers Clark Recreation Way* to my statement.

It is important to note that this scenic highway and its corridor, when fully developed, will serve the outdoor recreation needs of about 3,000,000 persons annually. Service facilities will hire up to 6,000 local people.

Next, $250,000 is needed for the continued development of a 1700 acre tract of National Forest land, on the shores of Lake of Egypt. The Forest Service purchased the land from Southern Illinois Power Cooperative in 1965. During 1966 and early 1967, the Forest Service has contracted for a 4.2 mile entrance road. Family camp and picnicgrounds are under construction. We want to continue the step-by-step development. During Fiscal Year 1968, this sum of money, if appropriated, will construct a bathhouse, a swimming beach, a water and sewage system and additional campgrounds.

As with all our developments, we are looking for economically sound methods of making Southern Illinois a better place to live and for ways to create job opportunities. When fully developed at a total cost of 1½ million dollars, this tract of National Forest land is expected to generate just under $1,000,000 of income annually to area businesses.

Lusk Creek Lake in Pope County is needed for development of this area. There are no other large bodies of water in this part of Illinois.

The lake is economically sound. The geological study is in the process of being completed now.

We ask that $100,000 be added to the Forest Service budget for Lusk Creek Lake. Final engineering design of the structure will be financed with this sum. Studies on Lusk Creek Lake indicate that for each dollar invested $2.45 will be returned to the economy. This is good business.

The Checchi report states that the consolidation of the Shawnee National Forest is important. All of the major projects underway require land purchases. The Land and Water Conservation Fund provides for the purchase of land, primarily valuable for recreation, within proclaimed National Forest boundaries as such boundary existed on January 1, 1965. In the case of the Shawnee National Forest, boundaries have been extended since January 1, 1965 to accommodate specific projects of public interest.

We ask that $500,000 of Weeks Law Funds to the Fiscal Year 1968 budget of the Forest Service for land purchases on the Shawnee. This sum will be used to purchase lands not eligible for Land and Water Conservation Funds along the George Rogers Clark Recreation Way; for Kincaid Lake now authorized for construction by Illinois; for a PL566 recreation lake in Johnson County; and for recreational developments along the Ohio River near my city of Rosiclare.

Mr. Chairman, I appreciate this opportunity to appear before your committee. I sincerely hope your committee will act favorably on my recommendations.

FOREST FIRE PREVENTION—LETTER FROM SENATOR LONG (MO.)

UNITED STATES SENATE,
COMMITTEE ON BANKING AND CURRENCY,
March 24, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Mr. Osal B. Capps, State Forester of Missouri and Vice President of the National Association of State Foresters, has called my attention to the need for an increase of $3 million in the budget request for forest fire protection.

Missouri presently has 15-million acres of forest land owned by some 200,000 persons. There is increased interest in good forestry practices, and this interest supports the need for intensification of fire control efforts as a protection to the investments being made.

Will appreciate your consideration of this request.

Kind personal regards.

EDWARD V. LONG,
United States Senator.

WILDLIFE HABITAT RESEARCH STATEMENT BY REPRESENTATIVE BURTON (UTAH)

Chairman Hayden, and Committee Members, I wish to review with you the need for an increased program of wildlife habitat research by the Forest Service at Provo, Utah. It is a logical outgrowth of action taken last year in appropriating Forest Service planning funds for the Western Browse Improvement Laboratory at Provo. In making this request for an expanded program, I have in mind that the research finding would ultimately be westernwide in importance.

The current estimate of construction costs for the Laboratory is $460,000. Were it not for other pressing needs at this time, I would be asking that these funds be appropriated this year. Moreover, I would be asking that you consider appropriating an additional $100,000 for research into means of protecting browse plants from damage by insects and disease. All that is needed for this important research to be started is this relatively small amount of money; the Intermountain Forest and Range Experiment Station, in cooperation with Utah State University at Logan, could be engaged profitably in these studies within a few weeks after receipt of funds.

This is a year in which the Nation has many pressing needs for funds, however, and I believe that the foregoing should be postponed at this time in favor of a program of research aimed at developing superior strains of native browse species. Admittedly, the immediate need for this research is in part due to the poor job its advocates have done in the past in obtaining funds for it—in large part, however, it is due to our human failing of deciding that existing programs of administration or construction, or some other such item, should take precedence over research whose contribution (we say to ourselves) will only be felt at some time in the indeterminate future. In reality, this is a form of borrowing from the future, of spending your principal instead of living on the interest.

Utah's big-game herds, numbering well over ½ million, like those of other Western States, are a major attraction. In Utah alone each year we have some 175,000 hunters—twice the number of 15 years ago. There are probably an even greater number of nature enthusiasts who enjoy wildlife for its aesthetic value alone. I won't attempt to place a dollar sign on the values of this resource, but we all know that it is an important one and that failure to meet current and future demands for it will result in losses of income, particularly in rural communities. In my State we have begun to feel concern I'm sure this is likewise true elsewhere.

The key to healthy and abundant big-game herds is browse production, especially on winter ranges. These ranges are for the most part in a badly deteriorated condition. Browse production must be increased if we are to realize fully the great potential of our game resources, and to meet future demands of both local and out-of-State people. New browse strains are needed that are more resistant to drought, fire, insects and disease. In order to effect genetic improvement of browse, a major expansion of research is needed. The findings would unquestionably be useful throughout the West and also would be applicable to other purposes such as livestock ranges, erosion control, recreation plantings, and roadside beautification.

In Utah we have taken some positive first steps to meet this problem. To date nearly 70,000 acres of critical deer winter range have been successfully restored by seeding methods developed during the past 10 years by a small cooperative research program carried out by our State Department of Fish and Game and the Forest Service.

In its search for suitable plant materials for use in the current big-game range restoration program, our scientists found some exciting and promising leads as to superior and more productive browse species, both native and exotic. The one Federally financed scientist and the two State biologists are convinced that superior species can be screened, or strains developed, which are better adapted to the variable climatic and soil conditions of our forests and rangelands.

Utah is an ideal location for such browse research because these shrubs dominate the natural vegetation there. It is centrally located with respect to the other Western States and its vegetation is sufficiently representative that the research findings would be of tremendous value to our neighboring States, as well as to Utah. As new strains are developed, experimental material could be shipped for testing to the Pacific Northwest Forest and Range Experiment Station at Portland, Oregon, for use at its project near La Grange; to the Pacific Southwest Station at Berkeley, California; and to the Rocky Mountain Station at Fort Collins, Colorado.

A promising start has already been made through the cooperative efforts the Utah Department of Fish and Game and the Forest Service. I hope the project can continue without interruption. In research of this kind, continuity is all-important.

HARDWOOD RESEARCH—STATEMENT IN BEHALF OF WARREN AREA (PENNSYLVANIA) CHAMBER OF COMMERCE

Chairman Hayden and members of the Sub Committee on Appropriations for the Department of the Interior and Related Agencies. My name is Michael Mead and I represent the Warren Area Chamber of Commerce. I am indeed grateful to you for giving me the privilege of appearing before you today.

I would like to talk about the high value hardwoods of the Allegheny Plateau, particularly Black Cherry. This is the second most valuable hardwood in the United States.

The supply of Black Cherry is being depleted at a growing rate. A wood in high demand, it is not regenerating itself nearly as rapidly as it is being cut off.

No one knows the precise reason or reasons for this failure to regenerate although the over population of deer seems to be a major factor. If true, this poses additional problems because hunting is a major leisure activity of the residents of the plateau areas and its fringes, including Pittsburgh, Youngstown, Cleveland, Erie and Buffalo.

An extensive research program seems to be necessary to:

1. Determine the reasons for this failure to regenerate naturally;
2. Develop solutions consistent with other needs and uses of our forests; and
3. Determine optimum growing conditions for Black Cherry, possibly to the extent of learning to culture Black Cherry artificially or producing fast growing, high quality varieties.

In short, apparently the forest people don't know enough about this valuable tree to protect it and meet the growing and various demands on the forests of the Allegheny Plateau. We need research to protect this asset and Warren, Pennsylvania, is the logical place for it to be centered.

Black Cherry is a fine hardwood which grows only in the parts of Pennsylvania, New York, Ohio, West Virginia and Maryland which comprise the "Allegheny Plateau".

Its color, grain and workability make it an ideal wood for furniture and veneers. The furniture industries increased their consumption of Black Cherry by a factor of about 15 between 1940 and 1960. The increases in demand are projected to continue at a strong, though lessor, pace into the foreseeable future. The furniture industries have come to depend on Black Cherry. They would suffer substantial economic strain if the supply diminishes, which it will.

The qualities of Black Cherry have given it a value second only to Black Walnut. And when I say Black Cherry is a national asset, I mean it literally. The people of the United States own 55 million dollars worth of Black Cherry stumpage in the Allegheny National Forest alone and the people of Pennsylvania own a considerable stand of Black Cherry in their state game lands.

To further illustrate the value of Black Cherry in our forests, note that it represents only 41% of the marketable lumber by volume in the Allegheny National Forest, yet this portion represents 72% of the dollar value of the marketable lumber there. In 1966, Black Cherry brought in 85% of the timber sales revenues of the National Forest, yet this represented less than one-third of the board feet sold.

The furniture industry, particularly in Jamestown and the Carolinas needs this wood. The Black Cherry has another difficult to measure value. Its fruit and seed play an important, perhaps irreplaceable part in the food supply of the deer, turkey and small game of these forest areas. The abundant wildlife has made Western Pennsylvania a favorite of hunters from the surrounding cities. So the hunters and sportsmen, even hikers, of Ohio, New York, and Pennslyvania have a major stake in Black Cherry.

As things are going now, the Black Cherry is not regenerating. The present technique is to clear cut 5 acres and larger areas to allow open areas for seedlings and sprouts to grow. By itself, this method is not working, for the seedlings are not developing into young trees. The natural new growth is not replacing the timber sold each year. This has been going on for some time—perhaps as long as twenty-five years. A major reason for this seems to be the over large deer herd, who browse on seedlings and sprouts after they have cleaned out their normal food. But the connection is not clear or precise, just as the forest managers don't know why Black Cherry prospers in one area and fails in another, although both areas are similar.

There is some evidence that some deer browsing is necessary to thin out the clumps of seedlnigs so one or two reach maturity, but again, no one knows whether there are too many deer or just a slight surplus.

It seems apparent, just from this example, that our forest managers, public and private, do not have adequate information. They apparently are totally in the dark on artificial regeneration, proper soil condition, and almost everything else about the Black Cherry.

Only extensive and coordinated research by wildlife experts, soil experts, geneticists, tree growth experts (silviculturists) and other sub-disciplines can provide answers. This will take an appropriation of about $500,000 this year. In addition to solving the regeneration problem, research might show us how to reduce the growth cycle, grow cherry trees where none have grown before and produce bigger trees, while increasing the hunting pleasures of hundreds of thousands of Americans.

Since it takes a long time to grow a tree, I would ask you to start now, this year, by providing the Forest Service with additional funds to start adequate research.

Warren County, Pennsylvania, is an ideal place to conduct research. The facilities already exist, virtually unoccupied, at the forest research laboratory. Some research is underway. The Black Cherry grows heavily there and the deer herd is typically over large.

Since we are twenty-five years behind already, I think now is the time to start.

I want to express again my appreciation to you for giving me this opportunity to meet with you. I am confident that you will give every possible consideration to my recommendation.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Statement by Columbia Artists Management, Inc., March 30, 1967

Two programs to become operative next season through the National Foundation on the Arts and Humanities are:

1. The plan for a National Chamber Orchestra. (Proposed grant $400,000).
2. The Carnegie Hall-Jeunesses Musicales program to subsidize the tours of 12 young artists. (Proposed grant $310,000).

In our opinion, though both programs appear to be commendable, they actually tend to, in one way or another, compete with programs that are already operative through private means and miss the mark of aiding our industry where needed.

In the matter of the first program, that of the National Chamber Orchestra, we feel that by subsidizing such a Chamber Orchestra, you will draw from an already diminishing supply of top string instrumentalists needed in the country's symphony orchestras. In addition, a federally subsidized program would be in direct competition for the box office receipts of the currently existing chamber groups here in New York and also in the touring market. There is no doubt that a privately subsidized Chamber Orchestra cannot make its total revenue from the box office, (ticket sales), but in varying degrees each of these privately sponsored chamber groups rely heavily on ticket revenues. In effect, the new National Chamber Orchestra will be competing for this same dollar market and will undoubtedly draw a portion of funds away from each of the existing chamber groups.

One of the major presentors of chamber music in our city, Jay K. Hoffman and George F. Schutz Presentations, after years of developing the market, is completely curtailing its operation next season because of the proposed National Chamber Orchestra. (Note Item I)

And finally, is there really a need for a National Chamber Orchestra to be based in New York City? Emphatically no. The list of chamber orchestras with appearances in New York City have mushroomed in such a proportion over the last eight to ten years as to more than cover the needs and wishes of this city's public. It would be equivalent to starting a poverty program for the Far Hills, N.J. community.

With regard to the second program—Carnegie Hall-Jeunesses Musicales—there are numerous non-profit organizations such as the National Music League, Young People's Concerts, Arts Program of the Association of American Colleges, the Leventritt Foundation, etc., that currently aid the gifted young artists who are not yet ready for our own type of management. These organizations each have had their varying degrees of success with the many individuals that have been helped by them. It is doubted, in our opinion, that any new organization would have any greater degree of success. Columbia has taken on numerous artists from these organizations such as Van Cliburn, winner of the Leventritt Competition in 1954, Gary Graffman and Malcolm Frager; artists such as Betty Allen and Lillian Kallir from the National Music League, and would be very interested in taking several young artists now being helped by Susan Wadsworth of the Young People's Concerts, among them, Peter Serkin, son of Rudolph Serkin, who is currently managed by this corporation.

However, what prompts our action more than any other of the above stated reasons, is the feeling that the programs of the National Arts Endowment are misdirected rather than harmful alone. If the Government is to involve itself in subsidizing the arts, it seams most apparent that such involvement should be in the areas where private capital from profit or non-profit organizations cannot or do not venture in sufficient degree.

Developing a broader base of interests in the arts really depends on educating and reaching the youth of this nation from the kindergarten through college level. If we may again draw a parallel, development of any industry is not dependent on turning out the largest possible quantity of product alone. It is far more important to realize a greater marketing potential.

We will be pleased, and have so stated to Roger Stevens of the National Arts Endowment, to sit down along with other professional and experienced colleagues in the field and work out programs that will accomplish a broader market and greater achievement for the arts in this country.

LETTER OF FEDERATION OF CITIZENS ASSOCIATIONS OF THE DISTRICT OF COLUMBIA

MARCH 24, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Committee.

DEAR SENATOR HAYDEN: We are submitting this letter and attached exhibits for inclusion in the record of your committee relating to the appropriation for fiscal 1968 for the National Foundation for the Arts and Humanities, with particular reference to the National Endowment for the Arts.

Our interest in the arts appropriation arises initially from our concern that the National Arts Endowment proposes to use public funds to compete with the privately supported National Symphony Orchestra of Washington, D.C. Upon investigating this matter, we find that this has become an issue of national concern to all privately supported musical organizations which have brought international luster to the performing arts of the United States. Since most of these organizations are tax exempt and hope to receive eventual funds from the National Arts Endowment, they are fearful of reprisals if they intervene directly in legislative matters. Nevertheless, representatives of such long-established organizations as the Philadelphia Orchestra, the New York Philharmonic, the Pittsburgh Symphony Orchestra, the Cleveland Orchestra the Minneapolis Symphony and others—including their trade organization, the American Symphony Orchestra League—have protested the use of Federal funds to set up an entirely new orchestra which will be in direct competition with the existing orchestras created by local initiative and private enterprise.

This matter has been discussed in the New York Times (March 12, 1967) with the conclusion "*the role of the Federal Government in the arts might be better applied . . . to helping existing organizations, rather than the creation of organizations to compete with those already in being.*" The entire article by Harold C. Schonberg is submitted.

A report of the American Symphony Orchestra League dated February 1, 1967, concludes, "*Question is raised as to the viability of using federal tax funds for the purpose of establishing a new professional national orchestra, which inevitably will be operating in direct competition with the existing orchestras that have been developed and are maintained primarily through private enterprise.*" A copy of the entire report is submitted herewith.

The New York Times commentary (see above) also refers to another grant by the National Arts Endowment of $310,000 to New York's Carnegie Hall which plans to use these funds to support an organization—Jeunesses Musicales of France—which will compete directly with privately owned management organizations, Columbia Artists Management and S. Hurok Attractions. The Washington Post reported this grant on February 28, 1967, under the headline, "*Howls Greet Musician Subsidy Plan.*" Professional management is quoted in this article (submitted herewith) as follows: "*The stark, staring needs are to take care of what we have and not to create a larger number of artists for the already small market.*"

For these reasons and for others, there should be thorough airing and investigation of the improvident proposals to use the new Federal arts funds for the benefit of a few insiders at the expense of American private enterprise and American taxpayers.

Sincerely,

JOHN R. IMMER, *President.*

MONEY: IT ALWAYS MAKES PROBLEMS

(By Harold C. Schonberg)

The National Foundation on the Arts and the Humanities has opened a hornet's nest, and angry concert managers are buzzing around, their stingers at the ready. It all started last year. Federal money has finally been appropriated for the arts, after all these centuries, and music is going to get its share. Fine; but it is how the money—or some of it, anyway—is going to be put to use that is agitating not only many of music's businessmen but also a large number of observers.

When N.F.A.H. (an unlovely collection of consonants and vowel; but one can't keep typing National Foundation on the Arts and the Humanities indefinitely) announced last year that federal money would go toward a chamber orchestra conducted by Alexander Schneider, an icicle of horror went through the concert business: an icicle that turned to an iceberg when it became noised around that Schneider was going to conduct a lengthy Carnegie Hall series in addition to one-night stands around the country. This, said managers, would put Schneider—backed by federal funds—into direct competition with the offerings of the private-enterprise concert business.

Schneider's musical competence was not called into question, but about everything else was. Where would the personnel of the orchestra come from? Would symphony orchestras be raided for string players? Who would do the bookings? Who needed still another chamber orchestra series in New York, anyway? And so on. The clamor was considerable.

ON THE ROAD

Now comes the announcement that N.F.A.H., together with the Jeunesses Musicales series of Carnegie Hall, intends to sponsor a concert artists program. The sum of $310,000 has been appropriated to select 12 young musicians, send them on the road at a fee of $250 clear per concert and expose them to concert life. Another storm has been created, and at a meeting between N.F.A.H. and concert managers a short time ago, there was quite a bit of remonstration. The balance sheet of the U.S. Post Office has also benefited from the volume of mail between N.F.A.H. and the concert business.

Transcripts of the meetings and the actual correspondence make fascinating reading. A certain amount of cant, humbug and hypocrisy is present. But the essential argument is real enough, and deserves airing. To the managers, the very idea of taxpayer money going toward the propagation of competing concerts is a specter. That is really what the fuss is about. Some peripheral matters, however, impinge, and those have been mentioned by the more thoughtful managers.

Their feeling is that the various advisers to N.F.A.H. are too oriented toward the performer, not enough oriented to the audience or to the economic side of music. People like Isaac Stern or Helen Hayes, they say, bleed when musicians or actors bleed. Stern and Hayes want to help the performing musician, the performing actor. But (say the critics), that is not the central problem. The problem is the audience and how to educate it. To these critics, the program of N.F.A.H. is only a federal handout, a dole.

The advocates of the N.F.A.H. program take a different point of view, naturally. Julius Bloom, who is head of Carnegie Hall, thinks that the N.F.A.H.-Jeunesses Musicales program is completely misunderstood by the concert managers. He insists that the program will help young artists (concert managers say no) and will expand audiences. Mrs. Fannie Taylor, consultant on music for N.F.A.H., has been saying to assure the concert community that there is no competition at all. "All contracts," she has written, "are in addition to the regularly scheduled series, and are in no way replacing existing programs, but are augmenting concert offerings."

Bloom adds that the new program is trying to open up outlets. About 90 per cent, he says, is aimed at colleges and universities, and at audiences in the late teens and early twenties. Student unions, fraternity houses, college managers—all will be approached. Many of these groups up to now have had no interest in serious music. An entire new audience conceivably could be developed. What is more, Bloom says, the successful young artists—that is, those who make the biggest hit with their audience—could be given foreign tours through Jeunesses Musicales in Europe.

Pooh! say the critics. Here N.F.A.H. is talking about "exceptional talent," selected by a mysterious panel, and this exceptional talent is going to be exposed to frat houses and the like. This kind of exposure is of no help to exceptional talent. The only kind of exposure good for that kind of talent is with major symphony orchestras or big concert halls. And (add the critics) where is this "exceptional talent" coming from? The really big talents are already under contract to major managements, and doing quite well, thank you.

But here we get into an area of high emotions. How much help does great talent really need? Everybody wants to help a sincere young musician, but there is beginning to arise an uneasy feeling that perhaps force-feeding is involved. Up to now, it is being pointed out, artists have had to sink or swim by themselves. The better ones swim, the great ones swim very fast, the lesser ones sink. The public has been the ultimate judge. Critics could help a career, but their words never have been of much importance in the long run. Managers could sell an artist who received a bad New York notice, but not for long if the artist did not make a hit with the public.

What the fuss about the role of N.F.A.H. boils down to is a conflict of interest that, to its critics, threatens the order of things and moves the Federal Government into the realm of free enterprise. But it is a complicated subject, and one that deserves much more thought and discussion than has been given, now that subsidy is a fact and not a hope. There is no harm in the order of things being shaken, but it should be shaken in every direction. Management's hands are none too clean, and its recent pious statements do not alter the fact that its record in helping young artists is highly spotted.

On the other hand, some of the aims of N.F.A.H. impress this writer as well-meaning but incredibly naive. And there remains the big question, far in the background: should the Federal Government be in this particular kind of thing to begin with? That the Government should have a role in our artistic life is unquestioned. Many of us have fought for subsidy for years, and we believe in it. But the role of the Federal Government in the arts might be better applied to national dissemination of culture through already existing organizations, or to helping existing organizations, rather than the creation of organizations to compete with those already in being.

AMERICAN SYMPHONY ORCHESTRA LEAGUE, INC. (MEMO NO. 460)

To: League Members.
From: John S. Edwards, President, Helen M. Thompson, Exec. Vice President.
Date: February 1, 1967.
Re: The New National Chamber Orchestra, Alexander Schneider, Musical Director. To be established by the National Endowment for the Arts.

The League office has been besieged the last couple of weeks by calls and letters from members seeking detailed information on the plans, financing, etc. of the new National Chamber Orchestra to be established by grants from the National Endowment for the Arts.

In order to make the requested information available to the membership, the League is filing this report together with suggestions for action that have been made by representatives of a number of member organizations.

Some months ago, the National Endowment for the Arts announced that a national chamber orchestra would be established primarily for the purpose of offering specialized training to young musicians who, at the end of a two or three year period of work with the orchestra, would be qualified to accept positions of leadership with the nation's professional orchestras.

The plan as originally outlined appeared to hold promise of providing a valued service to pre-professional musicians and to the orchestras seeking to engage trained personnel.

A planning grant of approximately $130,000 was made for development of the orchestra, and Alexander Schneider was chosen by the National Endowment to serve as the orchestra's artistic director.

As of the present date, the plans have developed as follows:

Name of the Orchestra.—National Chamber Orchestra—described as "a master chamber orchestra of virtuoso caliber which will serve as a training and educational institution as well as a performing group."

Sponsoring Group.—National Chamber Orchestra Institute, for which a board of directors is now being organized.

Personnel.—50 musicians, of which a small nucleus shall be chosen from among leading instrumentalists, the remainder to be recruited from available professional musicians (with emphasis upon free lance musicians) and outstanding pre-professional musicians.

Purpose.—"to provide opportunity for professional musicians, either as regular members or as guest artists, and for younger musicians of virtuoso caliber, to have the advantage of full-time concentration on a wide range of chamber literature under conditions that will enhance their own musical experience. The supply of instrumentalists qualified for leading positions and available to orchestras throughout the country will be increased through the project", according to Mr. Schneider.

Personnel Recruitment.—An advertisement was published in the January issue of the International Musician (official publication of the AF of M) inviting all interested musicians to contact the musical director and stating that salaries to be paid would not be less than salaries of the established orchestras. Mr. Schneider, now on tour with the Music From Marlboro players, is currently visiting various cities and holding auditions for interested musicians.

Financing.—Annual budget estimated at $700,000 to $800,000. Sources of funds: $300,000 to $350,000 annually through direct federal grants from the National Endowment for the Arts. Remainder from ticket sales, contributions, foundations, tour income, etc.

Salary scale.—$9,000 minimum salary for 9-months contract.

Performance Plans.—A. Annual series of concerts in Carnegie Hall, New York; Symphony Hall in Boston, Lisner Auditorium in Washington. B. Performances in other major cities. C. Visits to campuses of various colleges and universities in cooperation with the music departments of those institutions and local and state arts councils. D. Foreign tours in conjunction with the U.S. Department of State. E. Recording contract is being negotiated.

DISCUSSION

Whereas the original concept of a *training* orchestra was generally viewed as a constructive effort, the present plans for a virtuoso orchestra of this scope are viewed with considerable apprehension by representatives of many established orchestras, including their board presidents and/or chairmen, conductors and managers, and for the following reasons:

Question is raised as to the viability of using federal tax funds for the purpose of establishing a new professional *national* orchestra, which inevitably will be operating in direct competition with the existing orchestras that have been developed and are maintained primarily through private enterprise. It is believed that the new *national* orchestra and the established orchestras will be vying with each other for:

a. Personnel
b. contributions from individuals, foundations, business corporations, etc.
c. Touring dates, with special reference to new markets for music to be developed through federal funds granted to state arts councils, colleges and universities.

A small committee of managers, representing the major orchestras, discussed these matters with Isaac Stern in December. (Mr. Stern, as a member of the National Council on the Arts, made the original presentation of the proposed project to the Council.) Mr. Stern stated that he did not see that the new orchestra held any threat of competition for the established orchestras.

The committee of managers next discussed these matters with Mr. Schneider and with Mr. Roger Stevens, Chairman of the National Endowment for the Arts and of the National Council of the Arts.

Mr. Stevens expressed the opinion that the orchestra representatives were anticipating problems that would not actually develop, and that the program should, at least, be tried out for a couple of years. He stated that at the end of that time, if the new national chamber orchestra proved to be seriously detrimental to the work of established orchestras and such harm could be conclusively documented by the orchestras, that the Council could and would restudy the program.

He stated also that he felt the National Council on the Arts may have acted somewhat hastily in approving the project before full study had been given to the many ramifications of the proposal and extended an invitation to the committee to have one of its members sit in, as an auditor, on future meetings of the Council on the Arts.

The fact that the chamber orchestra project could have proceeded this far without full understanding on the part of the National Council of the many ramifications within the symphony orchestra world again points up the fact that within the membership of the National Council of the Arts there still is no representation from boards or administrators of symphony orchestras—an omission that is difficult to understand in view of the fact that symphony orchestras form the largest single unit of the performing musical arts of this country, and in view of the fact that Council membership has, from its inception, included a board and/or administrative representative from theater, opera, ballet, museums, and music education.

PROPOSED COURSE OF PROCEDURE

Representatives of many League member orchestras have requested the League to submit to the membership the attached suggestions for action. Your orchestra is urged to express opinion on the proposed action by returning one copy of the suggestions to the League office with comments, etc.

Individual members of the League likewise are invited to return their replies with their personal statements of approval and/or suggestions.

Howls Greet Musician Subsidy Plan

New York, February 27.—A modest program to provide financial aid to 12 young musicians ran into heavy crossfire here today when the sponsoring organization, the National Council on the Arts, presented it to a group of private and non-profit concert managers.

The program would allocate $310,000 to finance concert tours—mostly on college campuses—for highly talented young musicians, and to pay them $250 each for each performance. Its aim, according to the Council, is to give young artists who in the past have had difficulty being heard, an opportunity to develop and perform before audiences.

Today's meeting, at the Park-Sheraton hotel, was originally to be a press conference announcing the program. But it turned into a debate between a dozen or so concert managers and Roger L. Stevens, chairman of the Arts Council, and Julius Bloom, executive director of Carnegie Hall. Bloom is connected with Jeuneesses Musicales, all organization founded in France that sponsors tours by young artists, and which may be administering the new program.

MATTER OF EMPHASIS

The concert managers complained that the emphasis of the new program was misdirected. Rather than spending money to develop new artists—a job which they claimed they had been doing perfectly well for years—the Arts Council should use the funds to develop new audiences.

"The stark, staring needs are to take care of what we have and not to create a larger number of artists for the already small market," said Carl Dahlgren, vice president of Columbia Artists Management.

Claiming there is not enough demand now for the concert managers, Dahlgren young performers being handled by profit and non-profit added, "I do not believe that the program will generate new audiences. In the majority of cases, it will take away from the audiences we already have." Dahlgren's theory was that colleges and others who book concerts would naturally give preference to the cheaper subsidized artists.

Another contention of the managers was that the money should be fed through existing management operations rather than via a new organization which they claim would be competitive.

COULD QUADRUPLE CONCERTS

Susan Wadsworth, director of Young Concert Arts, Inc., a non-profit group said, "If I could say to colleges in the Middle West or the West, where expenses are higher, that I could offer a $250 subsidy for each of my artists, I would be able to quadruple the number of concerts for my people."

Another manager, who was unidentified, complained, "you are making a new organization that will be in competition to all of us. Why can't we book them? We invest our time and our life savings to help unknowns. You are getting taxpayers' money to do the same thing."

Other objections to the program were that it would discriminate against other artists who have been dulling their careers over the years and that two years—the duration of the program—will not be long enough to develop a young performer.

Stevens, apparently taken aback by the vehemence of the objections, told the group that the program was flexible and could be dropped in a year if it didn't work out.

"In effect, we're doing this hopefully to give money to the artists," he said. "There is nothing to stop management to stop managing. I don't think helping 12 artists is going to eliminate management. It's a drop in the bucket."

RANGE IMPROVEMENT AND WILDLIFE

STATEMENT OF SPORT FISHING INSTITUTE

Mr. Chairman, members of this Committee, I am Philip A. Douglas, Executive Secretary, Sport Fishing Institute, Washington, D.C., the only national non-profit, non-government, professionally-staffed fish conservation organization. The Institute is supported financially by a broad array of manufacturers of equipment and supplies used directly and indirectly by some 60 million anglers out fishing, as well as by a large and growing number of consumer groups and interested individuals. The Institute's program, as you and your colleagues may recall, Mr. Chairman, has three phases: (1) *research* in fishery biology, (2) *education* in concepts, principles and problems of fish conservation, and (3) professional *service* to official agencies and key citizen groups.

Dr. Robert Hutton, Executive Secretary for the American Fisheries Society, the nation's most venerable scientific society (organized in 1870), has asked that his organization of fishery scientists be associated with the testimony I am presenting on behalf of the Institute.

1. *National Reservoir Research.*—This program has been operating since 1961 on almost a deficit budget. The requested increase by the U.S. Bureau of Sport Fisheries and Wildlife for 1968 fiscal year amounts to less than 3 per cent over the $401,000 appropriated during fiscal year 1967 for this vital research program. Budgetary requests by the Department of the Interior amount to $167,000 for the South Central Reservoir Investigations headquartered in Fayetteville, Arkansas, up $5,000 from '67, and $87,000 for the North Central Reservoir Research program headquartered in Pierre, South Dakota, up $2,000 from '67. Also included is the Yankton, South Dakota, North Central Reservoir Research program amounting to $158,000, up $4,000 from '67. This, as a combined program, would amount to only $412,000, reflecting an increase of a mere $11,000 over this year's operating appropriations—all of it due to salary adjustments.

My organization considers the vital research efforts being conducted by the Federal Government in its White River studies in Arkansas and the Missouri River studies to be of utmost importance at this time. A three-fold increase in angling demand is anticipated to develop throughout the remainder of this century with one-third of this demand to be met by reservoir fishing. Much more must be learned about fishes in reservoirs in order to sustain the anticipated increase in fishing pressures on this natural renewable resource, possible only through research. The Congress has authorized some $2 billion of reservoir construction, as yet not implemented. It has an associated responsibility to assure the American taxpayer that he will realize the maximum benefits from these works. Recreational fishing has turned out to be one of the leading benefits to be expected! Static budgeting in this important area of reservoir research is causing us to fall behind in carrying out one of the most important related directives enunciated by the Outdoor Recreation Resources Review Commission. A doubling of the proposed budget amount requested for 1968 is certainly not unreasonable in the light of the fully expected and reconfirmed tripling of demand for fishing, which can only be met if we learn the facts that are needed to devise suitable reservoir fishery management programs. We therefore urgently request that for fiscal year 1968 the Congress appropriate at least $824,000 for the National Reservoir Research Program, instead of the $412,000 requested by the Administration—a $412,000 increase.

For the possible interest and information of this Committee, I am enclosing a copy of my organization's SFI BULLETIN No. 183 (March-April, 1967) which contains on pages 1 to 3, a summary report on progress being made under the National Reservoir Research Program. (Withdrawn for committee files.)

2. *Marine Game Fishery Research.*—Congressional committees charged with looking after the nation's resources are beginning to recognize the vital importance of such ecological complexes as estuaries and the effects of filling, dredging, and all the insidious forms of pollution on one of the greatest productive areas of our coastal oceans. In this respect, Mr. Chairman, it becomes doubly important that the life histories and ecology, behavior, significance of these estuaries and the effects of pollution of various sorts, influence of the various rates of harvest (both sport and commercial), and a myriad of other factors, require concentrated study by research scientists. Our corresponding testimony of last year pointed out the alarming course that high seas commercial fishing is taking with respect to the important offshore tunas, billfishes and other tuna-like fishes that constitute some of the most important big-game fishes. Some countries, notably Japan, are utilizing these magnificent fishes as ignoble binding elements in fish sausages, and raiding prime sport fishing areas near our own coasts in the process. The economic significance of the billfishes, in particular, to sport fishing is thoroughly recognized and, uniquely, most of these fishes are little used in our domestic commercial fishery. The attached pamphlet entitled "Competition for Billfishes and Tunas" prepared and published just a year ago by the U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife. Too, I call your attention to additional attachments representing two issues of our own publication: SFI BULLETIN No. 174 (pages 1–2) "Game Fish Long-Lining Confab," and No. 177 (pages 1–4) "Rio Conference on Tuna and Tuna-Like Fishes." (Withdrawn for Committee files.)

Mr. Chairman, the early implementation at full authorization of the Marine Game Fish Research funding program under P.L. 86–359 could by now have solved some of our marine game fish management problems. This seems to be another example where an authorization is utilized primarily to serve as a kind of damper to mute the cry for needed program funding which then seldom follows. As a result of depending upon the apparent intent of the Congress as expressed by its considered authorizations, conservationists and the broad public interest they represent have been left out on a limb more than once.

The $2.7 million that was authorized by this 1957 Act on an annual basis would have gone far to provide necessary funds at the Pacific Coast Marine Game Fish Laboratory, Tiburon, California. A five year program formulated in 1961 for the Tiburon facility should have given it an operating budget of at least $1 million by fiscal year 1966. Yet, here we are in 1967 operating on a mere $99,000 of approved budget with only $139,000 proposed for 1968. Fortunately, at least, this does provide a small step in the right direction, including the very modest increase of $40,000 to provide for three permanent positions to commence carrying out tuna and billfish investigations in the Atlantic and Pacific.

A considerable concern of U.S. big-game fishermen (as well as commercial fisheries for offshore species) is centered around the international situation involved in long-lining for billfishes and tunas. Research is needed to determine the extent and dollar value of the sport fishery for billfishes and tunas and to determine if there has been any change in the catch per unit of effort or average size of fish caught by commercial long-lining as well as by sport fishing. It is only with these basic facts that we may reach any rational agreement among nations concerning international management of fish stocks and future research to be carried out. In order to support such a program, the Commissioner from Puerto Rico, Santiago Polanco-Abreu, introduced House Joint Resolution 908 on March 17, 1966, calling for a first-year appropriation of $250,000 to get the work started and $500,000 annually in each of the succeeding 9 years in order to provide the necessary research funding to learn the vitally-important life-history and other facts about billfishes. These would include migration patterns, identity of stocks, growth rates, mortality rates, variations in natural abundance, distribution in relation to environmental properties, and the effects of fishing upon the stocks. Also needed are economic and statistical surveys to establish the locations, distribution and value of the business enterprises serving the thousands of American big-game anglers who engage in recreational fishing for these species in North, Central and South America, and the Carribean Islands.

Further, on March 1, 1967, the Senate ratified the treaty setting up an INTERNATIONAL CONVENTION FOR THE CONSERVATION OF ATLANTIC TUNAS, the provisions of which embrace "the populations of tunas and tuna-like fishes found in the Atlantic Ocean." "Tuna-like fishes," as defined in the treaty, include the billfishies, among other species, in addition to the true tunas. The treaty also establishes that the purpose of the Convention is conservation of these species to assure their maximum sustainable yields "for food and other purposes," the latter phrase being inclusive of use for recreational fishing. The provisions of the treaty impose responsibility on each of the signatory nations to collect and analyze statistical information relating to the current conditions and trends of these resources in the Convention area, and for studying the biology of these species and furnishing scietific information to the Commission established to implement the Convention as to measures needed to ensure maintenance of their populations.

The Sport Fishing Institute respectfully submits that this new responsibility cannot be met by the United States without a substantial increase in the appropriation for marine game fish research, to at least the level proposed in last session's H.J. Res. 908 and strongly urges that the 1968 appropriation for this item be increased to $250,000 to reflect this need and help implement this new international commitment.

The Board of Directors of the Sport Fishing Institute, regarding this as a most urgent matter, adopted the following resolution at its regular Semi-Annual Meeting:

"Whereas, there now appears to be an alarmingly high commercial harvest of our oceanic big-game fishes, particularly in the collective category of 'billfishes,' by foreign flag vessels, and these trophy fishes are highly esteemed and sought after by many thousands of recreational offshore ocean sport fishermen who, in turn, support a multi-million-dollar service-and-supply industry; and,

"Whereas, the Marine Game Fish Research Act of 1957 (P.L. 86-359) authorizes $2.7 million to be spent annually, from which amount but a small fraction has ever been appropriated for its authorized purposes, and, in turn, only a further small fraction has ever been available for vitally-important billfish tagging and statistical research now critically needed to save this important fishery from the threat of future disaster;

"Now, therefore, be it resolved, that the Directors of the Sport Fishing Institute, assembled in regular Annual Meeting at St. Louis, Missouri, this 24th day of May, 1966, do urge the Congress of the United States to appropriate $500,000 annually over a ten-year period as recommended in House Joint Resolution 908, for a concentrated study of the billfishes with regard to migrations, identity of stocks, growth rates, mortality rates, variations in abundance, distribution, fishing pressure effects and their economics, and optimum sustained yield."

The Atlantic Marine Game Fish Research laboratory at Sandy Hook, N.J., received some $650,000 in appropriations last year, with a $12,000 increase proposed for fiscal year 1968 to take care of salary adjustments only. We understand nothing is being requested for the Eastern Gulf Marine Laboratory at Panama City, Florida, but that funds are desperately needed to begin work there on estuaries and billfish research. Some $90,000 could provide a boat and the necessary operating expenses to commence to carry out this vital work. At this time, too, appropriation of $800,000 in new construction is needed to equip this station with essential buildings and other research facilites to operate efficiently. Too, a newly proposed marine game fish research laboratory at Port Aransas, Texas, would require at least $20,000 to put one fishery research man in the field in this initial stage, plus $800,000 to complete the construction program at this important location.

In completing our testimony on this particular phase of the U.S. Bureau of Sport Fisheries and Wildlife budgetary proposals for 1968, I would like to emphasize that the Institute is concerned that the West Coast game fish research effort has been neglected to the detriment of the broad national public interest It is disturbing that the program at the Pacific Game Fish Research Laboratory, Tiburon, California, has not been expanded at a rate equal to that applied to the marine game fish research effort at the Atlantic Game Fish Research Laboratory, Sandy Hook, New Jersey. Nearly five times the amount being requested for use by the West Coast facility at Tiburon is being requested for the East Coast lab. In order to bring things more into their appropriate perspective, we urge that at least $500,000 be appropriated for use by the Tiburon facility during fiscal year 1968. If granted, the total for the entire program would remain well under the $2.7 million that was authorized annually by P.L. 86–359.

3. *Anadromous Fish Program.*—Public Law 89–304 was passed by the Congress October 30, 1965. This authorized the Secretary of the Interior to initiate with the several states a cooperative program for conservation, development, and enhancement of the Nation's anadromous fish. The Act authorized, for the five-year period July 1, 1965 through June 30, 1970, a total amount not to exceed $25 million to carry out the purposes of this Act. This obviously contemplated that annual appropriations would average $5 million (half to the Bureau of Sport Fisheries and Wildlife, half to the Bureau of Commercial Fisheries). For fiscal year 1967, the appropriation for each Bureau for Anadromous and Great Lakes Fisheries restoration amounted to $2,675,000; however, the Administration permitted only $1.5 million to be expended in the current year. For fiscal 1968, the Administration has requested only $1,675,000 for expenditure by each Bureau. This is far less than the $2.5 million that should be appropriated annually to each Bureau during the five-year term if the full intent of P. L. 89–304 is to be realized. As a compromise, we strongly urge that your Committee recommend this item be increased to at least $2.5 million. These programs cannot operate significantly on less in all of the many states that are involved.

4. *Cooperative Fishery Units.*—A key finding of the late President Kennedy's Outdoor Recreation Resources Review Commission with respect to future development of the important sport fisheries was that an acute need exists to accelerate vital research efforts in order to generate the new and improved methods of fish management that will be required to meet the challenge of the three-fold increase in fishing pressure expected to develop in future decades. The development of a national system of Cooperative Fishery Units at selected universities, which is designed to help augment the limited supply of well-educated and highly-trained professional fish conservationists, is a major step in this direction. To date, the Congress has authorized 23 Cooperative Fishery Units that are now being administered by the Federal Government under the direction of the U.S. Bureau of Sport Fisheries and Wildlife. The total operating budget requested for 1968, to operate this important program within the Fisheries Services Activities item, is $888,300. The requested increase over last year's

appropriation is due entirely to salary adjustments. Unfortunately, five state Cooperative Fishery Units (Idaho, Louisiana, Maine, New York, and Pennsylvania) are still being required to operate at the sub-standard level of $30,000 each per year. May we call your attention, Mr. Chairman, to the fact that a $40,000 appropriation is needed at these Cooperative Fishery Units in order to bring them up to the level of training efficiency prevailing at the other 18 Units? We, therefore, strongly urge that your Committee recommend that the Congress increase this budget item by $50,000. Although such an increase has not been requested by the Department of the Interior, the need is recognized to be urgent.

5. *U.S. Forest Service Appropriation.*—The Sport Fishing Institute strongly supports the Forest Service plans to expand its facilities for watershed research. For this purpose a new laboratory is vitally needed at the U.S. Forest Service Coweeta Hydrologic Station, Dillard, Georgia, which is the site of the most intensive watershed study program—small though it is—ever to be inaugurated in these United States! With better than 30 years of detailed hydrologic data now recorded by this station, using various forms of manipulation on its test plots of 45 small watersheds, Coweeta now has the potential to provide needed answers to many puzzling technical questions concerning the precipitation-runoff relationships in certain types of forested areas. Vegetation, soils, and water involve complex relations between transpiration, interception, and evaporation. Improved understandings of these matters are of the utmost significance to hoped-for improvements in watershed management procedures. To further illustrate the program and potential of Coweeta, I refer you to the attached copy of SFI Bulletin No. 160, for March, 1965, particularly the marked pages numbered 4 through 7.

In the proposed 1968 budget, there is a $2,278,000 *Forest Research Construction* item. Included within this figure is an item of $57,000 for construction planning at Coweeta for a modest $650,000 laboratory (to be built as funds become available). We urge most strongly that your Committee support this proposed budget figure for *Forest Research Construction*, especially the $57,000 item it contains for planning of the contemplated expansion of research facilities at Coweeta.

Thank you for this opportunity to present before your Committee, Mr. Chairman, the Institute's views on these matters that are of such grave concern to nearly one-third of America's citizenry.

LETTER FROM AMERICAN NATIONAL CATTLEMEN'S ASSOCIATION

MARCH 30, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Subcommittee on Interior and Related Agencies, Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: Increased federal appropriations for needed range improvements are of vital concern to the range livestock operator who is highly dependent upon the use and availability of federal grazing lands. It is also of direct concern to those interested in efficient and practical land, forage, timber, water, fish and wildlife conservation practices.

About 62 percent of the total beef cattle which includes 62 percent of the total beef cows in the United States are located in the seventeen adjacent western states. As an example of how dependent the range livestock industry is on the use and availability of federal grazing lands, 60 percent of the total land area in the eleven adjacent western states is federally-owned. Without the use of federal lands for grazing livestock, many range livestock producers would be forced out of business.

Equally important, however, is that a large number of rural communities in the United States depend upon the economic activity (tax base) and the generation of new wealth by the range livestock industry. The cause of a "sick" rural community today can directly be traced to a "sick" livestock, timber or mining industry, etc.

The thousands of people who use the federal lands for recreational purposes also are highly dependent upon the condition and availability of various resources—water, trees, etc. Similarly, good range management which, of course, includes range improvements, has a very direct bearing on watershed protection, wildlife population, etc.

The need for additional range improvements is closely connected with the domestic demand for food and fiber, recreation, water development, and with future world demand for cereal, feed grains and other similar products. Should the United States attempt to supply any significant part of increased world demand for food and fiber, the supply of feed grains in this country may be reduced substantially due to our proven ability to interchange crops. Should this happen, it would tend to shift livestock back to their historical base of native and improved forage and crop residue. This development would greatly enhance the demand for federal lands suitable for crop and livestock production, but would emphasize the critical need for additional range improvements.

We believe there is ample justification for significant increases now in range improvements just to keep pace with these domestic demands. A well planned and managed, preventive-maintenance program, put into operation now, through increased appropriations for additional range improvements, would go a long way in meeting the increasing problem of adequate food supplies, before this particular problem is upon us in catastrophic proportions.

There are numerous economic and non-economic benefits from range improvements such as range reseeding, brush spraying, drainage, water development, fencing and cross-fencing, road developments, better distribution of livestock over the range, etc. Employment of these and other improved range or resource management practices, would provide more forage for the production of food and fiber while improving watershed development and protection, recreation and wildlife sanctuaries. This would put federal land and water resources in better condition for future generations.

Range livestock operators are willing to share, on a cooperative basis, in a number of needed range improvement projects. However, range livestock operators cannot and should not be expected to shoulder the entire cost of needed range improvements when these benefit all of society, which is the case at least 95 percent of the time.

At the existing level of appropriations for improvements, the public ranges cannot be properly managed and developed before the year 2,000, if by then. Range scientists and the livestock industry feel that such a deferment in range developments (improvements) would be of material detriment to the efficient and proper management of such vital renewable resources as water, soil, forage, etc.

The dollar requirements for all National Forests to adequately carry out a range management and improvement program within a reasonable period of time would be about $17,000,000 per year through 1972. The best estimate shows that range improvement *requirements* on forest lands will increase to about $22,000,000 per year by 1980. Expenditures projected for fiscal 1968 is about $11,800,000 or about half of that actually needed to carry out properly the range resource management responsibilities of the U. S. Forest Service.

Similar financing is needed by the Bureau of Land Management. The estimated budget allocation for range improvements for the BLM in F.Y. 1968 is about $1,600,000 which is at least *one-third* the amount needed to meet requests for cost-sharing range improvements in cooperative programs with the range livestock industry.

For the above reasons, we respectfully request that your Subcommittee give favorable consideration to increasing the funds required for range improvement and management work on Forest Service and Bureau of Land Management lands. Also, we respectfully request that this letter be made a part of the Subcommittee's hearing on the 1968 appropriations.

Cordially,

C. W. McMillan.

BUREAU OF COMMERCIAL FISHERIES

Letter From Governor McCall of Oregon

Office of the Governor,
State Capitol,
Salem, April 4, 1967.

Hon. Carl Hayden,
Chairman for the Department of Interior and Related Agencies of the Senate Committee on Appropriations, U.S. Senate, Washington, D.C.

Dear Senator Hayden: In fiscal years 1966 and 1967 your committee provided funding in the Department of Interior's budget in the amount of $600,000 for Phase A and $750,000 for Phase B of the Willamette Falls fishway project. Phase

A work is virtually completed, and Phase B work is scheduled to start in late April.

Construction necessary for completion of this project consists of two fish ladders and connections to the common exit structure above the falls. The preferred and most economical way of completing this project would be to fund and contract all the remaining work in fiscal 1968. If this can be accomplished, the money required from Federal appropriations would be $1,375,000. If the remaining construction is segmented into two portions, the Federal share for the first would be $750,000 and $775,000 for the second, or a total of $1,525,000.

It is my understanding that the Department of Interior's budget request for fiscal 1968 includes only $100,000 for this important project. In my opinion this sum is totally inadequate and will not substantially aid in an early solution of this long-standing block to anadromous fish.

I strongly recommend to your committee that an appropriation of $1,375,000 be made available in fiscal 1968 for completion of this project. However, if in your opinion budgetary considerations are such as to preclude the full amount, that a sum of $750,000 for construction of one ladder and connecting structures be approved.

Sincerely,

TOM MCCALL, *Governor.*

LETTER FROM OREGON FISH COMMISSION

STATE OF OREGON,
FISH COMMISSION OF OREGON,
Portland, April 5, 1967.

Hon. CARL HAYDEN,
Chairman, Senate Appropriations Subcommittee for Department of the Interior and Related Agencies, New Senate Office Building, Washington, D.C.

DEAR SENATOR HAYDEN: In fiscal year 1966, your committee provided add-on funding to the Department of the Interior's construction budget of $600,000 for construction of Phase A of the Willamette Falls Fishway Project. In fiscal 1967, your committee provided $750,000 for construction of Phase B of this project. We understand that the Bureau's fiscal 1968 budget contains $100,000 for construction work on this fishway. This letter is to request that this amount be increased to $1,375,000, and made available to the Department of the Interior to allow for completion of this necessary and beneficial fisheries project.

The construction of Phase A was begun in April of 1966 and will be complete in mid-April 1967. The contract for Phase B has been awarded, and work will begin in late April as water conditions permit. These first two phases provided for construction of the fish ladder from the cul-de-sac area of the falls and for the common exit structure. Still to be constructed are the two ladders from the main falls area and connections to the exit structure. A total of $1,375,000 federal funds is needed to complete the work. In addition to the Federal funding, 16.3 percent of all construction costs is being paid by a local utility, Portland General Electric Company. If the remaining work is to be done in two stages, or Phase C and Phase D, then the federal funds required are estimated at $750,000 for Phase C and $775,000 for Phase D, or a total of $1,525,000.

We have discussed future funding of the Willamette Falls fishway project within our agency, with the consulting engineers, and with the fishway designers, and collectively feel that the $100,000 included for fiscal 1968 is an insufficient amount to obtain any significant progress on this important project.

In order to continue construction of Willamette Falls fishway on a practical and prudent basis and to realize the best value for the dollars expended, we strongly urge the appropriation of $1,375,000 for fiscal 1968 for completion of this project. Your favorable consideration of this request will be appreciated.

Sincerely,

C. A. WEBERG, *Acting State Fisheries Director.*

BUREAU OF SPORT FISHERIES AND WILDLIFE

LETTER FROM SENATOR MOSS

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
April 7, 1967.

Hon. CARL HAYDEN,
Chairman, Appropriations Committee,
U.S. Senate, Washington. D.C.

DEAR CARL: I find that only $70,000 has been requested in the fiscal year 1968 budget for the Ouray Wildlife Refuge in the Uintah Basin in Utah. This is far short of the amount needed. It will allow some progress in the construction of dikes, levees and drains in the refuge, and will permit the building of a limited number of control structures. But if we are to develop the Shepard Bottoms area to the extent that it will provide a nesting marsh for migratory waterfowl, an additional $125,000 should be appropriated for the fiscal year 1968.

Actually, the Ouray Refuge has been starved for funds for several years now. Last session I asked for extra funds for Ouray and the subcommittee graciously recommended them. The House, however, refused to go along with the amendment.

I am asking again this year, in the hope that the subcommittee will again grant my request, and that this year the House will not strike the funds from the appropriation bill. The waterfowl population in Utah is declining, and the best way to reverse that trend is to provide more nesting areas.

I should also at this time like to make one additional request. It is for the sum of $56,000 for the establishment of a Trout Disease Laboratory at the National Fish Hatchery in Springville, Utah.

Two factors in the production of trout have changed the needs of the scientific diagnosis of fish disease. The first is that during the past few years trout fishing waters in the Intermountain Area have been greatly expanded through the creation of many new fresh water lakes at reclamation dams. As a result, fish are being produced in Federal, state and private fish hatcheries in far greater quantities than ever before. The second is that the large-scale movement of fish and fish eggs throughout hatchery systems and across state boundaries has produced a vehicle for the rapid, widespread distribtution of fish disease. There is an urgent need now for a trout disease laboratory in the Intermountain Area. The Springville Hatchery is the logical site.

The Springville hatchery has adequate facilities to house a unit staffed and equipped to identify causes of fish mortalities in the Intermountain Area, and to provide on-site diagnostic services in this region of high fish hatchery production.

To produce the large numbers and pounds of fish required for resource management and recreational fishing, population densities must far exceed natural situations. The environment is favorable for outbreaks of serious diseases, resulting in losses to recreational resources, private enterprise and local economics. The best course of action to prevent the spread of fish diseases is a program of constant vigilance and control carried out at fish hatcheries across the country.

The annual operation and maintenance requirements of such a unit would be as follows:

1 unit leader, GS-12	$11,420
1 assistant unit leader, GS-11	9,630
1 laboratory technician, GS-7	6,740
1 clerk-typist, GS-4	4,990
Total salaries	32,780
Travel supplies and incidentals	13,220
Vehicular and laboratory equipment	10,000
Total	56,000

There is a wide support in the area for the establishment of a Trout Disease Laboratory at Springville, and I hope the subcommittee will write in the small sum of $56,000 which will inaugurate the laboratory in the fiscal year 1968.

Thank you for your consideration of these items.

Sincerely,

FRANK E. MOSS,
U.S. Senator.

NATIONAL PARK SERVICE—JEFFERSON NATIONAL EXPANSION MEMORIAL

LETTER FROM SENATOR HRUSKA

U.S. SENATE,
COMMITTEE ON APPROPRIATIONS,
April 4, 1967.

Hon. CARL HAYDEN,
Chairman, Interior Appropriations Subcommittee,
Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed for your information is a copy of a letter received from Judge James M. Douglas, giving information that the voters of St. Louis have approved issuance by the City of $2,000,000 in bonds for the Jefferson National Expansion Memorial. It would be appreciated if this will be made part of the record in support of the construction appropriation for this purpose.

Sincerely,

ROMAN L. HRUSKA,
U.S. Senator, Nebraska.

LETTER FROM JEFFERSON NATIONAL EXPANSION MEMORIAL ASSOCIATION

ST. LOUIS, MO., *March 31, 1967.*

Hon. ROMAN L. HRUSKA,
U.S. Senate,
Washington, D.C.

DEAR SENATOR HRUSKA: I was happy to have the pleasure of seeing you at the meeting of the Commission on February 3rd.

All of us here who have worked so long and so hard for the completion of the Jefferson National Expansion Memorial were overjoyed with the result of the March City election approving the issuance by the City of $2,000,000.00 in bonds for the Memorial. Payment of this amount for the Memorial will fulfill the City's obligation. The vote was 70% favorable to the issuance of the bonds, so the requirement of 66⅔ approval was well surpassed. Perhaps this information might be conveyed to the Appropriations Committee before its consideration of the item of $2,300,000.00 in this year's budget for the Memorial.

It appears that the City administration and the Park Service have reached an agreement continuing the 275 foot height limitation of buildings in the neighborhood of the Memorial. The only issue still to be resolved is to determine the boundaries of the area surrounding the Memorial where this limitation will apply.

With best wishes and cordial regards,

Judge JAMES M. DOUGLAS,
Chairman, Executive Committee.

OFFICE OF SALINE WATER

Letter to Senator Proxmire

U.S. Department of the Interior,
Office of Saline Water,
Washington, D.C., March 22, 1967.

Hon. William Proxmire,
U.S. Senate,
Washington, D.C.

Dear Senator Proxmire: In reply to your inquiry as to the reasons for the decline in Office of Saline Water funds devoted to activities within the State of Wisconsin, the following explanation is submitted.

The Fiscal Year 1966 figure of $2,437,998 includes two contracts totaling over $2,100,000 for design, construction and fabrication, which were awarded on a competitive bid basis and which are of a nonrecurring nature. The Fiscal Year 1967 figure represents work actually contracted for during part of the year and contracts currently under negotiation that will probably be obligated before the end of the current year. Fiscal Year 1968 figures are estimates based on current program plans, and the probable renewal of extension of certain current contracts. It would be difficult for us to accurately forecast where all of the research and development funds requested for Fiscal Year 1968 will be expended until proposals are submitted, bids received and evaluated, negotiations conducted, and contracts or grants awarded.

It should be pointed out that as a result of the Office of Saline Water's programs, desalting technology has been advanced to a point where private industry can manufacture desalting facilities that are capable of producing potable water that is competitive, in certain areas, with conventional water sources. The Aqua-Chem Corporation, located at Waukesha, Wisconsin, has participated in our programs over the past several years and, as a result, has been aided by the Office of Saline Water in developing their technology and improving their position in the manufacturing of desalting facilities.

Aqua-Chem's position as a leader in the desalting field is illustrated in their report for the six months ending November 30, 1966, which shows net sale at $5 million compared to $2.7 million for the same period in 1965. The Company's backlog of orders has also more than doubled, going from $5.6 million as of November 30, 1965, to $12.5 million as of the same date in 1966. Based on these trends, there is every reason to believe that the Aqua-Chem Corporation will improve its position among the leaders in the desalting field and continued growth can be expected.

Sincerely yours,

J. A. Hunter, *Director.*

FOREST SERVICE

Letter From Senator Randolph

U.S. Senate,
Committee on Public Works,
March 5, 1967.

Hon. Carl Hayden,
Chairman,
Senate Committee on Appropriations,
U.S. Senate,
Washington, D.C.

Dear Mr. Chairman: It might help in your review of the 1968 budget proposal for the Forest Service in the Department of Agriculture, if I commented on the request for forest development roads and trails. The authorization for this particular item is considered by the Committee on Public Works which over the past four years has given it a great deal of study. We have worked closely with the administration and the industries and communities dependent on federal forests in developing that authorization.

As you are aware the authorization for national forest roads and trails for fiscal years 1968 and 1969 was established at $170 million annually by the Federal-Aid Highway Act of 1966. This was a doubling of the authorization level for fiscal years 1966 and 1967.

The Committee on Public Works recommended this substantial increase based on extensive testimony presented before the Committee on the imperative need to open up additional federal forest lands to forest management, protection and the production of essential products and services. The economic viability of many rural areas of our country, particularly the western states is dependent on the full productivity of federal forest lands.

This recommendation received the unanimous support of the Committee because of the economic dependence of vast rural areas, on forest productivity and the need to open up these resources for management and development.

You have had considerable experience in federal timber matters and well understand the importance to the federal government, the forest products industry and the dependent communities of offering the full allowable cut for sale. In testimony before the Committee on Public Works both Forest Service and forest industry spokesmen pointed out that the basic difference between the available timber supply and that offered for sale was due to lack of access.

The emphasis was placed on the need for access to open up new areas. There was no justification presented for a major program of upgrading existing roads serving areas already under management. There has been some concern expressed to my staff that funds appropriated under this budget item may go more for unnecessary upgrading of roads or for building roads to unnecessarily high standards rather than concentrating on opening up the maximum amount of forest area to management.

I respectfully suggest that you may wish to consider language in the report on the Interior and Related Agencies Appropriation bill cautioning the agency against undertalking a major program of upgrading existing roads until the majority of the critically needed access routes have been constructed.

Truly,

JENNINGS RANDOLPH,
Chairman.

QUESTION BY SENATOR PROXMIRE

Question: I recently received a letter from the Conservation Director of the State of Wisconsin indicating that the full $2,500,000 authorized was needed for cooperative Forest Survey work. I note that $2,203,000 is included in the F.Y. 1968 budget for this purpose. Could an additional $297,000 be wisely used? Would such an increase be of specific help to Wisconsin? What other States would be aided?

Answer: An additional $297,000 could be very effectively used when such an amount is available to strengthen the Forest Survey. Out of the $103,000 increase in the F.Y. 1968 budget request we will be able to allocate only $10,000 to the Survey work in the Lake States region.

We are ready to begin a resurvey in Wisconsin. The State is generously planning to contribute $468,000 over the next three years to assist in this work. An increase for the Forest Survey would be of major assistance in completing a new survey of Wisconsin's important timber resources.

Such an increase as you mention would be used to speed up and intensify the Survey in a number of areas, including the State of Maine, for example, and southern States where rapid industrial expansion is underway.

As you know, we have been steadily falling behind in the nationwide Survey as costs have risen. The demand for and use of up-to-date forest inventory data is greater than ever before. The Survey is important because it provides the information on which industrial expansion depends and on which plans for all kinds of forestry programs are based.

STATEMENT BY SENATOR HRUSKA

For many years the field of forestry research has suffered from neglect, compared with other fields of plant research. As part of a program to repair this neglect, construction of a Shelterbelt Laboratory at Lincoln, Nebraska, has been programmed, and it is hoped that this construction program can be carried through without unnecessary delay. An appropriation for construction funds for fiscal year 1968 is needed to permit this program to proceed expeditiously.

In fiscal 1967 the Congress appropriated $28,000 for the planning of the Laboratory and related facilities to house Forest Service research programs at Lincoln. The General Services Administration has negotiated a contract with an architectural and engineering firm for the design of this laboratory. The estimated time for completing the design phases under this contract is estimated to be February, 1968. The plans and specifications will be completed in time for a construction contract to be awarded in fiscal 1968.

The estimated cost of this laboratory-office building is $350,000. An additional $150,000 will be needed to construct the headhouse-greenhouse and other facilities required in this phase of construction. Plans for these additional facilities are being developed under the present architectural and engineering contract. The University of Nebraska has provided a building site.

Trees can modify local climate, benefit crops and livestock, and control wind erosion of light soils. They can control snow drifting, improve wildlife habitat, and add substantially to the comfort and aesthetic appeal of Plains environment. In recognition of their value, large numbers of trees have been planted in windbreaks, since the time of first settlement. Only a few species have been able to withstand the rigorous climate. Also, the length of tree life and period of shelterbelt effectiveness has not been as great as would be desirable. The problem of diseases is also important. These and similar problems would be the subject of study at the Shelterbelt Laboratory. Funds are also needed for the expansion of the research program, and it is hoped that they can be provided.

LETTER FROM SENATORS SYMINGTON AND LONG (MO.)

U.S. SENATE,
COMMITTEE ON BANKING AND CURRENCY,
April 6, 1967.

Hon. CARL HAYDEN,
Chairman, Interior and Related Agencies Subcommittee,
Senate Appropriations Committee, U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: We respectfully submit the statement of the Meramec Basin Association in support of an appropriation for H–25 Reservoir, to be known as Council Bluff Lake, which will be situated in the Clark National Forest, Missouri.

We fully support this fine statement and urge your committee to approve an appropriation of $170,000 which would be used for site preparation and the beginning of construction on the spillway or the foundation of the dam.

The construction design is now being completed and will be ready by July, 1967.

The President's Budget for fiscal year 1968 already includes funds to complete acquisition of all remaining tracts of land in the reservoir area. Approximately 65 percent of the land is part of the Forest. Another 9 percent has been acquired under fiscal year 1967 funds. Of the rest of the land, most is easily available. In a recent letter, George S. James, Regional Forester, informed us that "some of the landowners hesitate to option their lands because they are not sure there will actually be a lake constructed."

We would like to stress the increasingly urgent need for an early completion of this project. The population in the area is now increasing by 30,000 due to the new multi-million dollar lead, zinc, and iron mining industry which has just been launched near the reservoir site. Estimates already show that the reservoir will attract 162,000 visitor days annually. At present there is no recreation site of this kind in the Forest or on private land adjacent to the Forest.

On behalf of the citizens of Missouri and the Meramec Basin we would like to express our deep appreciation to you and your subcommittee for your continued interest and assistance in obtaining the full development of the Clark National Forest.

Sincerely,

STUART SYMINGTON,
U.S. Senator.
EDWARD V. LONG,
U.S. Senator.

RESOLUTION, BIBB COUNTY DELEGATION, GEORGIA STATE LEGISLATURE

Whereas Georgia's income from forest products exceeds one billion dollars annually; and

Whereas more than one hundred thousand Georgians are gainfully employed in harvesting, processing, manufacturing, and transporting products from Georgia's forests; and

Whereas there are 196,448 private forest land owners in Georgia; and

Whereas commercial forest land in Georgia totals 25,772,200 acres; and

Whereas Georgia's forest land is of the utmost importance in maintaining our excellent hunting, fishing and recreational facilities; and

Wheres Georgia's forest land is also important to tourism, water conservation and is unquestionably one of our State's most valuable assets; and

Whereas, the outstanding accomplishments of the Georgia Forestry Commission in protecting the State's forest lands from fire losses has resulted in an enormous build-up of fuel on the ground which creates potential conditions for large destructive wild fires during severe drought periods; and

Whereas preparations must be made to prevent the occurrence of large wild fires during periods of prolonged drought and severe fire weather conditions, in order that the fire menance does not exceed the capabilities of the State's fire suppression efforts; and

Whereas additional knowledge in fire behavior and new techniques in fire control and suppression must be provided through research; and

Whereas the State of Georgia, through the Georgia Forest Research Council, did construct the world's first forest fire laboratory at Macon, Georgia, with an agreement that the United States Forest Service would staff the laboratory and conduct programs of forest fire research; and

Whereas today there are 37 United States Forest Service Research personnel stationed at the Southern Forest Fire Laboratory and the Washington office of the United States Forest Service has indicated that their plans for the fire research program at Macon will require 110 personnel, or a 300% increase in the research staff by 1972; and

Whereas the Macon facility is already overcrowded and additional laboratory and office space will be required to house the anticipated increases in research activities; and

Whereas the Board of Commissioners of the Georgia Forest Research Council has approved an annex to the Southern Forest Fire Laboratory but were unsuccessful in obtaining funds from the 1967 General Assembly to construct the needed annex; and

Whereas because of pressing needs for education, mental health, highways, and services in other critical areas, it will be most difficult for the State of Georgia to allocate funds in the foreseeable future to construct this critically needed addition to the Southern Forest Fire Laboratory; and

Whereas the Southern Forest Fire Laboratory, one of the three major fire laboratories in the United States, serves the eastern half of the Nation, the research therefrom is beneficial to a broad area of the Nation: Now, therefore, be it

Resolved by the Bibb County delegation of the General Assembly of Georgia now in session on this 17th day of March 1967, in Atlanta, Georgia, That the members of said delegation do hereby express their belief that the expenses of building an annex to the Southern Forest Fire Laboratory should be the responsibility of the U.S. Government, and said members do, therefore, respectfully request the Honorable Richard B. Russell, U.S. Senator from Georgia, the Honorable Herman E. Talmadge, U.S. Senator from Georgia and the Honorable John J. Flynt, Jr., member of the U.S. House of Representatives of the 6th District of Georgia, to request the U.S. Congress to appropriate adequate funds for planning and building a structure of sufficient size to satisfy the present forest fire research program and those planned for the future; be it further

Resolved.—That the Bibb County Delegation shall assist in every way possible to obtain the needed funds and will petition the State of Georgia to give the United States Government a long-term lease of the land on which to erect an annex to the Southern Forest Fire Laboratory at Macon, Georgia.

Senator BILLY ADAMS.
Representative CARR G. DODSON.
Representative W. E LAITE, JR.
Representative F. RAGLAND.
Senator OLIVER C. BATEMAN.
Representative MITCH MILLER.
Representative G. ED KNAPP.
Representative ROGER W. WILSON.

JUSTIFICATIONS SUBMITTED PURSUANT TO SENATE DOCUMENT 22, APRIL 28, 1967

DEPARTMENT OF THE INTERIOR

OFFICE OF TERRITORIES

TRUST TERRITORY OF THE PACIFIC ISLANDS

For an additional amount for "Trust Territory of the Pacific Islands" $5,000,000, to remain available until expended.

Heading	Request pending	Proposed amendment	Revised request
Trust Territory of the Pacific Islands	$17,500,000	$12,500,000	$30,000,000

Additional funds are requested for the fiscal years 1967 and 1968 to provide grants for operations and capital improvements in the Trust Territory of the Pacific Islands. Additional operating grants are needed to improve medical and educational services, for community development, and for additional capital for economic development loans. Capital improvement grants are requested for hospitals and dispensaries; for new elementary and secondary schools; for power, water, and sewage projects; for improvement of transportation facilities and communications; and for other projects related to the urgently needed improvement of services in the trust territory.

Recent legislation authorizes the additional appropriations.

The amounts requested herein when added to the amounts previously requested will not increase the totals for the fiscal years 1967 and 1968 as shown in the 1968 budget.

* * * * * * *

PURPOSE AND NEED FOR ADDITIONAL FUNDS

The Trust Territory is requesting a supplemental appropriation of $12.5 million for Fiscal Year 1968. The 1968 supplemental funds are to be used primarily for the construction of facilities. A total of $1,100,000 is requested for programs, administration, and operations with $11,400,000 requested for capital improvement projects.

Program and financing

[In thousands of dollars]

	1968 request pending	1968 proposed amendment	1968 revised request
Program by activities:			
1. High Commissioner's Office	296	----------	296
2. Judiciary	247	----------	247
3. Grants	16,957	12,500	29,457
Total program costs, funded	17,500	12,500	30,000
Financing: New obligational authority (appropriation)	17,500	12,500	30,000
Relation of obligations to expenditures:			
Total obligations (affecting expenditures)	17,500	12,500	30,000
Obligated balance, start of year	1,254	----------	1,254
Obligated balance, end of year	−1,654	−9,024	−10,678
Expenditures	17,100	3,476	20,576

Object classification

[In thousands of dollars]

	1968, request pending	1968, proposed amendment	1968, revised request
41.0 Grants, subsidies, and contributions	16,957	12,500	29,457
No change in other objective classifications	543		543
Total obligations	17,500	12,500	30,000

JUSTIFICATION

The additional amount proposed in this amendment is distributed to the following activity:

Activity	Appropriation, 1967	Supplemental, 1968	House allowance, 1968	Additional request
1. High Commissioner's Office	$270,000			
2. Judiciary	202,000			
3. Grants	17,022,000	$12,500,000		$12,500,000
Total	17,494,000	12,500,000		12,500,000

A breakdown of the $12,500,000 by objects of expenditure follows:

41 grants, subsidies, and contributions $12,500,000

TRUST TERRITORY OF THE PACIFIC ISLANDS JUSTIFICATION

Supplemental Appropriation FY 1968, $12.5 Million

The United States of America accepted administrative responsibility and an obligation to the people of Micronesia through a Trusteeship Agreement between the United States and the United Nations Security Council, effective July 18, 1947. Under the terms of this agreement, the United States is responsible for promoting the economic, social, political, health, and educational development of the people of Micronesia. This responsibility was assigned to the Secretary of the Interior by Executive Order in 1951.

Appropriations by the United States Congress were at a level of $6,304,000 in 1962 but were increased by $15,000,000 in Fiscal Years 1963 and 1964, and to $17,500,000 in Fiscal Years 1965 and 1966. Over the years the increasing cost of service to a population widely dispersed among the many islands of the Territory and the very high cost of construction in the area resulted in decreased funds being available for new construction, as well as the deferment of maintenance, economic development, and other programs, in favor of education and health services. Legislation has passed the Congress which increased the annual appropriation authorization and permits an increase in the funds available to the Trust Territory for 1968, the current year.

The Trust Territory is requesting a supplemental appropriation of $12.5 million for Fiscal Year 1968. The 1968 supplemental funds are to be used primarily for the construction of facilities. A total of $1,100,000 is requested for programs, administration, and operations with $11,400,000 requested for capital improvement projects.

A. Programs, administration, operations

1. Community services:
    - (*a*) Public health:
        - (1) *Hospitals—$100,000.*—The total of $100,000 is required to permit the recruitment of four additional United States doctor personnel and three qualified registered nurses in FY 1968. These personnel are required to immediately up-grade services being rendered at our district hospitals, while at the same time, up-

grading the on-the-job training of our local national nursing personnel. The employment of these doctors will provide us also with much improved diagnostic capabilities and training of our local Micronesian medical practitioners. With the employment of registered nurses, the on-the-floor supervision for nursing services will be improved resulting in better patient care and conditions of service. These additions will change the doctor population ratio from 1 : 11,250 to 1 : 7,500. The nurse population ratio will be changed from 1 : 18,000 to 1 : 11,250.

(*b*) Education:

(1) *Elementary education—$68,000.*—The sum required will provide for the employment of 30 additional Micronesian elementary school teachers and $15,000 additional for badly needed materials and supplies. Increased enrollment will leave the teacher-pupil ratio essentially unchanged. A qualitative increase will take place among the Micronesian teachers since the number of degree-holding Micronesian teachers is expected to double in 1968 to a total of 29 and the Trust Territory teacher education program on Ponape will graduate an additional 40 teachers.

(2) *Secondary education—$23,000.*—This sum will provide for the employment of 10 additional Micronesian secondary education school teachers along with $5,000 additional for required materials and supplies.

(*c*) *Community development—$250,000.*—A total of $250,000 is required to provide for a Grant-in-Aid fund in FY 1968 to assist in Community Development for self-help type projects. Included in the range of these projects are the building of water systems, bridges, roads, sewage facilities and other community projects in health and education, generally. In each instance, the community furnishes all of the common labor and also frequently, some of the material costs. This program is more than simply a Grant-in-Aid, as it is also educational in teaching self-reliance while providing basic facilities in a community. The community self-help approach will be much accelerated by the presence of the Peace Corps volunteers in the Trust Territory.

2. Resources and development:

(*a*) *Economic Development Loan Fund—$250,000.*—In 1963, 1964, and 1965 this fund has been financed by annual appropriations of $100,000 each year. Loans are made directly or through commercial banks with the Fund guarantor for the loan. Public Law 88–487, approved August 22, 1964, authorized the transfer of the fund of $369,000 in assets of the former "Loans to Trading Companies" fund. No funds were requested in FY 1966 or in the FY 1967 regular submission pending analyses of economic development potentials and additional experience with the fund. From applications presently received, it is apparent that we can efficiently lend all of the remaining funds available for economic development at this time. For this reason, and from the anticipated report to be received from our American contractors on economic development, the additional financing of $250,000 will be required in 1968. The Economic Development Loan Fund currently has direct outstanding loan totalling $403,000 and has additionally guaranteed loans totalling $266,000. The Fund currently provides a 100% guarantee and maintains a 50 per cent reserve for such loans.

3. Administration:

(*f*) *Property and supply—$20,000.*—The $20,000 required for Property and Supply will provide for the employment of an Assistant Procurement Officer and a freight and claims clerk badly needed in our supply operations. With central procurement an established fact, and the much increased Capital Improvement Program, these additional personnel are badly needed to insure prompt action on purchase requests and proper documentation for shipment and claims of losses.

4. Operations, maintenance, transportation, and communications:

(*d*) *Operation and maintenance—Physical facilities—(4) District Public Works—O. & M. $152,000.*—The $152,000 required is for increased maintenance materials such as lumber, paint, nails, roofing materials, and screening.

5. Public affairs:

(*a*) *Political development—$73,000.*—The sum required will provide for additional political affairs staff at district level and headquarters, necessary supplies, equipment and travel and per diem expenses. Only minimum services are now provided in this crucial area of political development. Increased emphasis must be given in political development to meet an early plebiscite date. Management intern positions, both at headquarters and district staff level, will be funded. Provision will be made for sorely needed training programs at the municipal, district and territorial governmental level, for programs of political education of the public, and to sponsor conferences, and travel, both within the Territory and to the United States, by Micronesian leaders.

(*b*) *Public information—$95,000.*—The sum required is needed to improve and expand the public information program. In addition to informing the public and official agencies of its activities, the government provides newspapers and public information services to the district. There are no private news media in the Territory, with the exception of a weekly newssheet in the Marshalls and in Ponape District. Present staffing of Public Information services is confined to the Headquarters Information Office. The amount herein requested will provide for Micronesian public information officers and supplementary clerical and photographic staff in all six districts, supplies and equipment, travel and other essential information costs. Additional staff is required also at the Headquarters level.

(*c*) *Broadcasting—$69,000.*—This sum is urgently required to put the six broadcast stations in full operating condition. It will also provide for additional Micronesian broadcast studio staff, three U.S. station managers, at a cost of $35,000, and for essential broadcast equipment and supplies to operate a Headquarters Broadcast Center and six local stations. Both political development and informational services require increased broadcast services along with an increased emphasis on educational programs via radio broadcasting.

B. Capital improvements

Health facilities construction—$3,737,000.—A total of $3,442,000 is required to complete the funding for the 160-bed Truk Hospital designed for future expansion to 210 beds. The construction drawings for this hospital will be ready for invitation-to-bid in the first quarter of FY 1968. After prior year's approved re-programming, a total of $1,058,000 was available as the first increment of the construction of this facility which is estimated to cost $4.4 million. The funds requested herein will complete the funding for the Truk Hospital.

The cost of referring patients to the Naval Hospital in Guam for specialized care is now approximately $300,000 annually. It is anticipated that this cost will increase unless more intensified care can be provided locally. In addition to achieving the benefits of a properly equipped modern medical facility, the Trust Territory by the proposed construction will achieve eventually an annual avoidance of some of the medical referral costs.

Our outlying dispensaries are manned and equipped to act as obstetric wards for births, well-baby clinics, focal point for immunization, filariasis control, and tuberculosis control in outlying population centers, as well as providing a facility required for treatment when regular doctors make their periodic visits. The condition of many of our dispensaries is deplorable, and the dispensaries to be constructed will range from two to sixteen beds, with a magnitude of cost from $2,000 to $20,000 each. A total of $120,000 is requested for this construction. The balance of $175,000 will provide required funding for renovation of subcenter hospitals.

School construction.—In FY 1964, 65 and 66, an accelerated elementary school construction program was undertaken and many school classrooms were constructed for concrete block, wooden truss with metal roofs. High school classrooms were similarly constructed during this same period. With funds available after the approved re-programming in FY 1967, a design criteria was developed to permit the letting of an architectural and engineering contract for the design of a classroom module easily adaptable to our different island cultures. The design will result in more expensive construction than the concrete block classrooms built in the past; however, the aesthetic beauty of our islands and the potentialities for tourism makes it necessary to build the type of structure blending as much as possible with its natural surroundings. The construction of classrooms and dormitories, where required, will be of a permanent nature and completed with all necessary utilities and sanitary conveniences. As much as possible, construction of all facilities will be completed on an island-by-island basis to take advantage of contractor and of our force account mobilization to a maximum extent. In the beginning, we anticipate higher unit construction costs while training our Micronesian labor force; however, as projects go forward we fully expect expertise to be developed reducing costs.

Secondary school construction—$1,318,000.—A total of $1,318,000 is requested in FY 1968 for secondary school construction, students in grades 9 through 12. Increased enrollment is expected to be 1,478 in school year 1968–69. Secondary school construction will be in accordance with the master plan and will be accomplished on a permanent plant basis with capability of expansion as enrollment dictates. The funds requested herein will provide for the construction of a Territory Polytechnic High School at $718,000 and additional facilities, including dormitories in conjunction with the Agricultural and Technical School in Ponape for $600,000.

Teacher housing—$500,000.—In order to maintain current quality levels in instruction through recruitment of qualified teachers, 24 housing units costing a total of $500,000 are required. This housing and teacher recruitment is necessary to maintain a 1:25 teacher-pupil ratio. The amount of $20,000 per unit has been budgeted until we can design and construct a modular unit and gain some experience in costs. We believe that we should be able to construct employee housing for as little as $16–$17,000; however, due to the dearth of actual experience on good island designs and new construction, this estimate simply cannot be refined at this time.

Power development—$1,200,000.—The FY 1967 Supplemental request of $400,000 for the start of the Truk and Koror power rehabilitation along with the $1,200,000 herein will complete the first phase of the funding of new equipment required for the islands of Koror, Moen (Truk) and Saipan. This amount will provide new generating equipment for Saipan, installation of equipment procured FY 1967 for Palau; for a new distribution system in Palau; installation of the first increment of equipment procured FY 1967 for Truk; new distribution system for Truk.

Water development—$1,000,000.—The $1,000,000 requested herein is estimated to be adequate for the first phase of rehabilitation and additions to water requirements on Saipan, to provide sweet water sources and improvements to distribution to serve five major villages with adequate sanitary water supply presently of high saline content, and approximately $600,000 for water supply and distribution for Truk in the region of the new hospital. In addition, the water sources developed on Truk will be utilized by present communities at this district center alleviating as much as possible the water rationing which exists during draught periods at the present.

Sewage and sanitation development—$275,000.—This total is required for sanitary and sewer facilities for the Truk Hospital outfalls and is required to enable construction to be carried out concurrently with the Truk Hospital.

Communication construction—$775,000.—A total of $700,000 was requested in the FY 1967 Supplemental to provide the funds for immediate procurement of equipment required for the Trust Territory communication system. The Trust Territory Government is working very closely with the FAA on this requirement. Of the $775,000 total required herein, $660,000 completes the funding for the necessary structures, erection of antennas, and installation of equipment required for the system. The balance of $115,000 required is to up-grade the radio broadcast stations at Saipan, Truk and Palau.

Air field construction—$925,000.—Of the total required for Air Field construction in 1968 approximately $600,000 will be used to complete the fill for the Ponape Airfield. With the acquisition of the new 16-inch dredge, in FY 1967, we anticipate it should be possible to complete this airstrip and amortize most of the dredge cost within the funding previously estimated as required for this project. The remaining $325,000 would be used for impacting the Palau Airstrip.

Primary road construction—$350,000.—All funds required are to continue our build-up for the primary program. It is planned to acquire a large portable asphalt plant, spreaders, and road rollers in FY 1968. Work on paving of roads will not begin until FY 1969 when funds will be requested for the necessary labor and materials to begin placing sub-base course, base course and asphalting of selected primary roads. The equipment to be procured will also be used to pave airstrips when projects can be qualified and budgeted.

Harbor development and land reclamation—$300,000.—A study and complete construction design and engineering for a new commercial harbor and port facilities for the island of Ponape, which is now served only by lighterage, is estimated to cost $25,000. It is planned to construct this port facility on one end of Takatik island and land reclamation on this mangrove swamp area will be required for both port facilities and oil depots. Completion of the small harbor in Rota is estimated to cost $41,300 to provide breakwater armor and thus prevent rapid filling of the dredged channel. Other port facilities throughout the Trust Territory are in need of improvement and renovation. Funds remaining after the fill required for the port of Ponape will be used for this purpose.

Master planning—$100,000.—Funds required for 1968 are a continuation of the master planning required for districts and subdistricts so as to cover all major population developmental areas. The master planning will provide professional architectural/engineering services for schematic layouts of land use for each area as island-wide construction programs are authorized. Recommended type, location, and area of civic centers, commercial areas, shops and warehouses, waterfront/POL facilities, residences, hospitals, and park and recreational areas with magnitude of cost estimates for construction will be the information developed.

Emergency and minor construction—$100,000.—A total of $100,000 is requested for minor and emergency-type capital improvements that are not proper Public Works maintenance functions and which cannot be foreseen in this large area of the Pacific. Such construction inevitably is required and the status of these funds and their use will be reported annually in the budget document.

Equipment—$200,000.—The $200,000 required for heavy equipment is a modest increment for requirements in the dispersing of our construction effort to other islands. As construction of the hospital progresses toward the end of FY 1968, it will be necessary to leave some of the construction equipment on the island of Moen for maintenance and other construction purposes while we move to other islands of the Territory to begin major construction projects.

Boats—$320,000.—The sum of $320,000 is required to provide four inter-island boats, desperately required in the Marshalls, Truk, and Ponape Districts for medical evacuations, emergency food distribution and to carry out essential administrative services in island areas away from the district centers. The lack of such transportation at the present time is a serious omission in administrative services and one on which life and death often depends in the three districts mentioned where only transportation by such boats is feasible.

Agriculture—$200,000.—The sum of $200,000 is needed for purchase of major farm equipment to be available for rent to local people. The clearing and subjucation of arable land not now in production rests essentially on the farmers' ability to procure heavy farm machinery. The cost of such farm equipment is beyond the reach of the small farmer of the Territory. This project is one which will have maximum impact on the local economy and one which the Congress of Micronesia, the various district legislatures have urged the Administration to undertake since the program on a Territory-wide nature is one still beyond the local resources.

Dock warehousing—$100,000.—The sum of $100,000 is needed to provide essential dock warehousing for goods, supplies, materials. The lack of such dock warehousing at the present time makes for inefficiency in loading and unloading procedures and greatly increases the cost of handling ocean freight.

Fiscal year 1968 summary by activity of supplemental request

A. *Programs, administration, operations:*	
1. Community services:	
(*a*) Public health:	
(1) Hospitals	$100,000
(*b*) Education:	
(1) Elementary education	68,000
(2) Secondary education	23,000
(*c*) Community development	250,000
2. Resources and development:	
(*a*) Economic Development Loan Fund	250,000
3. Administration:	
(*a*) Property and supply	20,000
4. Operations, maintenance, transportation, and communications:	
(*a*) Operation and maintenance—Physical Facilities:	
(1) District public works O. & M.	152,000
5. Public affairs:	
(*a*) Political development	73,000
(*b*) Public information	95,000
(*c*) Broadcasting	69,000
Total program administration and operation	1,100,000
B. *Capital improvements:*	
Health facilities	3,737,000
Education:	
Secondary	1,318,000
Teachers housing	500,000
Utilities:	
Power	1,200,000
Water	1,000,000
Sewer	275,000
Communication construction	775,000
Airfield construction	925,000
Primary road program	350,000
Harbor development and land reclamation	300,000
Master planning	100,000
Emergency and minor construction	100,000
Equipment	200,000
Boats	320,000
Agriculture equipment	200,000
Dock warehousing	100,000
Total, capital improvements	11,400,000
Total, supplemental request	12,500,000

JUSTIFICATIONS SUBMITTED PURSUANT TO HOUSE DOCUMENT 114, APRIL 28, 1967

DEPARTMENT OF AGRICULTURE

Heading	Request pending	Proposed amendments	Revised request
Forest Service: Forest roads and trails (liquidation of contract authorization)	110,500,000	500,000	111,000,000

Additional funds are required for the Forest Service program to meet increases in salary rates for certain scientists and engineers as authorized by the Civil Service Commission under Executive Order No. 11073 pursuant to 5 U.S.C. 5303 to become effective in February, 1967.

* * * * * * *

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

Heading	Request pending	Proposed amendment	Revised request
Construction of Indian health facilities	$22,211,000	$1,425,000	$23,636,000

These proposed additional funds, are required for construction of the 200 bed Indian Medical Center at Phoenix, Arizona because of (1) cost escalation and (2) modification and expansion of the project to make provision for a clinical research unit. Architectural development is well underway and construction contracts can be awarded by November 1967.

* * * * * * *

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

CONSTRUCTION OF INDIAN HEALTH FACILITIES

Amounts available for obligations

	1968, presently available	1968, revised estimate	Increase
Appropriation	$22,211,000	$23,636,000	$1,425,000
Unobligated balance from prior years	[1]6,253,100	[1]6,253,100	
Total amount available	28,464,100	29,889,100	1,425,000

[1] Reflects amended President's budget to include $4,950,000 obligations for Phoenix in 1968 rather than 1967.

Obligations by activities

	1968, presently available	1968, revised estimate	Increase
Hospitals and clinics	[1] $11,727,400	$13,152,400	$1,425,000
Personnel quarters	3,886,700	3,886,700	----------
Alterations	1,194,900	1,194,090	----------
Community hospitals serving Indians and Non-Indians	250,000	250,000	----------
Construction of Indian sanitation facilities	10,416,000	10,416,000	----------
Total obligations	27,475,000	28,900,000	1,425,000
Unobligated balance carried forward	989,100	989,100	----------
Total available	28,464,100	29,889,100	1,425,000

[1] Reflects amended President's budget to include $4,950,000 obligations for Phoenix in 1968 rather than 1967.

Obligations by objects

	1968 presently available	1968 revised estimate	Increase
Average number of all employees	398	398	----------
Employees in permanent positions end of year	0	0	----------
Employees in other positions, end of year	467	467	----------
11 Personnel compensation	$3,166,000	$3,166,000	----------
12 Personnel benefits	151,000	151,000	----------
21 Travel and transportation of persons	151,000	151,000	----------
22 Transportation of things	418,000	418,000	----------
23 Rent, communications, and utilities	52,000	52,000	----------
24 Printing and reproduction	20,000	20,000	----------
25 Other services	2,570,000	2,570,000	----------
26 Supplies and materials	181,000	181,000	----------
31 Equipment	328,000	328,000	----------
32 Lands and structures	20,188,000	21,613,000	+$1,425,000
41 Grants, subsidies, and contributions	250,000	250,000	----------
Total obligations	[1] 27,475,000	28,900,000	+1,425,000

[1] Reflects amended President's budget to include $4,950,000 obligations for Phoenix in 1968 rather than 1967.

JUSTIFICATION

Additional funds of $1,425,000 for a total of $6,725,000 are requested for the PHS Indian Medical Center at Phoenix, Arizona. To date $5,300,000 has been appropriated for this project. The additional funds are required primarily for price escalation. The current cost of $36.30 per square foot as compared to $31.09 per square foot at the time of the 1966 appropriation is based on the schematic drawings now completed by the Architect-Engineer Lescher and Mahoney, Phoenix, Arizona.

In appropriating the construction funds in 1966, $500,000 was deleted by the House-Senate Conferees. However, the conferees realized that the funds appropriated for construction might not be adequate and stated that, if additional funds of $500,000 were required, such funds may be included in subsequent appropriations (Report No. 513, Amendment 45, June 14, 1965).

It is estimated that a construction contract will be awarded in the fall of 1967.

AGENCY REQUESTS FOR AMENDMENTS TO HOUSE BILL

Bureau of Land Management

MANAGEMENT OF LANDS AND RESOURCES

(House hearings, pt. 1, pp. 138–165)

(Senate hearings, p. 346)

Appropriation, 1967	$49, 655, 000
Estimate	49, 573, 000
House allowance	49, 013, 000
Restoration requested	None

(P. 2, line 10)

AMENDMENT REQUESTED

This amendment is only to clarify the intent that the amount of $5,358,000 appearing in the statement on page 7 of the House Report, and quoted below, is available for "Forest Management, Western Oregon," including thinning and salvage.

HOUSE REPORT

"The reduction of $560,000 recommended by the Committee relates to salvage and thinning activity in Western Oregon. The budget estimate proposed an increase in appropriated funds of $560,000 for this purpose. The Committee recommends that instead of appropriating additional funds for this activity in the amount of $560,000, a total of $760,000 be deducted from the 25% available in the Oregon and California grant lands fund and be ear-marked for this purpose. Thus, with the $4,598,000 provided in the budget base for this activity, plus the $760,000 recommended by the Committee for deduction from the Oregon and California grant lands fund, a total of $5,358,000 will be available in fiscal year 1968 for thinning and salvage. Based on information received by the Committee, funding at this level should be ample for the thinning and salvage activity that can feasibly be conducted in fiscal year 1968."

Bureau of Land Management

CONSTRUCTION AND MAINTENANCE

(House hearings, pt. 1, pp. 165–177)

(Senate hearings, p. 364)

Appropriation, 1967	$3, 032, 000
Estimate	4, 300, 000
House allowance	3, 900, 000
Restoration requested	400, 000

(P. 2, line 14)

AMENDMENT REQUESTED

Page 2, line 14, strike out "$3,900,000" and insert in lieu thereof "*$4,300,000*"—the estimate, or an increase of $400,000 in the appropriation.

HOUSE REPORT

"The Committee approves the construction and maintenance program as submitted in the budget estimate. The recommended reduction of $400,000 is based on anticipated slippage in the actual performance of the construction program.

"To the extent that the anticipated slippage may be less than the $400,000 reduction recommended by the Committee, the proposed program for the construction of recreation facilities should be restricted in accordance with the priority listing as shown on page 175 of the hearings.

"Funds provided under this appropriation include $1,100,000 for the Boise Inter-Agency Fire Center; $150,000 for the Craig District Office Complex; $170,000 for the Kanab District Office Complex; and $30,000 for survey and design.

"Testimony developed during the hearings indicated to the Committee that a rather haphazard policy is being followed in the charging of admissions to the various recreation facilities administered by the Bureau of Land Management.

"It is the strong feeling of the Committee that this matter should be given immediate and concerted attention with a view not only to attaining uniformity in the charging of admissions at the various Bureau of Land Management recreation facilities, but also to obtaining uniformity to the degree practical, with admission charges being made by other Federal agencies operating similar recreation facilities.

"It is the further feeling of this Committee that when extensive Federal Funds are used for the development of these recreation areas, it is incumbent upon those enjoying these facilities to bear their fair share of the costs in the form of admission charges."

JUSTIFICATION

This amendment restores the reduction of $400,000 made by the House in the Budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance. 1968	Restoration requested
Construction	$1,482,000	$2,550,000	$2,270,000	$280,000
Maintenance	1,550,000	1,750,000	1,630,000	120,000
Total	3,032,000	4,300,000	3,900,000	400,000

A breakdown of the restoration request by objects of expenditure follows:

25.0	Other services	$120,000
32.0	Lands and structures	280,000
	Total	400,000

This amendment restores $280,000 for construction of recreation facilities, $70,000 in operation and maintenance of recreation facilities and $50,000 in maintenance of access roads for the total of $400,000 reduction made by the House in the Budget estimate.

The restoration of $400,000 will allow the construction of 184 family units at seven sites, the clean-up and maintenance of about 200 undeveloped sites located throughout the West and the preventative maintenance of about 450 miles of road. The recreation projects below are listed in descending priority:

Project name	State	Family units	Cost
Plains	Wyoming	24	$35,000
Wilson Reservoir	Nevada	46	83,000
Castle Dome	Arizona	33	37,000
Tangle Lakes	Alaska	31	45,000
Star Springs	Utah	15	26,000
White Mountain	Alaska	10	14,000
Point of Pines	Utah	25	40,000
Total		184	280,000

Although the above projects are the lowest in priority of the projects listed for development in FY 1968, they are urgently needed to provide facilities to areas presently receiving heavy public use.

For example, the Plains Recreation Complex is located in the Platte River Area. It has some of the best fishing in Wyoming and presently is receiving approximately 90,000 visits per year. The Wilson Reservoir, Nevada, site is located in a fishing area and is receiving about 7,000 fisherman days of use per year. The site is easily accessible and has no existing facilities. The Castle Dome, Arizona, Site is a continuing project. Funds are required to expand the developed portion to accommodate increasing desert camping use. The Tangle Lakes and White Mountain, Alaska, Sites are presently receiving 35,000 and 26,000 visits per year respectively. Absence of facilities has resulted in sanitation and littering problems. The Point of Pines and Star Springs, Utah, Sites are located in areas with excellent scenic views and are presently receiving about 15,000 visits per year.

The $70,000 reduction in operation and maintenance of recreation facilities will delay the clean-up and maintenance of about 200 undeveloped sites. This work is needed to safeguard the public health and to protect the natural resources at undeveloped sites which are currently being used for recreation.

The $50,000 reduction in maintenance of access roads will prevent timely maintenance of about 450 miles of access road. Roads not maintained when the need develops soon become a corrective maintenance item and maintenance costs are approximately double.

BUREAU OF LAND MANAGEMENT

PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS

(Liquidation of Contract Authorization)

(House hearings, pt. 1, pp. 178–181)

(Senate hearings, p. 371)

Appropriation, 1967	$2,000,000
Estimate	3,000,000
House allowance	2,600,000
Restoration requested	400,000

(P. 2, line 20)

AMENDMENT REQUESTED

Page 2, line 20, strike out $2,600,000" and insert in lieu thereof *"$3,000,000"*, the estimate, or an increase of $400,000 in the appropriation.

HOUSE REPORT

"This appropriation is required to liquidate the obligations incurred under the contract authority provided in the Federal-Aid Highway Act for the development of roads and trails on the public lands.

"In view of the program deferral imposed on this activity for the 1967 fiscal year, and the unexpended balance as reported for December 31, 1966, it is the opinion of the Committee that this activity will be adequately funded for the 1968 fiscal year with an appropriation of $2,600,000."

JUSTIFICATION

This amendment restores the reduction of $400,000 made by the House in the Budget estimate. This amount is for the following activity:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
Public lands development, roads and trails	$2,000,000	$3,000,000	$2,600,000	$400,000

A breakdown of the restoration request by objects of expenditure follows:

32.0 Lands and structures	$400,000

The amendment restores $400,000 for the liquidation of contractual authority. Based on the current rate of liquidating outstanding obligations, the available cash appropriation is estimated to be fully expended at June 30, 1967. There will be a zero cash balance at June 30; but $720,000 of unliquidated obligations will be carried forward into FY 1968. Anticipated total obligations outstanding in FY 1968 will amount to $4,240,000; however, if the $400,000 is not restored, only $2,600,000 of cash will be available to liquidate these outstanding obligations. This is a gap of $1,640,000 between unliquidated obligations and available cash. Experience during FY 1967 has shown that the difference between programmed obligational authority and cash appropriated must be closed if we are to carry out an orderly road construction program. The restoration of the $400,000 in the cash appropriation is urgently needed, otherwise we must defer projects to the end of FY 1968.

If the amendment is not approved, the number of projcts to be obligated under current obligational authority must be reduced. The projects to be deferred are listed below in descending order of priority:

Project name	State	Miles	Costs
Big Knox Bull	Idaho	5	$100,000
Waugh Mountain	Colorado	9	80,000
Troublesome	Colorado	9	110,000
Bare Creek	California	14	70,000
Beatty Butte	Oregon	5	40,000
Total		42	400,000

Intensive management and public use require ready access to the public lands. For example, the Troublesome access road in Colorado will open 12,000 acres of inaccessible public lands for harvesting 26 million board feet of over-mature timber, hunting and fishing and early detection and control of fires. The Bare Creek road in California will provide access to about 50,000 acres of public lands for fire protection, management and recreation.

BUREAU OF INDIAN AFFAIRS

EDUCATION AND WELFARE SERVICES

(House hearings, pt. 1, pp. 766–803)

(Senate hearings, p. 686)

Appropriation 1967	$116,840,300
Estimate	129,478,000
House allowance	126,478,000
Restoration requested	3,000,000

(P. 6, line 2)

AMENDMENT REQUESTED

Page 6, line 2 strike out "126,478,000" and insert in lieu thereof "*129,478,000*", the estimate, or an increase of $3,000,000 in the appropriation.

HOUSE REPORT

"The amount allowed by the Committee by activity compared with the 1967 appropriation and the estimate 1968 is as follows:

"The decrease of $3,000,000 consists of a reduction of $500,000 for the operation of additional Federal school facilities; $500,000 of the increase requested for the adult education program; and $1,000,000 of the increase requested for additional trainees in relocation and adult vocational training.

"The Committee recommends an additional general reduction of $1,000,000 for this activity. This reduction is based on the continued high rate of position vacancies along with various personnel limiations imposed by the Bureau of the Budget.

"The Committee recommends that funds for maintaining law and order be distributed on the basis of tribes having the greatest need of financial assistance for this purpose."

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Educational assistance facilities and services	$82, 909, 000	$87, 924, 000	$86, 244, 000	$1, 680, 000
2. Welfare and guidance services	13, 899, 000	16, 303, 000	16, 153, 000	150, 000
3. Relocation and adult vocational training	17, 123, 000	22, 267, 000	21, 097, 000	1, 170, 000
4. Maintaining law and order	2, 909, 300	2, 984, 000	2, 984, 000	----------
Total	116, 840, 300	129, 478, 000	126, 478, 000	3, 000, 000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	[1] $232, 000
12	Personnel benefits	18, 000
21	Travel and transportation of persons	35, 000
22	Transportation of things	24, 000
23	Rent, communications, and utilities	35, 000
24	Printing and reproduction	2, 000
25	Other services	47, 000
26	Supplies and materials	925, 000
31	Equipment	12, 000
41	Grants, subsidies, and contributions	1, 670, 000
	Total	3, 000, 000

[1] Related to requested restorations in operation of new schools.

General reduction—$1,000,000

The Bureau considered slippages in employment due to normal turnover, employment ceilings, and delays in initial recruitment as lapses in preparing our estimates and reduced personal services accordingly. The personal services estimate will fund the minimum staff necessary for carrying out Bureau programs. The additional reduction of $1 million made by the Committee results in a dual reduction for the same reason—lapses in employment. Therefore, this further reduction would generally be applied to object classes other than personal services.

If the reduction is not restored, the $1 million will be distributed to operating programs as follows: Educational assistance, facilities and services—$680,000, Welfare and guidance services—$150,000, and Relocation and Adult Vocational Training—$170,000. The impact of these reductions is shown in the discussion of each activity.

Education

Restoration of $1,180,000 is requested for the operation of Federal school facilities. This amount includes $500,000 identified by the House to new school facilities and $680,000 as the portion of the general reduction of $1 million allocated to this activity.

Operation of new school units—$500,000

The reduction of $500,000 for the operation of additional Federal school facilities would leave an increase of $285,000 for day school operations: $100,000 for additional units and $185,000 for increased food allowances. An additional 25 day school classrooms will be ready for operation in September 1967, and children are available for enrollment in these units, most of which are in Alaska.

Bureau-wide, the average cost of operating a day school unit is $21,000; the average in Alaska is $24,000. The allowance of a $100,000 increase for the additional units would provide but $4,000 per unit which would cover only minimum maintenance and protection of the facilities. It is requested that the $500,000 be restored in order that teachers may be employed, teaching supplies and materials obtained, and other necessary operating costs may be met.

If the restoration is not made, the Bureau must face the hard decision on whether to open the new day school units by reducing the amounts available for children now in school or to deny the benefits of education to over 600 Indian and Alaska Native children.

General reduction applied to education—$680,000

The general reduction of $1,000,000 results in a further decrease of $680,000 in funds for education programs. This reduction for Federal school operations would lower the proposed average per pupil expenditure for all students in Bureau boarding schools to $1,379 per pupil. This would mean that Federal boarding schools would continue operating at a level far below the standards found in other private boarding schools.

The average tuition rate charged in secondary boarding schools is $2,700 per pupil ("Boarding Schools For the Disadvantaged" by F. James Clatworthy, Phi Delta Kappan, March 1967). The reduction would have a conceivable impact of $23,000 in a single school. With our best efforts to minimize the impact, the reduction would have to be absorbed by the various schools in the way which would be least detrimental to the education of the children. This would mean that staff in some schools would continue to carry high pupil loads; in others, expenditures for instructional supplies, equipment and materials would be decreased; some facilities would be unable to upgrade their feeding program to the planned level; and certain needed educational experiences would be curtailed.

Adult education—$500,000

Restoration of $500,000 deleted by the House in Adult Education is seriously needed for the development of two programs considered of highest priority by this Bureau at the present time.

A part of the recent reorganization of the Bureau of Indian Affairs involved separation of Adult Education from Education in order to place it in Community Services and orient it more toward general community development. Since the Adult Education Program was reduced substantially in fiscal year 1967 from fiscal year 1966, $239,537 of the requested $800,437 increase is designated to partially restore the program to its 1966 level. In the last several months there has been an expanded interest in the on-going Adult Education Program in such fields as literacy training and the acquisition of high school equivalency certification. These activities and the others carried out by Adult Education are important. Motivation is the key factor. Opportunities for adults are becoming more available, but without the basic educational skills and attitudinal orientation to the world of work, the opportunities cannot be exploited beneficially.

The remainder of the increase requested was intended to initiate selected community development programs. Community development activity is most timely now and can support not only all of the programs of the Bureau among Indian people but the expanding efforts of other federal agencies in such fields as housing, economic development, and the like. Originally there was proposed $260,900 for grants and contracts to institutions of higher education in an effort to stimulate this activity and encourage action programs in Indian communities. This approach would have the two-fold benefit of providing demonstration projects for specific Indian communities and involving the resources and capabilities of the institutions working in the program so that their continuing involvement would far transcend the specific introductory programs. There was proposed also to provide community development specialists in the various area offices and, in some cases, at the reservation level to coordinate projects and exploit more fully than in the past all available resources, particularly those from sources other than the Bureau of Indian Affairs as well as an intensive training program for all Bureau superintendents, area directors, and selected field and central office staff.

With the current emphasis on self-direction and increased initiative by Indians and with the current interest generated in Indian affairs on the part of other federal agencies, state and local governmental agencies, private organizations and colleges and universities, there are few program efforts that have more promise or are more urgently needed than this community development effort. This specific program thrust will be impossible if $500,000 of the requested increase is deleted.

Housing improvement—$150,000

Restoration of the Housing Improvement program's $150,000 share of the general reduction made by the House is necessary to provide for repairs and renovations to over 50 Indian homes and new houses for 6 needy families living in unrepairable housing.

Relocation and adult vocational training—$1,170,000

The restoration of the $1,000,000 deleted by the House under the Relocation and Adult Vocational Training Program and $170,000 of the general $1,000,000 reduction is requested so that the Bureau can assist an estimated 530 additional applicants for institutional vocational training.

Since the inception of P.L. 959 there has always been an applicant backlog of approximately 25% who have not been furnished institutional training at the time it was requested due to the lack of funds. The restoration of these funds would assist in eliminating some of this backlog which has been created as a result of increased demand for vocational training by the Indian people.

BUREAU OF INDIAN AFFAIRS

RESOURCES MANAGEMENT

(House hearings, pt. 1, pp. 804–850)

(Senate hearings, p. 714)

Appropriation 1967	$44,086,000
Estimate	47,608,000
House Allowance	47,200,000
Restoration Requested	200,000

(P. 6, line 11)

AMENDMENT REQUESTED

Page 6, line 11 strike out $47,200,000" and insert in lieu thereof "*$47,400,000*",—an increase of $200,000 in the appropriation.

HOUSE REPORT

"The amount allowed by the Committee by activity compared with the 1967 appropriation and the 1968 budget estimate is as follows:

"The decrease of $408,000 recommended by the Committee consists of a reduction of $200,000 in the budgeted increase for additional staff to assist with the mutual help and low rent housing programs; and a reduction of $208,000 in the budgeted increase for the maintenance of new facilities * * *."

JUSTIFICATION

This amendment restores $200,000 of the $408,000 reduction made by the House in the Budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Forest and range lands	$5,224,000	$5,438,000	$5,438,000	----------
2. Fire suppression	140,000	140,000	140,000	----------
3. Agricultural and industrial assistance	7,592,000	8,959,000	8,759,000	$200,000
4. Soil and moisture conservation	5,248,000	5,379,000	5,379,000	----------
5. Maintenance of roads	3,887,000	3,913,000	3,913,000	----------
6. Development of Indian arts and crafts	374,000	380,000	380,000	----------
7. Management of Indian trust property	6,780,000	7,200,000	7,200,000	----------
8. Repair and maintenance of buildings and utilities	13,631,000	14,988,000	14,780,000	----------
9. Operation, repair and maintenance of Indian irrigation systems	1,210,000	1,211,000	1,211,000	----------
Total	44,086,000	47,608,000	47,200,000	200,000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$162, 184
12	Personnel benefits	13, 000
21	Travel and transportation of persons	12, 000
23	Rent, communications, and utilities	5, 816
26	Supplies and materials	1, 000
31	Equipment	6, 000
		200, 000

Restoration of the $200,000 reduction made by the Committee is requested in order to permit the orderly development and operation of the housing programs which are primarily funded by other agencies (i.e., principally the Housing Assistance Administration). This reduction would reduce the amount of housing development under such programs because of the Bureau's reduced ability to provide the services and assistance to the Indians that are required in those programs.

The Committee reduction would eliminate 8 construction superintendents and 8 housing development officer positions. This would mean that construction of at lease 8 mutual help projects would have to be postponed until next fiscal year and that approximately 160 Indian families that have been involved in the planning of their houses would have to wait that much longer for their opportunity to build their mutual help homes. In addition, the reduction would reduce our ability to assist the tribes in planning for mutual help projects to be undertaken in the future and in the planning of regular low-rent and other housing developments for Indians.

BUREAU OF INDIAN AFFAIRS

CONSTRUCTION

(House hearings, pt. 1, pp. 851–899)

(Senate hearings, p. 741)

Appropriation, 1967	$56, 118, 000
Estimate, 1968	40, 407, 000
House allowance	40, 525, 000
Restoration requested	----------

(P. 6, line 17)

HOUSE REPORT

"The net increase of $118,000 recommended by the Committee includes a reduction of $642,000 for school equipment. This equipment has been budgeted for various new schools scheduled for construction in fiscal year 1968. Construction of these schools is seldom completed during the fiscal year for which construction funds are budgeted. It is the feeling of the Committee that equipment for these schools should therefore be funded in the fiscal year following that for which construction funds are appropriated for the schools.

"An additional reduction of $275,000 is recommended in connection with the proposed construction of swimming pools in schools at Santa Fe, New Mexico, and Sisseton, South Dakota. The Committee recognizes the potential benefit, both socially and physically, which construction of swimming pools might contribute to Indian youths. However, when there is still a shortage of adequate classrooms for Indian children, the use of Federal funds for construction of swimming pools is subject to question. The Committee would have no objection to the inclusion of swimming pools in the plans and specifications for the construction of Indian schools, however. This could be done at little or no additional cost as far as the planning is concerned, and would be predicated on the possibility that local civic groups or tribal councils might at some future date determine the pools to be of sufficient value to warrant financing of their construction with tribal funds; by subscription of local civic organizations; or in the case of integrated schools, by contribution of local governing bodies.

"A reduction of $90,000 is also recommended by the Committee in connection with funds requested for fallout shelters for various schools included in the 1968 construction program. This Committee has consistently followed the policy of disapproving expenditures for this purpose in the construction of Indian schools.

"The Committee recommends an increase of $250,000 for construction of the Eufaula Boarding School, Eufaula, Oklahoma, for which planning funds were included in the 1967 appropriation.

"The Committee also has approved $425,000 for the construction of dormitory facilities at the Phoenix Indian School at Phoenix, Arizona.

"An additional $450,000 is recommended to provide the required Federal funds as part of the total cost of a modern integrated junior high and high school facility at Tularosa, New Mexico."

STATEMENT

The Committee added two construction projects to the Bureau's request: Eufaula Boarding School—$250,000 and Boarding Facilities, Phoenix Indian School—$425,000. The amounts added are not sufficient to complete either project. Project estimates for the two schools are:

Eufaula Boarding School.—The $250,000 House allowance is not sufficient to construct a 128-pupil dormitory at Eufaula. The present site is too small to construct all of the needed new buildings; therefore, it has been planned to move to a new site approximately three-fourths of a mile away and build a completely new complex. The total cost for this construction is estimated at $1,129,000. This will provide for a new plant at Eufaula, including one 128 capacity dormitory; a multipurpose room with kitchen for food preparation and small stage for assemblies and school programs; three employees' quarters, utilities, site improvements, equipment and on-site inspection.

Phoenix Indian School.—The House allowance of $425,000 provides only for the estimated cost of the base contract for one 128 capacity dormitory at Phoenix, and funds are not included for utility work, on-site inspection, equipment, contingencies, design or site improvements which are necessary for a complete project. The estimated cost to construct one dormitory is $544,000. The construction of one dormitory, however, will not achieve the goal of replacing the existing sheet metal building which houses 240 boys. If only one dormitory for 128 is constructed, 112 boys must remain in the metal building. To construct the two dormitories, which is necessary to provide adequate housing for all of the boys currently housed in the sheet metal building, will cost an estimated $1,400,000. This will provide for construction of two dormitories, complete replacement of overloaded and old utility systems, site improvements, equipment, on-site inspection and design.

BUREAU OF OUTDOOR RECREATION

SALARIES AND EXPENSES

(House hearings, pt. 1, pp. 1069–1117)

(Senate hearings, p. 1339)

Appropriation 1967	$3, 910, 000
Estimate	4, 240, 000
House allowance	4, 140, 000
Restoration requested	100, 000

(P. 10, line 10)

AMENDMENT REQUESTED

Page 10, line 10, strike out "$4,140,000" and insert in lieu thereof "$4,240,000"—an increase of $100,000 in the appropriation.

HOUSE REPORT

"The Committee has disallowed the requested increase of $100,000 for services to the President's Council on Recreation and Natural Beauty, and liaison services for the new Citizens' Advisory Committee on Recreation and Natural Beauty."

JUSTIFCATION

The amendment restores the reduction of $100,000 made by the House in the budget estimate. This amount is distributed to the following activities:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
Planning and research	$2,596,000	$2,796,000	$2,796,000	
Federal coordination	793,000	912,000	812,000	$100,000
Technical assistance	521,000	532,000	532,000	
Total, salaries and expenses	3,910,000	4,240,000	4,140,000	100,000

The restoration of $100,000 will provide additional funds of $40,000 to finance on a full year basis the salaries of the staff of the Bureau assigned to assist the President's Council on Recreation and Natural Beauty which was established by Executive Order 11278, signed by the President May 4, 1966. The fiscal year 1967 Appropriation Act provided for an increase in staff to service the Council but did not provide for their salaries on a full year basis. The Executive Order directed that "The Council shall review plans and programs of Federal agencies for or affecting outdoor recreation and natural beauty." The Executive Order provides that the staff of the Council shall include an Executive Director from the Bureau of Outdoor Recreation. Bureau staff provides leadership in conducting the studies and preparing reports pursuant to Council directives.

The restoration of the House reduction for expenses of staff services provided by the Bureau will enable the Council to carry out its responsibilities more effectively and will preclude having to reduce other program levels financed under the Federal coordination activity.

The restoration of $100,000 also will provide funds of about $60,000 for: (1) travel expenses of the members of the Citizens' Advisory Committee on Recreation and Natural Beauty and (2) finance staff services to the Committee.

The Citizens' Advisory Committee on Recreation and Natural Beauty is a body established by Executive Order 11278, dated May 4, 1966, to advise the President and the Cabinet-level Council on Recreation and Natural Beauty on policies and substantive matters in this field. Mr. Laurance Rockefeller is Chairman of the Committee which is composed of eleven other prominent citizens from various sections of the country who are knowledgeable about such matters. All members serve without compensation, but are authorized by the Executive Order to be reimbursed for travel expenses and per diem in lieu of subsistence.

The Committee has a small staff financed during the current year by assessments from Federal agencies represented on the Council. For fiscal year 1968 these expenses have been budgeted under the Bureau's appropriation item "Salaries and Expenses" which will reduce administrative costs and provide a better basis for carrying on the work.

The Federal Government is receiving highly valuable services from the twelve members of the Committee at no cost other than travel expenses. Several important studies by the Committee are underway, such as:

(*a*) Problems of environmental quality associated with the electric utility industry—undergrounding distribution lines, potential for nuclear energy and the appearance of electric utility facilities.

(*b*) Highway planning—with emphasis on coordination of highway location problems and the implementation of Section 4(f) of the Department of Transportation Act.

(*c*) Recreation Use of Private Land—an analysis of how the private sector of the economy can be encouraged to plan a role in providing recreation opportunities on private lands.

(*d*) Organization of Federal Resource Agencies—A review of the need for improved interagency coordination among the many new and complex Federal programs.

(*e*) Conservation education—analysis of deficiencies in current conservation education programs and development of recommendations.

Unless these funds are restored the Committee's efforts will be seriously impaired and its studies may have to be discontinued. A breakdown of the restoration by objects of expenditure follows:

11.0	Personnel compensation	$63, 400
12.0	Personnel benefits	4, 600
21.0	Travel and transportation of persons	20, 500
24.0	Printing and reproduction	11, 500
	Total	100, 000

Bureau of Outdoor Recreation

LAND AND WATER CONSERVATION

(House hearings, pt. 1, pp. 1118–1220)

(Senate hearings, p. 1365)

(Appropriation of Receipts)

Appropriation 1967	$110, 000, 000
Estimate	110, 000, 000
House allowance	110, 000, 000
Restoration requested	----------

Advance appropriation

Appropriation 1967	----------
Estimate	$32, 000, 000
House allowance	9, 500, 000
Restoration requested	22, 500, 000

(P. 10, lines 21, 24; p. 11, lines 1, 2, 3, 4, 11)

AMENDMENTS REQUESTED

(1) Page 10, line 21, strike out "$119,500,000" and insert in lieu thereof "*$142,000,000*"—the estimate, or an increase of $22,500,000 in the appropriation.

(2) Page 10, line 24, strike out "$34,458,000" and insert in lieu thereof "*$48,225,000*"—the estimate, or an increase of $13,767,000 in this item.

(3) Page 11, line 1, and 2, strike out "$15,367,000" and insert in lieu thereof "*$18,000,000*"—the estimate, or an increase of $2,633,000 in this item.

(4) Page 11, line 3, strike out "$1,900,000" and insert in lieu thereof "*$3,000,000*"—the estimate, or an increase of $1,100,000 in this item.

(5) Page 11, line 4, insert after "Wildlife", the following:

> "*; and (5) not to exceed $5,000,000 shall be available to the Bureau of Outdoor Recreation for supplemental allocations to the above agencies*"

(6) Page 11, line 11, strike out "$9,500,000" and insert in lieu thereof "*$32,000,000*"—the estimate, or an increase of $22,500,000 in the repayable advance.

HOUSE REPORT

"With certain limitations, Public Law 88–578 approved September 3, 1964, provides for advance appropriations to the Land and Water Conservation Fund from any moneys in the Treasury not otherwise appropriated, in such amounts as to average not more than $60,000,000 for each fiscal year for a total of 8 years. The 1968 budget request for an advance appropriation of $32,000,000 is the first request under this legislation.

"Since the funds to be provided by the advance appropriation are to be used for the same identical purposes as those available by the appropriation of receipts of the fund, the Committee has considered the funding from the two sources as a combined fund.

"However, as a result of the various deletions recommended by the Committee, the decreased funding requirements for this program is applied against the advance appropriation.

"The Committee recommends a land acquisition program totaling $119,500,000 for the 1968 fiscal year. $110,000,000 of this amount is to be provided by appropriation of receipts from the fund, and $9,500,000 will be provided by advance appropriation.

"The following table reflects the action taken by the Committee on the budget request.

"Activity	Budget estimate	Committee bill, 1968	Change
1. Assistance to States	$65,000,000	$65,000,000	
2. Federal land acquisition program:			
National Park Service requirements for recently authorized areas:			
Whiskeytown-Shasta National Recreation Area	6,000,000	6,000,000	
Lake Mead National Recreation Area	783,000	783,000	
Indiana Dunes National Lakeshore	6,500,000		-$6,500,000
Assateague Island National Seashore	6,439,100	6,439,100	
Piscataway Park	2,738,900		-2,738,900
Pictured Rocks National Lakeshore	800,000	800,000	
Delaware Water Gap National Recreation Area	11,000,000	11,000,000	
Fire Island National Seashore	3,864,900	3,864,900	
Guadalupe Mountains National Park	1,800,000	354,000	-1,446,000
San Juan Island National Historic Park	1,750,000	750,000	-1,000,000
All other proposed acquisitions less than $500,000 per unit	2,247,700	1,228,900	-1,018,800
Subtotal, new areas	43,923,600	31,219,900	-12,703,700
Inholdings	4,301,400	3,238,100	-1,063,300
Total, Park Service	48,225,000	34,458,000	-13,767,000
Forest Service:			
Wilderness areas	2,294,359	2,294,359	
Primitive areas	340,640	340,640	
Other recreation areas	15,365,001	12,732,001	-2,633,000
Total, Forest Service	18,000,000	15,367,000	-2,633,000
Bureau of Sport Fisheries and Wildlife: Endangered species	3,000,000	1,900,000	-1,100,000
Bureau of Outdoor Recreation: Emergency planning and acquisition	5,000,000		-5,000,000
Total, Federal program	74,225,000	51,725,000	-22,500,000
Administrative expenses	2,775,000	2,775,000	
Total, 1968	142,000,000	119,500,000	-22,500,000

"National Park Service

"The reduction of $13,767,000 in the Federal Land Acquisition program of the National Park Service includes the following:

"Piscataway Park, Maryland	$2,738,900
Guadalupe Mountains National Park, Texas	1,446,000
Wolftrap Farm Park, Virginia	107,500
San Juan Island National Historical Park, Washington	1,000,000
Virgin Islands National Park, Virgin Islands	511,300
Herbert Hoover National Historic Site, Iowa	400,000
Indiana Dunes National Lakeshore, Indiana	6,500,000
Total	$12,703,700
Inholdings	
Everglades National Park, Florida	$1,048,000
Larimer County, Colorado:	
Tract 276A	1,200
Tract 630	11,000
Flathead County, Montana: Tract 221C	3,100
Total	$1,063,300

"*Forest Service*

"The reduction of $2,633,000 in the Federal Land Acquisition program of the Forest Service consists of low priority tracts as listed on page 1219 of the hearings, for which $1,288,050 was programed.

"In addition, the Committee did not approve acquisition of the following inholding tracts:

"1. Arkansas: Tract 68–6	$80,000
2. California: Whiskeytown Shasta-Trinity	499,350
3. Colorado: Tract 04002–68	78,000
4. Georgia: Tract 68–6	39,900
5. Illinois: Tract 2895	8,050
6. Kentucky: Tract 144–68	17,500
7. Michigan: Tract 8–2112–11	354,000
8. Minnesota:	
Tracts:	
B8–7	16,400
B8–10	4,000
5322	1,550
9. New Hampshire: Tract 8–467–4	5,500
10. Oregon:	
Tracts:	
131–68	6,000
83–68	54,000
11. West Virginia:	
Tracts:	
B8–33	155,000
B8–36	9,700
B8–37	16,000
Total	1,344,950

"Bureau of Sport Fisheries and Wildlife

"The reduction of $1,100,000 in the Federal Land Acquisition program of the of the Bureau of Sport Fisheries and Wildlife includes the following:

"1. Patuxent Wildlife Research Center, Maryland	$750,000
2. Columbia White-tailed Deer Sanctuary, Washington	350,000

"Bureau of Outdoor Recreation Contingency Fund

"The budget estimate included $5,000,000 as a contingency fund for emergency planning and acquisition of priority tracts of land. The Committee has not approved this request.

"While there may be certain advantages to the availability of such a fund, the Committee feels that this would in essence involve the granting of blanket authority to the Bureau to acquire $5,000,000 worth of land at its discretion. While the land acquisition program on a general basis has been reasonably good to date, the Committee has found it necessary to disapprove sufficient proposals for the acquisition of certain tracts that it is not ready to relinquish its review of proposed acquisitions until operating experience under this program has generated more confidence by the Committee.

"LAND AND WATER CONSERVATION FUND POLICY

"Income to the fund from admission and user fees is much less than was estimated. The Committee directs the Bureau of Outdoor Recreation and the participating agencies to be much more aggressive in the designation of fee areas and in the administration of the fee aspects of the Land and Water Conservation Fund. The Committee believes that the using public should pay a reasonable share of the cost of recreation facilities provided by the Federal government.

"The Committee reaffirms the reprogramming procedures followed during the past two years.

"The Committee is not responsive to programming on an administrative unit basis until it is evident through a material reduction in reprogramming requests that the agencies are doing a better job of selection and price estimation on the tracts recommended in the budget estimate.

"The Committee is also concerned that States have not obligated a larger portion of their allocations and it believes emphasis by the State should be on acquisition rather than development. In the opinion of the Committee a proper ratio between development and acquisition for the States would be about one-third for development and two-thirds for acquisition. It urges the Bureau of Outdoor Recreation and the States to work toward this objective.

"The Committee will look with strong disfavor on any developments under the State programs that involve luxury types of development in general, and it feels that the Bureau of Outdoor Recreation in approving State plans should give the very lowest priority to resort hotels and motels that can be funded by private financing."

JUSTIFICATION

Explanation of amendments (1), (2), (3), (4), (5), and (6).—These amendments restore all of the reductions made by the House in the limitation amounts for the Federal agencies. These amounts are distributed as follows:

	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
National Park Service	$23,471,500	$48,225,000	$34,458,000	$13,767,000
Forest Service	18,093,000	18,000,000	15,367,000	2,633,000
Bureau of Sport Fisheries and Wildlife	172,500	3,000,000	1,900,000	1,100,000
Bureau of Outdoor Recreation		5,000,000		5,000,000
Total Federal Programs	41,737,000	74,225,000	51,725,000	22,500,000

A breakdown of the restoration request by object of expenditure follows:

11.0	Personnel compensation	$114,000
12.0	Personnel benefits	9,000
21.0	Travel and transportation of persons	17,000
23.0	Rent, communications, and utilities	11,000
25.1	Other services	37,000
26.0	Supplies and materials	12,000
32.0	Lands and structures	22,300,000
	Total	22,500,000

Explanation of amendment (1).—This amendment is necessary in view of amendments (2) through (6) which restore the full amount of the House reduction.

Explanation of amendment (2).—The following is a justification of the individual acquisitions proposed for purchase by the National Park Service that have been deleted by the House:

Piscataway Park, Md.

The National Park Service urges in the strongest possible terms the restoration of the item of $2,738,900 included in the 1968 budget request for acquisition of lands in Piscataway Park, Maryland.

This area, intended primarily for the protection of the view from historic Mount Vernon, was first authorized by Act of Congress approved October 4, 1961. On July 19, 1966, after further study and hearings, the area was reauthorized under new concepts and with the ceiling on land costs raised.

In reliance on the establishment of the park, interested foundations in the area have donated or committed for donation over 460 acres, or about two-fifths of the total area authorized to be acquired in fee. Of this, a large and valuable tract of 151 acres has actually been conveyed to the United States, though subject to reversion to the grantor should the park not be established by August 8, 1967. In addition, scenic easements over 178 tracts totaling 1215 acres have been acquired.

The scenic easements, as well as the donated fee property, will revert, if this park is not established. Because of the reversion date in many of the deeds, it is vital that appropriations be obtained to prevent valuable donations secured by the Government from lapsing.

Collapse of present efforts by the Government at this time to protect the Mount Vernon overlook, however, will unquestionably open the gate to developments ruinous of this now pleasant scene.

Guadalupe Mountains National Park, Tex.

The National Park Service respectfully requests reinstatement of the amount of $1,446,000 disallowed by the House from its 1968 fiscal year land acquisition budget request in the amount of $1,800,000 under the Land and Water Conservation Fund for Guadalupe Mountains National Park.

Within this amount it is planned to accept an option that has been obtained for the J. C. Hunter ranch which comprises 67,518 acres of land. This tract alone represents 87% of all the private land ownerships within the authorized boundaries of the park. The option price is $1,500,000 and expires on February 26, 1968. It is our honest belief that if we allow this option to expire, further negotiations will result in a higher price. It will also result in the need of additional legislation to raise the present statutory monetary limitation of $1,800,000 for acquisition of lands and interests in lands, as contained in Section 6 of the Act of October 1966 (80 Stat. 920), which authorized establishment of this park.

The State of Texas legislature has approved the donation of the State-owned mineral rights to the United States Government and similar action is expected soon from the Gas Company. This will clear the way for the acquisition of the Hunter tract which in turn will permit early establishment and development of the park for the enjoyment of the visiting public.

Wolf Trap Farm Park, Va

This important park for the performing arts and related educational programs will encompass some 145 acres. All of the park except approximately 39 acres have been donated. The latter will be purchased in fee and easement to round out the area and to provide scenic easement protection. We respectfully request that $107,500 be restored for this purpose. Failure to proceed as soon as possible can result in encroachment from adjoining housing developments which are planned for the area and would result in increased acquisition costs, or permitting of the higher density dwelling unit per acre which could have a seriously adverse effect on the park and the purpose for which it was authorized.

San Juan Island National Historical Park, Wash.

The National Park Service respectfully requests the reinstatement of the amount of $1,000,000 disallowed by the House on the $1,750,000 1968 fiscal year land acquisition budget request for San Juan Island National Historical Park.

The amount of the budget request for this park is for $1,750,000 which is the total authorized by the enabling act. A delay in proceeding with the entire acquisition immediately after authorization of the park will result in price escalation and possible need of additional legislation to raise the monetary limitation to meet the continuous increase in land values which are more predominant in the western part of the United States. It will also result in additional acquisition costs.

Virgin Islands National Park, V.I.

The Virgin Islands National Park in the United States Virgin Islands comprises lush green hills, white sandy beaches, supports tropical plant and animal life, contains relics of the prehistoric Carib Indians, and remains of old colonial sugar plantations. The parks gross area of 15,150 acres consists of 5,367 acres of land donated to the United States by one donor. These lands are scattered along the beaches, on the hillsides, and atop the mountains. Interspersed among the now Federal lands are 4,119 acres of land mostly in large holdings situated also along the beaches and on the mountains. The Service's long-range recreation and conservation plans require the consolidation of all lands in Federal ownership. The upward trend of visitors supports a forecast of about 237,000 visitors a year by 1973, with an approximate estimate of an annual increase of 15,000 visitors. About 5,650 acres of United States owned contiguous offshore tidal lands are a part of the park.

It is imperative that we move forward immediately and take advantage of every opportunity to eliminate these inholdings in view of the rapid rise in land values. Delay in acquisition, in all likelihood, would result in the land being developed for uses not compatible with the true spirit of the park. It is, therefore, respectfully requested that the $511,300 requested for Virgin Island National Park for fiscal year 1968 be reinstated.

Herbert Hoover National Historic Site, Iowa

The land acquisition program at Herbert Hoover NHS commenced with the availability of fiscal year 1967 funds.

Exceptional progress has been made and all funds appropriated to date for this area have been committed. Options are now being negotiated, subject to the availability of funds, for acceptance when the fiscal year 1968 funds become available.

The land required for this area can be purchased within the statutory ceiling provided this program is allowed to be completed without delay. If the $470,000 requested in the fiscal year 1968 program is reduced by $400,000 and the program is not completed until fiscal year 1969 or later, an increase in the statutory limitation will be needed.

It is our intention to complete the negotiations at this area by July 1, 1967, and then utilize the services of this well qualified Land Acquisition Officer at Pictured Rocks NL.

It is believed to be in the best interest of the U.S. Government to reinstate the $400,000 for Herbert Hoover NHS.

Indiana Dunes National Lakeshore

Indiana Dunes National Lakeshore was authorized November 5, 1966 and a statutory limitation for land acquisition of $27,900,000 was specified. The authorization placed approximately 8,721 acres of privately owned land within the boundaries of this park, positioning the landowners so that they are not able to use their property as they desire because of the eventual acquisition of it by the United States. This enables persons interested primarily in profit to purchase land merely for speculative purposes.

The amount which was included in the 1968 fiscal year budget request was determined to be adequate to initiate land acquisition and to consummate a measurable portion of the land acquisition program. The deletion of this item will cause a loss of time which can be measured in dollars lost due to the natural escalation of land costs. Lands situated in an area as suitable for public recreation as those within the boundaries of Indiana Dunes NL are increasing in value at an average rate of over ten percent annually. A practical application of this indicates that the land which could be purchased now for $6,500,000 will increase to $7,150,000 in the following year.

The National Park Service respectfully requests the reinstatement of $6,500,000 for Indiana Dunes National Lakeshore.

Everglades National Park, Fla.

The National Park Service respectfully requests the reinstatement of the amount of $1,048,000 included in the 1968 fiscal year land acquisition budget request under the Land and Water Conservation Fund for Everglades National Park. This request covers the proposed purchase of 52 tracts, all under option, which are located in Monroe and Collier Counties in the northwest corner of the park. These tracts are not within the "Hole-in-the-Donut" section which is in Dade County.

The establishment of Everglades National Park was authorized by the act of Congress approved May 30, 1934 (48 Stat. 816), as supplemented and amended by later acts. In accordance with this authority over 1,300,000 acres of land were acquired without cost to the United States through donation of lands and funds to purchase lands by the State of Florida and other donors.

By the act of July 2, 1958 (72 Stat. 280), the boundary of the Park was redefined, with some lands to the southeast of the then boundary added to the authorized area and a considerably greater amount of lands, which were considered to have lesser park values, excluded from the area. The non-Federally owned lands presently within the authorized boundaries of the Park total approximately 93,700 acres, to a large extent lands included within the boundaries by the 1958 act.

Everglades National Park represents something different from prior established Natonal Parks in that it was the first Park in which biological rather than geological features are stressed.

The acute problem of price escalation on private lands located within the boundaries of National Parks, added to ever present danger of the use of these lands for purposes adverse to those for which the Park was established, requires immediate action in proceeding with the acquisition of these inholdings.

Larimer County, Rocky Mountain National Park, Colo.

The National Park Service respectfully requests the reinstatement of the $12,200 disallowed by the House on the $120,800 land acquisition budget request for Rocky Mountain National Park under the Land and Water Conservation Fund. This reduction specifically covered Tract No. 276A, owned by the Rocky Mountain Natural History Association and Tract No. 630, Griffin, programmed in the amounts of $1,200 and $11,000, respectively.

Tract No. 276A is in high priority for acquisition for development of a picnic area which will provide additional recreational facilities in a park that received 907,800 visitors in calendar year 1966. This picnic area is in the park's approved master plan and only the acquisition of the land is needed to proceed with its development. The Rocky Mountain Natural History Association purchased this tract several years ago to prevent adverse development and price escalation. We have obtained an option on the tract. We are very proud of our good relations with the Association and are grateful for their support and cooperation as it relates to the management and protection of Rocky Mountain National Park. We wish to keep maintaining these relations in good order.

Tract No. 630, Griffin, is also a high priority acquisition. It will be sold to others if we fail to acquire it now. Delay in its acquisition will no doubt result in a higher price later. The tract is needed for expansion of the utility and residential area.

Flathead County

(Glacier National Park, Tract 221–C Glacier National History Association)

This Service has utilized various associations, such as the Glacier Natural History Association, to acquire land and hold until appropriated funds are available. This practice is followed in selected instances to prevent lands from falling in the hands of individuals who may develop for uses not compatible with the true spirit of the park. It must be recognized, however, that these associations operate on a limited budget and thereby cannot hold such land for an indefinite period. The Glacier Natural History Association is in need of operating funds and has requested the Service to acquire these tracts from them.

It is requested that the $3,100 disallowed for tract 221–C be reinstated.

Explanation of amendment (3).—This amendment restores the reduction of $2,633,000 made by the House in the Federal Land Acquisition Program of the Forest Service.

Forest Service, the Federal agency having the largest number of recreation users, urgently needs to acquire additional recreation lands, particularly in the eastern United States. The program submitted to the Congress reflected this need through scheduling of 93% of the acreage in the heavily populated eastern United States. All of these properties are within three hours driving time of at least one urban population center of 50,000 or more. Acquisition of these lands will permit sounder recreation development of existing National Forest lands as well as providing new development sites, primarily water oriented. Careful study and analysis of the needs for new recreation installations in the National Forest System shows that by 1972, a person-at-one-time capacity of 2.5 million in 26,400 developed sites will be required. At the beginning of F.Y. 1968, the National Forest System will have only 9,500 developed sites that can accommodate only 626,500 persons-at-one-time. If steps are not immediately taken to acquire additional land, it will be extremely difficult to provide the type of recreation demanded by the American public. Many of the tracts proposed for purchase will be needed before development of expansion facilities at existing Forest Service recreation areas can proceed. In addition, tracts are also needed before construction can proceed on proposed recreation areas. Further delay in purchasing the needed properties will result in a corresponding delay in construction schedules. Increases in land values can also be expected.

The selection of properties to be included in the F.Y. 1968 Land and Water Fund Act purchase program by the Forest Service was highly selective. As was stated in the testimony by Mr. M. N. Nelson, Deputy Chief, Forest Service, on page 1200, the budget preparation started off at a planning level of $8 million more than the final budget submisison. This was progressively reduced through careful review and coordination with the Bureau of Outdoor Recreation. No tracts of land were included that were not considered of high priority. If these lands are not acquired promptly, the opportunity for acquisition may well be lost and use detrimental to sound recreation development and management of the National Forest System can occur.

While at the request of the Committee, a tabulation of the lowest priority tracts totaling $1,299,050 was prepared, "lowest priority" in the context of the highly selective system of coordination and review is relative. We do not consider any tract in the F.Y. 1968 program of sufficiently low priority that its acquisition should be delayed. Restoration of this portion of the budget reduction is respectfully requested.

In addition to the lowest priority tracts listed on page 1219, funds for 16 additional properties were included in the budget reduction. The need for each of these properties is individually justified.

Arkansas—Ozark National Forest

Tract 68-6: 80 acres, total cost $80,000.

This 80-acre property is needed for intensive recreation development and public access to the scenic Buffalo River, Arkansas. This river is in a beautiful mountain setting with vertical rock bluffs rising along the bank to a height of 600 feet and is a popular float fishing river. Landowners adjoining the river are denying public access and there are no public recreation facilities. A part of the Buffalo River is proposed under current introduced legislation as the Buffalo National River. Publicity is already resulting in increased land prices.

The property lies about equally on both sides of the river and has a quarter of a mile of frontage. Arkansas State Highway 7 crosses the river at the property. This highway is considered to be one of the ten most scenic highways in the United States and receives very heavy tourist use, primarily from the Midwestern States, Louisiana, Oklahoma, Texas and Arkansas. No public recreation facilities are located on this highway north to the Missouri line and to the south for 15 or more miles.

The Forest Service plans to construct 120 family camping and picnicking units, a boat ramp, a swimming area on the tract, and related recreation facilities. Both sides of the river are developable.

The improvements on the tract consist of a residence, a cafe (modernized to a limited extent), and six individual cabins. These are not high grade improvements.

California

Whiskeytown-Shasta-Trinity N.R.A.: $499,350.

The first stage Land Acquisition Plan has been completed for the Forest Service acreas at Shasta and Claire Engle Lakes within the National Recreation Area boundaries. This plan specifically identifies lands needed for intensive development of public use recreation facilities, lands needed for protection of natural beauty and lands in which public service type facilities are required.

Guidelines have been prepared for proposed local zoning ordinances and hopefully favorable local government action will be taken. If favorable action is not taken, prompt action by the United States in conformity with the requirements of the Act will be necessary.

Land acquisition personnel are on the job and proceeding with negotiations for needed properties. Purchase of one tract has been completed and an option obtained for another—these total 460 acres. Appraisals have been completed for 5 other properties totaling 330 acres and negotiations for purchase are continuing. Full commitment of all funds appropriated to date is expected by June 30, 1967. Unless additional funds are appropriated to the Forest Service for F.Y. 1968 for the Whiskeytown-Shasta-Trinity National Recreation Area, no further land purchases can be made within the area for at least another year. This delay can only result in increased cost to the United States when the purchase program is again implemented.

Colorado—Grand Mesa-Uncompahgre National Forest

Tract 04002(68): 160 acres, total cost $78,000.

Two State of Colorado properties, this tract and tract 13009(68) for $120,000 on the San Juan National Forest (included in list of lowest priority tracts on page 1219, Part 1, of House Hearings), should be considered as a unit. A three-way transaction is involved by which a Mr. Charles Redd, Moab, Utah, would acquire the two tracts for sale to the United States in exchange for his lands that are critical game lands needed by the State of Colorado.

Both of the tracts of land cannot be and will not be economically developed and managed for recreation purposes by the State. Both are surrounded or nearly surrounded by National Forest lands having same present recreation development. Under the present status the mix of State and Federal recreation use makes it impractical to designate the National Forest recreation areas under the "Golden Eagle" L&WCF recreation fee system. Once acquired and fully developed these areas and the additional development would be so designated.

Georgia—Chattahoochee National Forest

Tract 68-6: 17 acres, total cost $39,900.

This tract of land was included in the lowest priority tract list on page 1219. The inclusion as an individual tract reduction results in a duplicate reduction for this property.

This tract of land is adjacent to lands being acquired by exchange fronting on Lake Burton. A planned recreation development will be installed on the properties. Access to the recreation area will be through this tract. There is a new house on the property that will be used in administration of the recreation facilities.

The shore line of Lake Burton is almost 100% privately-owned. There is an urgent need to provide recreational facilities and access to the lake.

Illinois—Shawnee National Forest

Tract No. 2895: 7 acres, total cost $8,050.

This tract is located on the shoreline of the proposed Kincaid Lake. The project has been started and will be constructed by the State of Illinois.

Upon completion, a portion of the lake will lie within the Shawnee National Forest. The lake will offer superlative water-oriented recreational opportunities which will be readily available to the metropolitan areas of St. Louis and Chicago.

This private property within the Shawnee National Forest is presently accessible by road and is suitable for immediate recreational development. It is also excellently suited for public recreation developments.

The property has been appraised, negotiated and is under option to the United States.

Kentucky—Daniel Boone National Forest

Tract No. 144-68: 481 acres, total cost $17,500.

This tract is adjacent to the proposed Jellico Creek Corps of Engineers Reservoir and will be developed with public use recreation facilities. Consequently the land is also very desirable for development of private non-conforming facilities.

Experience over the past decades has shown that the purchase of lands of this type adjacent to proposed reservoir projects is opportune during the proposal stages of those projects. Delays in acquiring the needed lands result in either escalated prices at a later date or the private market absorbs the most desirable land first. The latter in many cases has resulted in development of private facilities that do not conform to the public developments planned for the area.

Michigan—Huron-Manistee National Forest

Tract No. 8-2112-11: 5,466 acres, total cost $354,000.

These lands straddle the Pine River for approximately 12 air miles and consist of some of the best recreation land left in the lower peninsula of Michigan. Approximately 1,500 acres are planted in Red Pine. There are large numbers of wildlife including deer, partridge, wild turkey, mink, beaver, otter and migratory water fowl. The Pine River is considered to be one of the best canoeing rivers in the United States. It is an excellent trout river having widely diversified kinds of water, varying from long deep running holes to fairly long stretches of "white river". It is located within 4 hours driving time of 25 percent of the Nation's population.

The Forest Service considers the acquisition of this tract of land to be one of the highest priorities in the National Forest System. Negotiations with the owners have been conducted for the past several years and substantial agreement has now been reached. They are now willing to sell to the United States. If we cannot proceed with the purchase, the owners will sell to private individuals as they have been doing in the past and the opportunity to acquire the property for the general public will be lost.

Additional far reaching impacts on negotiations for other properties of these owners will result. This is a test purchase as far as they are concerned. They own a very substantial acreage of the best water front lands in this area of Michigan. They have started disposing of these lands to hunting and fishing clubs and other private individuals. Both the State of Michigan and the Forest Service are making concentrated efforts to acquire part of these lands for the general public.

Minnesota—Chippewa National Forest

Tracts B8–7, B8–10 and 5322: 6 acres, total cost $21,950.

These three properties aggregating 6 acres at a total cost of $21,950. One of the properties (No. 5322) has been appraised, optioned and approved for purchase by the National Forest Reservation Commission. This tract is located on O'Niel's Point on Star Island in Cass Lake.

O'Niel's Point was the site of the Chippewa Indian Village used by Henry Rowe Schoolcraft as a base camp during his search in 1882 for the source of the Mississippi River. This village was in existence until 1890. Much evidence of the early inhabitants remains, including wild rice storage pits, agriculture clearings, building site clearings, and deeply worn trails to the lakeshore. Timber and vegetative cover remain essentially the same as at the time of the Indian's departure. Pot shards have been found which also indicate an earlier culture, possibly prehistoric.

Forest Service plans and recommendations are for acquisition of the remaining outstanding private ownership in the vicinity to prevent destruction of the area through summer home development. Although private ownership in this area is a small proportion of the total, this valuable historic site will be destroyed through development and use as a summer home area.

Sale in the market is imminent, if the Forest Service does not proceed with the purchases. The properties are on the market and will be sold.

New Hampshire—White Mountain National Forest

Tract No. 8–467–4: 0.1 acre, total cost $5,500.

This tract is presently occupied by a summer cottage. The tract is a 0.1 acre lot in an area proposed for development of additional public use facilities in the South Pond Recreation Area. It is one of several similar-sized lots located in the middle of two existing recreation areas. Plans are to expand the two areas into a single more intensively developed recreation complex. The location of several summer cottages in the middle of the public recreation facilities is completely incompatible with sound management.

The property is on the market and available to the Forest Service at a fair price. Delay in purchasing at this time could result in a possible condemnation at a later date. Experience has shown that court awards in similar cases have resulted in much higher acquisition costs.

Oregon—Mount Hood National Forest

Tract No. 131–68: 1 acre, total cost $6,000.

This one-acre tract is located within the Toll Gate Recreation Area located approximately 24 miles from Portland, Oregon, on a heavily used recreation highway. The existing facilities are not sufficient to satisfy an increasing demand.

Proposed development plans for the area include this tract of land. This small parcel if in private ownership would be used for construction of a summer home. A summer home in a public use recreation area such as this is not compatible with public recreation management.

If this tract is lost to the public through private sale and subsequent development, increased construction costs of the proposed facilities will result.

Siskiyou National Forest

Tract No. 83–68: 40 acres, total cost $54,000.

Public Law 85–833 was passed in 1958 to extend the boundary of the Siskiyou National Forest to include approximately 30 miles of Rogue River and Illinois River frontage for protection and preservattion of an outstanding scenic area. Public ownership is needed to prevent indiscriminate private use of the areas visible from the river. Many river travelers visit the area not only to enjoy the scenery but to take advantage of the outstanding fishing that the rivers offer.

This tract is a highly desirable river property suitable for development of a public campground. The area is presently used as a parking area for mobile-house trailers. Acquisition will protect the scenic aspects of the area and eliminate a private non-conforming use in conformity with the objectives of P.L. 85–833. The improvements are suitable for use in the campground development, and will be incorporated and used when the area is developed.

West Virginia—Monongahela National Forest

Tract No. B–8–33: 320 acres, total cost $155,000.

This property is a "must acquisition" needed for right-of-way and protection of the scenic values along the Spruce Knob Scenic Drive. The Scenic Drive will extend from State Route 28 and U.S. Route 33 to Spruce Knob, which is within the National Recreation Area. The tract includes six ownerships.

Improvements on the tract includes 2 frame houses, an old sawmill structure, office building and associated buildings. The improvements are valued at $75,000.

Construction of segments of the Scenic Highway has started. Delays in acquiring the needed right-of-way will result in corresponding delays in construction starts and subsequent delays in completion. In addition, the development of nonconforming private faciilties is highly probable if the tracts are not purchased when they become available.

Tract No. B8–36: 330 acres of mineral interests, total cost $9,700.

Mineral rights on these lands are needed to protect the proposed campground expansion site at Summit Lake. This development is scheduled for construction in 1968 or 1969. The existing recreational facilities that would be protected by the acquisition of mineral rights are 17 camping sites, a boat launching site, parking area, and fishermen and hiking trails.

The Master Development Plan for Summit Lake includes the following proposed additional facilities: 52 camp sites, 1 boat launching site, 10 picnic sites, one overlook, and numerous trails. The purchase of the mineral rights is necessary before these facilities may be constructed. The existing and proposed facilities will also be aesthetically protected by this mineral purchase.

Coal deposits are present in this area and should they be developed, unsightly open pit strip mines would result, severely damaging or destroying the recreation resource.

Tract No. B8–37: 90 acres, total cost $16,000.

This tract adjoins the proposed Mouth of White Oak campground area. Development of this area is scheduled in the 5-year plan for recreation construction. Location of tract B8–37 limits the development potential of the Mouth of White Oak area to approximately 10 to 15 camping units. This capacity is inadequate to serve the current demand for camping facilities in the area. Acquisition of this tract bordering the Mouth of White Oak site would increase the development potential to approximately 50 camping units.

The Mouth of White Oak Campground combined with development of this tract will provide one of the few opportunities for a development easily accessible to the 15 mile stretch of Williams River, a major trout stream in the southwest portion of the Forest.

The tract is on the market now. Delay in purchasing could result in a sale to a private buyer. Private demands for recreation type development land are increasing. If the tract is not purchased now it could be lost to public use or an inordinate price escalation could occur.

Improvements consist of a residence and related out-buildings and pasture fences at a valuation of $7,000.

Explanation of amendment (4).—This amendment restores the reduction of $1,100,000 made by the House in the Bureau of Sport Fisheries and Wildlife program.

Of this reduction, $750,000 is needed for land acquisition for the Endangered Species Research Center at Patuxent, Maryland. The total proposed acquisition is 470 acres, of which 253 acres are proposed for acquisition in fiscal year 1968. This is the maximum amount allowed for acquisition for any one area under the Endangered Species Preservation Act and specific authority must be obtained for the additional land needed.

Detailed research is prerequisite to a full program to preserve endangered species. The limiting biological factors must be determined for each species before a realistic program can be developed. The Endangered Species Research Center which is an addition to the Patuxent Wildlife Research Center will provide laboratory facilities for research in nutritional requirements, genetics, disease, propagation, and behavior. The station will hold a variety of species to serve as breeding stock for testing, captive propagation, imprinting, and release. One of the major objectives of the station is to develop techniques for propagating certain species in captivity, and reintroducing the resulting stock into the wild.

Development of the center is now reaching a point where additional land is urgently needed for propagation and conditioning pens and facilities. One hundred or more species and from 50 to 100 pairs of each species, when the project is fully operational, will be held throughout the year. To maintain up to 1,000 breeding pairs and to rear many times that number properly conditioned for release to the wild, will require additional acreage. Intolerance of breeding birds and conflict among species as well as disease prevention in irreplaceable stock makes it necessary to provide greater space than considered necessary for a purely game farm type of operation.

When Patuxent was selected as the site for a new Endangered Wildlife Research Center it was realized that additional lands would be required on which to construct the complete facility. The proximity to our own, as well as other, research institutions, favorable climate and having part of the land needed already under Government ownership, were determining factors in this site selection and outweighed the high land value factor of the area. The funds requested will permit acquisition of lands, the cost of which, although already high, is rapidly rising and commercial development is encroaching upon the area.

The remaining amount of $350,000 is needed for the proposed acquisition of 970 acres in fiscal year 1968 of a proposed total acquisition of 2,000 acres, for the Columbia White-tailed Deer Refuge in Wahkiakum County, Washington. The last of the Columbia White-tailed Deer habitat is being cleared at a rapid rate. The deer are very restricted in range and highly selective in habitat and it has been found they cannot adapt to available coastal range woodlands occupied by the Columbia Black-tailed Deer. The Columbia White-tailed Deer is threatened with extinction from loss of its selected and limited habitat to intensive agricultural development. Unless enough of its habitat is permanently protected this deer is destined for addition to an already overly-long list of extinct animals. To obviate this situation, acquisition of acreage for this refuge is recommended.

Explanation of amendment (5).—The problem of recreation land price escalation has been of concern to the Executive Branch and to the Congress. There is no easy solution to the problem of rapid price increases on lands at newly authorized recreation areas. Studies have shown that land prices throughout the Nation are increasing 6 to 10 percent annually and that recreation lands are increasing more rapidly.

One effective means of combating this problem is to move quickly into a newly authorized area and acquire prime tracts before speculation occurs. This action also establishes a price pattern that will be useful in future negotiations. The purpose of the $5,000,000, deleted by the House, was to provide funds to develop ownership data, prepare maps and acquire prime parcels promptly rather than having to wait 12 to 18 months to obtain funds through the normal budgeting process.

The report issued by the House Committee indicates a reluctance to make available $5,000,000 to the Bureau for acquisition of land "at its discretion". The Bureau of Outdoor Recreation failed to make clear that it would not use this money without Committee clearance. It was the Department's intention, and still is, that any proposed use of these funds would be presented to the House and Senate Subcommittees on Appropriations for review prior to being expended for developing ownership data, land acquisition or any other purpose. It should also be known that existing reprogramming authority would not be used insofar as these funds are concerned. Instead of utilizing such authority as is available, the Department would present all proposals for the use of these funds to the Committees. This would provide the Committees an opportunity to disallow any proposal that appeared unreasonable or undesirable.

Explanation of amendment (6).—This amendment restores the reduction of $22,500,000 made by the House in the repayable advance appropriation. The increase requested will provide the Federal agencies with immediate cash to acquire lands in newly authorized areas before land price escalation has made the lands prohibitively expensive. Lands that are to be purchased from revenues to the Fund cannot be obtained until sufficient receipts have occured to cover costs. Therefore, revenues accruing to the Land and Water Conservation Fund are not immediately available to the land acquiring agencies. Funds accruing in one month are not warranted by the U.S. Treasury until the following month.

It will be September before the agencies will have available any revenues from fiscal year 1968 receipts for land acquisition. The $32,000,000 advance appropriation requested will be repaid from receipts in the Land and Water Conservation Fund beginning in 1976, the eleventh year of the program.

Geological Survey

SURVEYS, INVESTIGATIONS, AND RESEARCH

(House hearings, pp. 180–335; Senate hearings, p. 397)

Appropriation 1967	$80, 032, 000
Estimate	88, 199, 000
House allowance	85, 499, 000
Restoration requested	2, 700, 000

(p. 14, line 17)

AMENDMENT REQUESTED

Page 14, line 17, strike out "$85,499,000" and insert in lieu thereof "*$88,199,000*"—the estimate, or an increase of $2,700,000 in the appropriation.

HOUSE REPORT

"The amount allowed by activities as compared with the 1967 appropriation and the estimate for 1968 is as follows:

"Activity	Committee bill, 1968	Bill compared with—	
		1967 appropriation	Estimate, 1968
Topographic surveys and mapping	$24, 488, 000	+$1, 802, 000	
Geologic and mineral resource surveys and mapping	26, 223, 000	+1, 580, 000	−$551, 000
Minerals discovery loan program	425, 000	+4, 000	
Marine geology and hydrology	1, 170, 000	+308, 000	
Water resources investigations	26, 432, 600	+2, 004, 600	−1, 649, 000
Soil and moisture conservation	250, 000	+4, 000	
Conservation of lands and minerals	4, 814, 000	+121, 000	
General administration	2, 241, 400	+207, 000	
General reduction, travel	−500, 000	−500, 000	−500, 000
Transfers in the estimate		−63, 600	
Total, Geological Survey	85, 499, 000	+5, 467, 000	−2, 700, 000

"The reduction of $551,000 below the budget estimate for 'Geologic and Mineral Resources Surveys and Mapping' consists of a decrease of $280,000 for the heavy metals program and a decrease of $271,000 for earthquake research. The Committee recognizes the importance of the heavy metals program and does not wish by this reduction to convey any disapproval of activities in this connection. Even with the recommended decrease, this Bill provides an additional $1,500,000 over the $6,396,000 available in 1967. With careful administration, the Committee feels the program objectives can be accomplished in 1968 with the lesser amount of funds.

"Information received by the Committee would indicate there is an increasing duplication of effort in earthquake research. Notwithstanding the $271,000 reduction recommended by the Committee, there will still be $1,097,000 available for this work in 1968. With frugal administration, the 1968 program objectives in all probability can be achieved at the lower level of funding.

"For 'Water Resources Investigations', the Committee recommends a decrease of $1,649,000 below the budget estimate. $199,000 of this reduction relates to the requested increase for development and application of modern scientific methods of research and support of water conservation planning and management.

"An additional reduction of $1,500,000 is recommended below the requested increase of $2,000,000 for the International Hydrological Decade. A total of $668,000 would be available for this activity. Based on testimony received during the hearings, the Committee is of the opinion that this in essence is a 'Foreign Aid' program for water. As such, there is some question whether or not it is properly for funding in this appropriation account. At any rate, in a year of severe budget limitations, and in view of the pressing water needs of this country, the Committee does not feel that this is an appropriate time to initiate a greatly accelerated international water program.

"The Committee recommends an increase of $50,000 to initiate a comprehensive study and investigation of the water resources of the Delmarva Peninsula as authorized by Public Law 89–618, approved October 4, 1966.

"A reduction of $500,000 below the budget estimate of $4,060,000 for travel and transportation of persons is recommended. Actual expenditures for this purpose amounted to $2,990,798 in fiscal year 1966. Notwithstanding the fact that the agency's activities will have expanded to some extent since 1966, the Committee is of the opinion that the budgeted increase for this purpose is out of proportion to the expansion of the program. In addition, information available to the Committee indicates that proper precautions are not being taken to insure that travel costs are held to a practical and reasonable minimum."

JUSTIFICATION

The amendment restores the reduction of $2,700,000 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
(1) Topographic surveys and mapping	$22,686,000	$24,488,000	$24,488,000	
(2) Geologic and mineral resource surveys and mapping	24,643,000	26,774,000	26,223,000	$551,000
(3) Minerals discovery loan program	421,000	425,000	425,000	
(4) Marine geology and hydrology	862,000	1,170,000	1,170,000	
(5) Water resources investigations	24,428,000	28,081,600	26,432,600	1,649,000
(6) Soil and moisture conservation	201,000	205,000	205,000	
(7) Conservation of lands and minerals	4,693,000	4,814,000	4,814,000	
(8) General administration	2,098,000	2,241,400	2,241,400	
General reduction, travel			−500,000	500,000
Total	80,032,000	88,199,000	85,499,000	2,700,000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$163,000
12	Personnel benefits	13,000
21	Travel and transportation of persons	500,000
25	Other services	780,000
	Services of other agencies	950,000
26	Supplies and materials	100,000
31	Equipment	194,000
	Total, Geological Survey	2,700,000

(2) *Geologic and mineral resource surveys and mapping*

(*a*) *Heavy metals.*—The Geological Survey appeals the reduction of $280,000 in funding for the heavy metals program recommended by the House Committee.

In its first year, the heavy metals program has resulted in—

identification of exploration targets that can be followed-up immediately by industry, as at Cortez, Nevada.

identification of extensive deposits that may be made mineable by improved technology, toward which the Bureau of Mines will work, as in northwestern Wyoming.

identification of favorable areas that can be only partly evaluated by surface geologic and geochemical studies and that will require geophysical studies or drilling to provide information in the third dimension before exploration targets can be developed sufficiently to be attractive to private industry.

The first year of this program has been markedly successful. The requested funds provide for continuation of the program at a level endorsed by representatives of several agencies of the Federal Government. Reduction in the requested funds will impair the capability to carry studies to conclusion. In addition it will force cancellation of at least three planned projects in three states, and cancellation of marine and research contracts with four universities.

(*b*) *Earthquake research.*—We earnestly request restoration of the decrease of $271,000 in funds for earthquake research.

In September 1965, a special Ad Hoc Committee appointed by the Science Advisor of the President, and comprised of leading authorities in the Nation, reported the results of an intensive study of the needs for a program of earthquake research. Because of the great potential dangers to life and property in the earthquake-prone areas of the country, the Committee recommended a major increase in the level of research and a 10-year program at a cost of $137,000,000.

In response to this recommendation, the Geological Survey immediately reoriented a significant part of its geological and geophysical capability to focus on the earthquake problem, and in October, 1965 established the National Center for Earthquake Research at Menlo Park, California. The total program so constructed is at a funding level of $1,097,000 in fiscal year 1967. Potential losses from earthquake in the great urban centers of the West Coast are enormous and present knowledge of earthquakes and their effects is still grossly inadequate to guard against such losses.

Important steps have been taken within the past year to eliminate the possibility of duplication of work in the Federal earthquake program. Dr. Hornig of the Office of Science and Technology has established the Ad Hoc Interagency Group for Earthquake Research. The U.S. Geological Survey, as the acknowledged leader in the field, was designated to chair this unit, which consists of representatives of research organizations and of "user" groups such as HUD. A series of meetings has been held to review on-going activities, to consider future needs, and to recommend a coordinated program.

The requested increase of $271,000 is urgently needed to (1) Establish additional instruments along active fault zones on the West Coast, so as to measure possible premonitory movements and accumulated strain; and (2) to inaugurate a totally new endeavor in earthquake engineering as part of the Engineering Geology program. This effort is designed to determine the physical properties of soft, saturated sediments of the San Francisco Bay area and their response to ground motion. Data to be obtained from this research is needed immediately by insuring offices of FHA and the Veteran's Administration, as well as by other public and private groups to diminish future losses from major earthquakes.

(*5*) *Water resources investigations*

(*a*) *Development and application of modern scientific methods.*—Restoration of the House reduction of $199,000 in funds requested for development and application of modern scientific methods is urged. No specific reason is given by the House Committee for disallowing the entire increase requested for this important program element.

This reduction will seriously hinder the Geological Survey in its efforts to supply timely and useful data for modern water managers. Conjunctive use of ground water and surface water is imperative in modern management and such use depends on extensive knowledge of ground-water systems which can be obtained quickly and accurately only with the help of geophysical logging techniques. Geophysical tools already developed cannot be used if funds are not available. Dispersion patterns and travel times of pollutants in surface waters (including heat) can be measured most effectively and economically with the help of areal sensors and automatic river monitors, and certain phenomenon, such as lake circulation patterns, can be determined only by remote sensing. Both quantitative and qualitative changes now are occurring so rapidly in lakes, reservoirs and streams that it no longer is practicable to monitor these changes with conventional tools. Wide scale areal coverage, automatic monitoring, underground logging and scientific modeling are needed for supplying real time information to a growing number of water managers. Eliminating the relatively small increase requested for orderly expansion of this work will seriously retard the Geological Survey's plan for tooling up to meet increasing demands for better and faster data collection.

(*b*) *International hydrological decade.*—The House reduced by $1,500,000 the requested increase of $2,000,000 for the International Hydrological Decade program. The principal reason given is the Committee's opinion that the proposed work is in essence a foreign aid program for water.

The IHD definitely is not a foreign aid program for water. In fact, it is aimed in part at reducing the need for such foreign aid. The request does include $450,000 for a fellowship program of advanced study by foreign students. However, this is justified on the basis that it is in the interest of the United States to increase the ability of foreign countries to cope with their own problems, thereby reducing global effects of such problems as well as the need for direct U.S. aid. Similar justification applies to on-the-job training at the requested level of $100,000.

The remaining 72.5 percent of the requested increase is for activities of direct interest and major importance to this Nation. For example, extremely important boundary resources such as the Great Lakes and surface water and ground water systems bordering Mexico can be studied properly only through international cooperation. Also, global data are required to improve predictions of floods, droughts, and fallout contamination, and to cope with decreasing tolerance in this country for variation in quantity and quality of water.

It is requested that funding be restored to the $2,000,000 level, the estimated minimum required for an effective start on this important interagency program.

(c) *Delmarva Peninsula study.*—The amendment eliminates $50,000 provided by the House for partial implementation of a comprehensive study and investigation of the water resources of the Delmarva Peninsula as authorized by Public Law 89–618, approved October 4, 1966. Full implementation of this study is being considered for inclusion in a future budget.

General reduction, travel

Restoration is requested of the $500,000 House reduction in funds for travel and transportation of persons.

An analysis of travel costs in the Geological Survey in FY 1966 showed that about 90 percent was directly related to field surveys and only 10 percent was what might be classed as administrative in nature. Any curtailment of field, or operational travel has the inevitable effect of retarding field work, with resultant inefficiencies in the prosecution of the programs. The 10 percent, for administrative travel, includes supervisory inspections, attendance at meetings, and change of headquarters. Funds for administrative travel have been reduced already far below an optimum level. For example, $108,000 is budgeted in FY 1967 for participation in scientific meetings and conferences—a decrease from that budgeted in FY 1966.

It is estimated that $200,000 increase over 1966 will be needed for family moving expenses pursuant to Public Law 89–516. An additional $869,000 is for expanded programs, which is disproportionate to appropriation increase, but justified on the basis that the new programs require greater emphasis on field surveys than laboratory oriented studies. Notable among new and expanded programs involving unusually large amounts of field operations are the heavy metals, wilderness area mineral surveys, and marine programs, for which additions to professional staff have been allowed. The areas to be covered are larger than those involved in our regular mapping programs, and they require a greater percentage of time in the field. Any reduction or forced curtailment of field operations reduces the production of maps, field survey, and land information which are basic to our mission.

BUREAU OF MINES

CONSERVATION AND DEVELOPMENT OF MINERAL RESOURCES

(House hearings, pp. 199–206, 215–288, 328–339; Senate hearings, p. 870)

Appropriation, 1967	$34, 740, 000
Estimate, 1968	39, 825, 000
House Allowance	38, 180, 000
Restoration Requested	1, 780, 000

(P. 16, line 8)

AMENDMENTS REQUESTED

(1) Page 16, line 8, strike out "$38,180,000" and insert in lieu thereof "$39,960,000"—an increase of $1,780,000 in the appropriation.

(2) Page 16, line 8, strike out "2,224,000" and insert in lieu thereof "$2,724,000"—the estimate, or an increase of $500,000 in the amount to remain available until expended for the conduct of a tunneling technology program.

HOUSE REPORT

"Activity	Committee bill, 1968	Bill compared with—	
		1967 appropriation	Estimate, 1968
Research:			
Coal	$6,745,000	+$455,000	−$15,000
Petroleum	2,360,000	+235,000	------------
Oil shale	1,620,000	+311,000	−300,000
Metallurgy	10,371,000	−495,000	------------
Mining	6,742,000	+2,466,000	−700,000
Marine mineral mining	1,433,000	------------	------------
Explosives	578,000	+8,000	------------
Resource development:			
Statistics	1,777,000	−26,000	------------
Economic analysis	450,000	+120,000	−130,000
Bituminous coal	905,000	+12,000	------------
Anthracite	370,000	+4,000	------------
Petroleum	700,000	+108,000	------------
Minerals	3,565,000	+237,000	−500,000
International activities	564,000	+7,000	------------
Transfers in the estimates	------------	−2,000	------------
Total, conservation and development of mineral resources	38,180,000	+3,440,000	−1,645,000

"The net reduction of $15,000 for Coal Research consists of a decrease of $150,000 in the request of $650,000 to fund an investigation of new processes for removal of sulphur oxides from stack gases after combustion, and an increase of $135,000 for "Operation Anthracite Refuse". This is a proposed research project to establish approaches and capabilities for use in removal of refuse from anthracite mines by determining characteristics, economic value, utilization and disposal of current and in-situ refuse.

"The Committee recommends an appropriation of $576,000, a reduction of $300,000 below the budget estimate, for oil shale research for in-situ work on Federal lands. The amount provided is more than double the funding available for this activity in fiscal year 1967.

"The reduction of $700,000 for mining research includes a decrease of $200,000 in the total funding requested for the heavy metals program. Funding for this activity at the level recommended by the Committee will provide a total of $1,600,000 in fiscal year 1968, an increase of $409,000 over funds available in fiscal year 1967. The Committee is of the opinion that the funding level provided in this Bill for the heavy metals program will be sufficient to accomplish the objectives of the 1968 program if adequate attention is given to administering the program as economically as possible.

"The reduction also includes a decrease of $500,000 below the $2,724,000 requested to start "Project Badger", a program of research and development in tunneling technology aimed at reducing the cost and increasing the speed of tunneling for such purposes as urban and inter-city transportation, waste disposal, water supply, underground power distribution and other civilian and military uses.

"A reduction of $130,000 is recommended below the increase of $250,000 requested for economic analysis. This provides about a 50% increase above the funding level for this activity in fiscal year 1967.

"The Committee also recommends a reduction of $500,000 the amount of the budget estimate, for studies on technologic and economic changes upon supply and demand of resources. Testimony developed during the hearings indicated all this work would be done under contract. It is the opinion of the Committee that further consideration should be given the possibility of performing these studies in-house."

JUSTIFICATION

Explanation of amendment (1)

The amendment increases the House allowance by $1,780,000. This amount is distributed by activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
Research:				
(*a*) Coal	$6,290,000	$6,760,000	$6,745,000	$150,000
(*b*) Petroleum	2,125,000	2,360,000	2,360,000	----------
(*c*) Oil shale	1,309,000	1,920,000	1,620,000	300,000
(*d*) Metallurgy	10,866,000	10,371,000	10,371,000	----------
(*e*) Mining	4,276,000	7,442,000	6,742,000	700,000
(*f*) Marine mineral mining	1,433,000	1,433,000	1,433,000	----------
(*g*) Explosives	570,000	578,000	578,000	----------
Resource development:				
(*a*) Statistics	1,803,000	1,777,000	1,777,000	----------
(*b*) Economic analysis	330,000	580,000	450,000	130,000
(*c*) Bituminous coal	893,000	905,000	905,000	----------
(*d*) Anthracite	366,000	370,000	370,000	----------
(*e*) Petroleum	592,000	700,000	700,000	----------
(*f*) Minerals	3,330,000	4,065,000	3,565,000	500,000
(*g*) International activities	557,000	564,000	564,000	----------
Total	34,740,000	39,825,000	38,180,000	1,780,000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$247,000
12	Personnel benefits	18,000
21	Travel and transportation of persons	48,000
22	Transportation of things	20,000
23	Rent, communications, and utilities	25,000
24	Printing and reproduction	12,000
25	Other services	1,162,000
26	Supplies and materials	82,000
31	Equipment	166,000
	Total	1,780,000

Research

(*a*) *Coal.*—Restoration is requested of the $150,000 reduction for the investigation of new processes for removal of sulfur oxides from stack gases.

The removal of sulfur oxides from the flue gases of coal burning installations is one of the most pressing problems facing the Nation today. Although the effect of exposure to low levels of concentration of sulfur oxides for extended periods is not fully known, there is ample evidence of severe effects in human health and damage to land, plants, and materials of construction during periods of high concentration. A comprehensive research program will be undertaken to minimize the sulfur from combustion of coal either by removing the sulfur prior to combustion or removing the sulfur oxides from stack gases after combustion. Unless this problem can be solved effectively, efficiently, and immediately, the Nation's energy supply situation will be severely unbalanced with the possible result that heavily populated parts of the Nation will be without electric power and fuel for home heating.

The urgency of this problem is emphasized by the President's message to Congress on January 30, 1967. Among the targets for immediate action specified in this message is low sulfur or sulfur-free fuels.

On April 27, 1967, the President sent a memorandum to the Heads of all Departments having a responsibility in the air pollution area. The President designated two areas of immediate attention, research and economic incentives. In part, the memorandum reads, "The first of these areas is air pollution control research and development. We need a greatly accelerated program to develop methods to control sulfur emissions. This must be a targeted program directed at providing control technology for existing and new facilities at the earliest possible time."

Later the memo reads, "Maximum use should be made of the expertise of other Federal agencies, particularly the Department of Interior's knowledge of the production, treatment, and utilization of fossil fuels."

In view of the urgency for accelerated research on the removal of sulfur oxides from stack gases, the Bureau of Mines respectfully requests a reconsideration of the $150,000 decrease in its budget request for this purpose. The principal part of these funds were earmarked for exploratory research and feasibility studies on new processes for sulfur oxide removal, many of which have been suggested within the last year. Several sulfur dioxide removal processes, one by the Bureau of Mines, are under active development, but all are expected to materially increase the cost of energy production. However, we believe it possible that other processes not now being developed may prove more economically feasible. For example, it has recently been discovered that certain shales are almost as effective as the alkalized alumina absorbant now in pilot scale testing—yet the shales can be procured at a few dollars per ton while alkalized alumina costs 25 cents per pound. It has been discovered also that the waste from one of the aluminum processes is a very active absorbant for sulfur—this waste material has essentially no value. The additional funds will support investigation of the potential value of these and other new processes.

(*c*) *Oil shale.*—Restoration of the House reduction of $300,000 for in-situ oil-shale retorting is requested for the following reasons:

The Bureau of Mines is specifically charged by the Congress in the Organic Act as follows, ". . . on behalf of the government to investigate the minerals fuels and unfinished mineral products belonging to, or for the use of, the United States, with a view to their most efficient mining, preparation, treatment and use; and to disseminate information concerning these subjects in such a manner as will best carry out the purposes of this act." The vast Green River oil-shale deposits of Colorado, Utah, and Wyoming largely are owned by the Federal Government and the people of the United States. Development of this resource with the objectives of conservation; preservation of land, water, and air values; and equitable income to the Government requires an optimum research program on shale-oil production techniques by the Federal Government. The proposed increase of $600,000 is a minimal increase to achieve that objective.

Current interest in oil-shale research and development is great enough that the Bureau of Mines needs to develop and maintain the technology necessary to advise the Secretariat and other agencies responsible for formulating oil-shale policy.

The current level of effort on in-situ retorting (about $400,000 annually) is not adequate to provide that competence, nor would a total expenditure of $700,000 be adequate for that purpose for fiscal year 1968 because of the inherent high costs of field in-situ retorting research.

Research this year is principally centered on experiments at the Laramie Petroleum Research Center utilizing a small (about 10-ton capacity) batch retort and random sized blocks and pieces of shale in a size range (up to 20 inches in two dimensions) such as would be expected in a chimney resulting from a contained nuclear explosion. While the results of that research have been encouraging, it is not practicable to scale up from 10 tons to the million+ tons of broken shale expected to be present in a nuclear chimney. Therefore, tentative work plans for fiscal year 1968 include intermediate experiments to simulate a nuclear experiment (at a smaller than actual nuclear scale but considerably larger than the present retort capacity). This may be done either in a larger surface vessel or in a subsurface, excavated "chimney." The exact design of the experiment will depend upon the funds available. However, any reduction in the funds requested will preclude conducting an optimum, meaningful experiment because of the high cost of designing and constructing equipment, procuring oil shale, and actually conducting experiments. The experiments are needed to have adequate background to design and conduct an actual nuclear-explosive in-situ retorting experiment beginning in fiscal year 1969.

Other current in-situ retorting research, including electrical and chemical explosives fracturing applicable to deposits too shallow for nuclear fracturing, spent-shale burning, and core drilling for site selection, is vital to the overall study of in-situ retorting and should be continued.

The proposed increase in the in-situ retorting research is in line with Secretary Udall's recently announced five-point oil-shale development program. Point five of that program is an accelerated program of research and development and investigations. The proposed level for fiscal year 1968 is necessary to go ahead with the actual full-scale in-situ retorting experiments proposed therein.

(*e*) *Mining.*—The House Committee decreased the Heavy Metals program by $200,000 and "Project Badger" by $500,000. Restoration of the total reduction of $700,000 is requested.

Heavy metals.—The requested increase of $609,000 to accelerate mineral deposit delineation, design research, and mine systems deevlopment for heavy metals was reduced by $200,000. Restoration of the cut is essential if the program is to progress at the intended rate to fullfill the purpose of the program. Time is an important element of this program as heavy metals are already in critical short supply. New sources must be uncovered within a short time-frame if vital national requirements are to be met. The program is a joint effort of the U.S. Geological Survey and the Bureau of Mines, with the Geological Survey having responsibility for indicating favorable areas to the Bureau for further deposit delineation development of mine design criteria. Favorable areas indicated by the Geological Survey have exceeded original expectations to a point that it will be difficult to investigate these possibilities at the original requested level of funding. A cut of $200,000 will seriously delay the progress of this program.

Project Badger.—The funds recommended for the development of rapid excavation technology are $500,000 less than those estimated as necessary for fiscal year 1968. It is requested that this cut in appropriation be restored.

In a special message to the Congress dated January 30, 1967, the President recommended a program of research to develop rapid and low-cost excavation technology. In the same message the President directed the Secretary of the Interior to initiate a cooperative research program with industry to find solutions to these technical problems.

Nine governmental departments have an interest in rapid excavation technology. The President has designated the Bureau of Mines of the Department of the Interior, because of its unique competence, as the head Bureau to develop and implement a government-wide research and development program in excavation technology.

This is a program for research and development to establish technology for rapid subsurface excavation essential for future development of our mineral resources and the subsurface space requirements of our urban development of urban and intercity transportation, water and power distribution, waste disposal and related civilian and military requirements. The goal is to double the speed of excavation and cut the cost in half within five years. Funds in the first year will be used almost entirely to establish through contracts the wide base of participation by universities, research organizations and industry in the elements fundamental to the purpose of this program. The reduction of $500,000 seriously restricts the scope of work that will provide the base for success of the program and will delay fulfillment of its objective at a time when each year brings a compounding need for the goal set for this work that will result in a disproportionate loss to other vital programs.

Resource development

(*b*) *Economic analysis.*—Restoration of the House reduction of $130,000 is requested to permit expansion of the regional mineral economic and the heavy metals studies beyond the current minimal level.

Provision of additional funds for the regional studies will permit investigation of the relationship between the mineral industry and the regional economy. Such studies will analyze the effect of minerals on the development of an area and the relationship of local resources to regional demand; the studies would also permit development of regional energy balances. These studies are important in developing an integrated analytic system designed to warn of impending problems, and to test alternative solutions. In this regard it might be noted that some metals, such as lead, have exhibited a downward trend lately. Through the type of studies proposed for expansion, it would be possible to evaluate the impact of regional economic well-being as a result of such declines and to test solutions to these problems.

The heavy metals economic studies are designed to permit more definitive analysis of the effects of economic and technologic changes on a given property as well as on national reserves. They will also provide guides for research. Expansion to the requested level would allow acceleration of these studies and extension to metals other than gold.

If these funds are not restored, the putting in place of integrated economic industry models for use in Bureau and Government programing decisions will be delayed by at least one year.

(*f*) *Minerals.*—Restoration of the House reduction of $500,000 is requested for supporting studies to determine the impact of technologic and economic changes upon the resource supply potential and the capacity of the mineral industry to meet foreseeable demands.

The President, in his message to the Congress on January 30, 1967, called for the study to provide him with the fundamental knowledge he needs to establish governmental policy in the non-fuel minerals area. The last such comprehensive review was completed in 1952. Rapid economic growth throughout the world since that time has tended to exhaust the more accessible and high-grade deposits of many minerals. Rapid and revolutionary technological change in both the production and utilization of non-fuel minerals has sharply altered underlying conditions, and future changes promise to be of even greater importance.

The sharply increased pace of change over the last 15 years has created greater uncertainty in private investment decisions, and the rising cost and complexity of technology has increased the period over which advanced planning is required. Government policies in a wide spectrum of fields have direct and indirect effects upon the minerals industries, some of which are subtle but powerful in nature.

The proposed study will make an objective evaluation of all major aspects of the problem of assurance of an adequate supply of non-fuel minerals. It will examine the nature of the technological and economic changes taking place in the minerals industry, both past and prospective, and the probable effect of these changes on the industry's ability to meet the Nation's needs. It will, among others, look into such questions as—

(1) The long-range supply and requirements outlook under various contingencies.

(2) The adequacy of incentives for exploration, research, development, and technological innovation needed to provide mineral requirements.

(3) The adequacy and consistency of existing Government policies, plans, and programs.

(4) The adequacy of private industry practices in these areas.

The study will examine the policy alternates facing the Federal Government, but will not make recommendations with respect to them. It will provide the analytical and factual material to create a comprehensive understanding of the nature of the problems we face. This study, upon its completion, will enable the President's advisers, such as the Chief, Council of Economic Advisers, the Science Adviser, and the Secretary of the Interior, to better analyze the impact of proposed programs and to recommend decisions which will insure that adequate and low-cost mineral supplies remain available in the future. Private industry will obtain a firmer basis for existing decisions and will be able to more efficiently allocate its efforts.

If these funds are not restored, the "New Examination" needed by the President and of great value to the domestic industry will not be forthcoming.

Explanation of amendment (*2*)

The amendment restores the reduction of $500,000 in the amount to remain available until expended for the conduct of a tunneling technology program. The justification for the restoration is the same as for item (e) "Project Badger" under amendment (1) above.

BUREAU OF MINES

HEALTH AND SAFETY

(House hearings, pp. 207, 288–299; Senate hearings, p. 938)

Appropriation, 1967	$9,590,000
Estimate, 1968	10,821,000
House allowance	10,721,000
Restoration requested	100,000

(P. 16, line 15)

AMENDMENT REQUESTED

Page 16, line 15, strike out "$10,721,000" and insert in lieu thereof "$10,821,000"—the estimate, or an increase of $100,000 in the appropriation.

HOUSE REPORT

"The Committee recommends a reduction of $100,000 below the budget estimate. This amount was requested for an exhaustive review of current safety educational material."

JUSTIFICATION

The amendment restores the $100,000 reduction made by the House in the budget estimate for this appropriation. This amount is distributed by activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Inspections, investigations, and rescue work	$7,453,000	$8,469,000	$8,369,000	$100,000
2. Control of fires in coal deposits	203,000	203,000	203,000	
3. Health and safety research	1,934,000	2,149,000	2,149,000	
Total	9,590,000	10,821,000	10,721,000	100,000

A breakdown of the restoration request by objects of expenditure follows:

24	Printing and reproduction	$5,000
25	Other services	80,000
26	Supplies and materials	15,000
	Total	100,000

Inspections, investigations, and rescue work.—The second session of the 89th Congress enacted two laws which require special attention to mining safety educational programs. Public Law 89–376, Federal Coal Mine Safety Act Amendments of 1965, requires the enlargement and intensification of educational programs of the Bureau of Mines with respect to the advancement of health and safety in coal mines. Similarly, Public Law 89–577, Federal Metal and Nonmetallic Mine Safety Act, requires the development of expanded programs for the education and training of employees in the recognition, avoidance and prevention of accidents or unsafe or unhealthful working conditions in mines subject to the Act.

As part of the initial steps in carrying out these mandates from the Congress in an efficient, effective manner, the Bureau feels it important to have the benefit of professional adult education guidance for the preparation of courses, the choice of visual aids, selection of teaching techniques, and in motivation of voluntary attendance and participation by miners and supervisors. All of these involve an evaluation by skilled professionals in terms of motivation of the class members, their level of educational background, and psychological factors as well as information on effectiveness of instructors. This evaluation and review of methods and teaching materials will have an added benefit of making the most efficient use of the time of students and Bureau instructors.

The $100,000 in the budget estimate will enable the Bureau to secure both the basic information and suggestions to improve its approach, course materials, methods of instruction, and effectiveness. It is intended to respond fully to the requirements of both Acts for intensified, expanded programs at a minimum continuing cost in the most effective manner.

BUREAU OF MINES

GENERAL ADMINISTRATIVE EXPENSES

(House hearings, pp. 299–304; Senate hearings, p. 948)

Appropriation, 1967	$1, 556, 000
Estimate, 1968	1, 616, 000
House Allowance	1, 532, 000
Restoration Requested	84, 000

(P. 16, line 22)

AMENDMENT REQUESTED

Page 16, line 22, strike out "$1,532,000" and insert in lieu thereof "1,616,000"—the estimate, or an increase of $84,000 in the appropriation.

HOUSE REPORT

"The Committee recommends an appropriation of $1,532,000, a decrease of $84,000 below the budget estimate."

JUSTIFICATION

The amendment restores the $84,000 reduction made by the House in the budget estimate for this appropriation. The amount is for the following activity:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
General administrative expenses	$1, 556, 000	$1, 616, 000	$1, 532, 000	$84, 000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$70, 000
12	Personnel benefits	5, 000
21	Travel and transportation of persons	2, 000
23	Rent, communications, and utilities	1, 000
24	Printing and reproduction	1, 000
25	Other services	1, 000
26	Supplies and materials	2, 000
31	Equipment	2, 000
	Total	84, 000

General administrative expenses.—Restoration of the House reduction of $84,000 is requested to provide administrative support of the Bureau's expanded substantive program. The additional funds will provide for seven additional positions, as well as increased costs of within-grade salary advances. The new positions will be utilized to meet increased workload in contractual services, budget, and personnel activities.

Contractual services.—Since passage of the Solid Waste Disposal Act on October 10, 1965, the Bureau has entered into 6 contracts and 13 grants for research totaling $612,739. During fiscal year 1968 we expect to have approximately 9 contracts and 16 grants in effect under this authority.

Under authority of Public Law 89–672, we have entered into 3 contracts and 5 grants for research totaling $106,519. We expect to have grants and contracts in effect during fiscal year 1968 totaling approximately $3,000,000.

Most grants and contracts are made for one-year periods so that we may review the results obtained during that period and determine whether to continue the research. This necessitates annual review and negotiation of agreements and also provides greater control over our limited funds for contract and grant research.

Negotiation of new agreements and review of contracts subject to renewal during the coming fiscal year cannot be adequately handled by the Bureau's current staff.

Budget program.—Because of new and expended programs such as heavy metals, Appalachia, solid waste, etc., the volume and scope of budget work has materially increased. This requires additional analyses to assure that program objectives are appropriately translated into budget context for presentation to the Bureau of the Budget and Congressional Appropriation Committees. Also, it requires analysis of alternative methods to meet the program objectives. To provide for this additional workload we are requesting funds for an additional budget analyst and a clerk-typist.

Personnel activities.—The ability of the Bureau of Mines to obtain essential technical manpower is sharply conditioned by the relative scarcity of trained scientists and engineers and the limited number of new graduates in essential disciplines. In order to overcome manpower shortages, both short- and long-range recruiting plans must be implemented. Short-range objectives include expanded and intensified recruitment efforts, improved coordination of recruitment programs, and many more contacts with universities and other manpower sources. Long-range objectives include improving the image of the minerals professions and expanding contacts with secondary schools, minority groups, and women's organizations in order to increase the future supply of trained personnel and to tap all potential sources of manpower supply. To accomplish these objectives, one additional position of Personnel Staffing Specialist (GS–9) is required.

The Bureau of Mines must also insure maximum utilization of available technical personnel. The key to effective manpower utilization is proper and imaginative job design. The position classification function in the Bureau is being expanded and reoriented toward the implementation of true position management. Position classification specialists are analyzing existing operations and establishing procedures to free professional technologists from subprofessional duties and to create adequate technician and other support positions. This will create job opportunities for lesser skilled individuals who are in greater supply and will enable the Bureau to accomplish its research and development programs despite the limited supply of professional scientists and engineers. To achieve maximum manpower utilization, one additional position of Position Classification Specialist (GS–12) is required.

BUREAU OF MINES

HELIUM FUND

(House hearings, pp. 203, 208–211, 316–332; Senate hearings, p. 967)

Payment authority, 1967	$47,500,000
Borrowing authority, 1967	26,000,000
Estimate, 1968:	
Payment authority	60,000,000
Borrowing authority	18,200,000
House allowance:	
Payment authority	47,500,000
Borrowing authority	16,200,000
Restoration requested: Payment authority	12,500,000

(P. 17, line 18)

AMENDMENT REQUESTED

Page 17, line 18, after "The Secretary is authorized to" insert the following: *enter into contracts and agreements pursuant to section 3(a)(2) of the Helium Act Amendments of 1960 which may require payments for helium in any one fiscal year in an amount not to exceed $12,500,000 in addition to amounts heretofore specified: Provided, That the Secretary is also authorized to*

HOUSE REPORT

"This borrowing authority is required to finance helium purchases under the existing contracts for the conservation of helium. Testimony developed during the hearings indicated that total funding available for fiscal year 1968 would be $49,502,000 based on additional borrowing authority of $18,200,000. Purchases for fiscal years 1966 and 1967 indicated an annual rate of $42 million. It is on this basis that the Committee is recommending a reduction of $2 million in the borrowing authority for helium.

"CONTRACT AUTHORIZATION

"The budget estimate proposes an increase of $12,500,000 over the current annual limitation of $47,500,000 on the contracting authority for the purpose of helium for storage under the conservation program. Under this increase, the Department would enter into additional long-term contracts (20 to 25 years), committing the United States to the purchase of an additional $250 million worth of helium. The present contracts under the annual authority of $47,500,000 obligate the United States to the expenditure of over a billion dollars for the purchase of 62.5 billion cubic feet of helium.

"It is the recommendation of the Committee that this request be denied."

JUSTIFICATION

The amendment restores the reduction of $12,500,000 in the annual limitation on the authority to contract for purpose of helium under the conservation program.

The Bureau of Mines requests reconsideration of the requested increase of $12,500,000 over the current annual limitation of $47,500,000 on the contracting authority for the purchase of helium for storage under the conservation program. The helium program is self-liquidating, and all costs including interest will be repaid out of income from the sale of helium. Currently, more than half the program costs are financed from such income. Program assets as of June 30, 1966, were $162.7 million. Liabilities, which include borrowed funds and accrued interest, were $90.2 million, resulting in net worth of $72.5 million. Helium stored underground for future use has a book value of $120.4 million. At the current $35.00 a thousand cubic foot price, the stored helium will yield future income of more than $380 million. The present program and the requested increase are sound investments and offer a unique opportunity for farsighted resource conservation.

OFFICE OF COAL RESEARCH

SALARIES AND EXPENSES

(House hearings, pt. 2, pp. 130–180; Senate hearings, p. 997)

Appropriation, 1967	$8, 220, 000
Estimate, 1968	9, 725, 000
House allowance	9, 180, 000
Restoration requested	545, 000

(P. 18, lines 8 and 9)

AMENDMENTS REQUESTED

(1) Page 18, line 8 strike out "$9,180,000" and insert in lieu thereof "$9,725,000"—the estimate or an increase of $545,000 in the appropriation.

(2) Page 18, line 9 strike out "$380,000" and insert in lieu thereof "$425,000"—the estimate or an increase of $45,000 in the limitation on the amount available for administration and supervision.

HOUSE REPORT

"This appropriation provides for contract research to develop new methods of mining, preparing, and utilizing coal. The amount allowed includes $8,800,000 for contract research and $380,000 for administration and contract supervision.

The Committee has disallowed the request of $500,000 for the initiation of new research projects, and $45,000 for administration and contract supervision.

The budget estimate failed to include funds for the continuation of three research projects currently in progress. Sizable amounts of Federal funds have been invested in these projects and according to information received by the Committee, failure to continue work on these projects will to a large extent negate the benefit to be received from the previous investment of funds on this work. Until a realistic policy is developed in connection with research projects that extend over a period of several years, the Committee is not inclined to recommend appropriations for new research projects."

JUSTIFICATION

Explanation of amendment (1)

The amendment restores the reduction of $545,000 made by the House in the Budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
(a) Administration and contract supervision	$376,000	$425,000	$380,000	$45,000
(b) Contract research	7,844,000	9,300,000	8,800,000	500,000
Total	8,220,000	9,725,000	9,180,000	545,000

A breakdown of the restoration request by objects of expenditures follows:

11	Personnel compensation	$6,000
12	Personnel benefits	1,000
21	Travel and transportation of persons	6,000
22	Transportation of things	1,000
23	Rent, communications and utilities	3,000
24	Printing and reproduction	10,000
25.1	Other services	500,000
25.2	Services of other agencies	16,000
26	Supplies and materials	1,000
31	Equipment	545,000
	Total	545,000

The original total sum requested of the Congress ($9,725,000) represents the absolute minimum needs of Office of Coal Research for Fiscal Year 1968, and the proposed cuts should be restored to continue a viable and on-going research program, the end results of which can do much to insure that coal will remain a competitive factor in the Nation's energy industry.

(*a*) *Administration and contract supervision*

The $45,000 which was disallowed from the administrative and supervisory funds represents a reduction which in the long run can prove costly and harmful to the program all out of proportion to the benefits on savings from such reduced appropriation.

The elimination of these funds will require the Office of Coal Research to forego two additional positions which are sorely needed to properly handle and monitor all of the requirements of the contracts which are getting into the larger phases of pilot plant efforts. The additional program costs commensurate with these pilot plant programs require more frequent and careful evaluation of a project's activity and its needs in order to insure the best utilization of the research expenditures being made by this Office.

The coal research Act requires the Office of Coal Research to make available to the public the results of the research performed. This is done through published technical reports of an interim or final nature. The nature of the work is such that several reports are presently scheduled to be made available in Fiscal Year 1968. Such reports represent a vital source of research knowledge to interested organizations who are potentially interested in carrying such results into the stage of commercial development, and thus achieving the ultimate objective for which the Office of Coal Research was created—the expanded use of coal and creation of new jobs in connection therewith.

The foregoing and the other lesser, but equally important, elements of costs in connection with properly administering and supervising the program, dictate the need for restoration of the sum of $45,000 for these purposes.

(b) Contract research

The $500,000 for new research projects which was disallowed by the Committee will preclude any new research effort in fiscal year 1968. Such action, if allowed to stand, could effectively signal the beginning of the end of research efforts seeking to permit fuller utilization of our Nation's extensive coal resources. This will also result in delaying other projects seeking new and expanded uses for coal, as well as inhibit, or dry up, the interest of qualified research and development sources throughout the country who are interested in performing work for the Office of Coal Research, and who would otherwise be expected to submit proposals for the Office of Coal Research's consideration.

At the present time, the Office of Coal Research continues to receive proposals for worthwhile research at the rate of forty to fifty each year. These are carefully evaluated by the Office of Coal Research, by private consultants, by Office of Coal Research's General Technical Advisory Committee, and the Bureau of Mines to check on technical feasibility and desirability and to prevent duplication of present or past work. The cost of performing these evaluations is borne by the Office of Coal Research. They represent a considerable culling-out process, which is still further refined and enforced by the limitations of the budget and appropriations, thus requiring ultimate maximum selectivity by the Office of Coal Research to proceed only with those few projects permitted within the $500,000 requested, and which show maximum promise for early and substantial results.

It is not anticipated that any of the proposed new research—which Office of Coal Research would undertake in Fiscal Year 1968 within the limitations of the $500,000 appropriated for such purposes—would be for projects of a long-range nature, or for projects which might proceed subsequently to an advanced stage of effort requiring pilot plants or additional heavy commitment of funds. It is contemplated that the results will be beneficial primarily as corollary efforts to the Office of Coal Research's other on-going research projects by providing necessary work and data. We request that the entire amount be restored.

Explanation of amendment (2)

This amendment restores the reduction of $45,000 in the limitation on funds available for administration and contract supervision. The justification for this restoration is the same as for item (a) under amendment (1) above.

OFFICE OF OIL AND GAS

SALARIES AND EXPENSES

(House hearings, pt. 2, pp. 100–130; Senate hearings, p. 833)

Appropriation, 1967	$722,000
Estimate, 1968	926,000
House allowance	740,000
Restoration requested	74,800

(P. 18, line 17)

AMENDMENT REQUESTED

Page 18, line 17, strike out "$740,000" and insert in lieu thereof "$814,800"—an increase of $74,800 in the appropriation.

HOUSE REPORT

"The amount recommended by the Committee provides $567,900 for coordination of oil and gas activities; $156,700 for administration of the oil import program; and $15,400 for the oil import appeals board.

$111,200 of the reduction for the coordination of oil and gas activities relates to defense functions previously carried in the schedules for "Civil Defense and Defense Mobilization Functions of Federal Agencies, Office of Emergency Planning". Funding for this activity will be considered in the appropriation for the Office of Emergency Planning.

A reduction of $74,800 in funds requested for administration of the oil import program is also recommended. During the hearings the Committee tried unsuccessfully to determine how the decisions are made on the oil import program. The Committee was assured that no decisions were made by those responsible for the administration of this activity, and that it served merely as a statistical function. In this case, little responsibility is delegated to this activity, and in the opinion of the Committee $156,700 will be ample to provide for the accumulation of statistics in fiscal year 1968."

JUSTIFICATION

The amendment restores $74,800 of the reduction of $186,000 made by the House in the Budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Coordination of oil and gas activities	$548,800	$679,100	$567,900	----------
2. Administration of oil import program	158,000	231,500	156,700	74,800
3. Oil import appeals board	15,200	15,400	15,400	----------
Total	722,000	926,000	740,000	74,800

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$60,000
12	Personnel benefits	4,500
21	Travel and transportation of persons	2,000
22	Transportation of things	500
23	Rent, communications, and utilities	2,100
24	Printing and reproduction	3,000
25	Other services	700
26	Supplies and materials	1,000
31	Equipment	1,000
	Total	74,800

The disallowance by the House of $74,800 will not only prevent the recruitment of four additional permanent staff positions and the employment of needed industrial specialists and consultants for peak operating periods requested in the estimate, but will result in a decrease in the present staff. Expanding programs, notably the addition of the petrochemical industry to the oil import control program, have placed additional responsibilities and technical competence requirements on the present eleven regular staff members. The requirement for additional industrial specialists (petrochemicals) staffing is especially pressing and significant; since decisions concerning allocation requests from the petrochemical industry are based upon very complex, varied and highly technical judgments by the Oil Import Administration.

Unless the requested $232,000 is provided for the oil import administration for 1968 operations, the present limited staff will be unable to make expeditious, careful decisions and acquire the technical knowledge needed to execute its assigned responsibilities. These decisions by the Oil Import Administration concern evaluation of allocation requests, granting of import licenses, surveillance and compliance with import regulations and to properly advise the Secretary of developments in the oil import area and recommend required changes in the regulations and presidential proclamation. The oil import control program exerts an immense monetary and economic effect upon two of the largest industries in the United States (petroleum and chemical). Each year the Oil Import Administration issues licenses and allocates economic values conservatively estimated at one-half billion dollars.

The Oil Import Administration is directly involved in such vital areas of interest as national security, preservation of a healthy domestic petroleum industry, water and air pollutions, international balance of payments and international trade relations. It is urgently requested that the amount disallowed be fully restored.

BUREAU OF COMMERCIAL FISHERIES

MANAGEMENT AND INVESTIGATIONS OF RESOURCES

(House hearings, pt. 1, pp. 365–420; Senate hearings, p. 1046)

Appropriation, 1967	$20, 701, 000
(Appropriation of receipts)	(1, 000, 000)
Estimate, 1968	23, 835, 000
House Allowance	23, 194, 650
Restoration Requested	640, 350

(P. 19, line 3)

AMENDMENT REQUESTED

Page 19, line 3, strike out "$23,194,650" and insert in lieu thereof "$23,835,000",—an increase of $640,350 in the appropriation.

HOUSE REPORT

"The amount allowed by the Committee by activity compared with the 1967 appropriation and the 1968 budget estimate is as follows:

"Activity	Committee bill, 1968	Bill compared with—	
		1967 appropriation	Estimate, 1968
Management	550, 800	+60, 500	
Marketing and technology	6, 913, 850	+1, 460, 375	−310, 350
Research	11, 680, 400	+93, 600	−250, 000
Research on fish migration over dams	1, 405, 100	−263, 849	−30, 000
Fishing vessel mortgage insurance	45, 300	+1, 000	
Columbia River fishery development	2, 599, 200	−119, 800	−50, 000
Transfers in the estimate		+261, 824	
Adjustment for Pribilof Island transfer		+1, 000, 000	
Total, management and investigations of resources	23, 194, 560	+2, 493, 650	−640, 350

"The decrease of $310,350 recommended by the Committee for 'Marketing and technology' consists of $38,000 for expansion of the economic research program; $214,350 for fishing gear research and development, underutilized fish, Gulf of Mexico; and $58,000 for development of a foreign trade expansion program.

"The decrease of $280,000 in research recommended by the Committee consists of a reduction of $100,000 for Pacific anchovy studies; $150,000 for EASTROPAC inter-agency oceanographic studies; and $30,000 for research on fish migration over dams.

"An additional reduction of $50,000 is recommended for Columbia River fishery development."

JUSTIFICATION

This amendment restores the reduction of $640,350 made by the House in the Budget estimate.

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
Management	$490, 300	$550, 800	$550, 800	
Marketing and technology	5, 474, 500	7, 224, 200	6, 913, 850	$310, 350
Research	11, 586, 800	11, 930, 400	11, 680, 400	250, 000
Research on fish migration over dams	1, 676, 100	1, 435, 100	1, 405, 100	30, 000
Fishing vessel mortgage insurance	44, 300	45, 300	45, 300	
Columbia River fishery development	2, 429, 000	2, 649, 200	2, 599, 200	50, 000
Total	21, 701, 000	23, 835, 000	23, 194, 650	640, 35

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$170, 700
12	Personnel benefits	12, 300
21	Travel and transportation of persons	20, 800
22	Transportation of things	6, 000
23	Rent, communication, and utilities	18, 000
24	Printing and reproduction	7, 000
25	Other services	307, 050
26	Supplies and materials	23, 000
31	Equipment	75, 500
	Total	640, 350

Restoration of the $640,350 reduction made by the House is needed to fund the following programs:

(1) $38,000 for expansion of the economic research program. The reduction made by the House will seriously impair our efforts to improve the economic condition of the domestic fishing industry. With fewer personnel and less funds the program will not accomplish the needed results during fiscal year 1968.

Our domestic fishing industry faces increased foreign competition for interternational fishery resources and a share of our domestic markets. As a result it is encountering serious economic difficulties. Income of labor and return on invested capital in this industry is low as compared to many other industries. The economic research program is designed to identify and evaluate economic difficulties acting upon the fishing industry. Identification and evaluation of the economic constraints are necessary so as to know where economic efficiency can be applied to improve the economic position of the industry. The results of the eonomic research studies provide a guide to industry as well as to other disciplines in the Bureau of Commercial Fisheries (i.e., Biology, Technology, Exploratory Fishing, and Marketing) as to where service, research, and development efforts sholud be concentrated, in order to overcome the most limiting constraints.

(2) $214,350 for fishing gear research and development for underutilized fish in the Gulf of Mexico.

This program is considered top priority in its objective of substantially increasing landings of fish by 1972. Industry has expressed considerable interest in the program especially since it is designed to make available fish resources to supplement the present reduced landings of menhaden. In addition, availability of other fish may help to stabilize the industry in creating a fishery during the menhaden closed season.

It was felt that such a program would result in making available to the fishing industry an estimated 500 million pounds of industrial-type fish by 1972. The amount requested was considered a minimum to carry out the proposed work within the time schedule.

The program called for coordinated activities including: (a) charter of planes to delineate areas of surface fish school concentrations; (b) charter of vessels to conduct multivessel gear studies; (c) conduct experiments in locating and identifying fish concentrations; (d) development of light attraction techniques, fish pump and seine harvesting methods.

This reduction would reduce the effectiveness of the program to a point where it would not be possible to produce significant results within the projected 5 year period, and limit the area of activity to small segments of the Gulf.

At the reduced level of funding the only activities considered for implementation are delineation of surface fish concentrations through plane charter and photographic techniques, and development of fish attraction techniques with use of the existing Bureau vessel. It would be difficult to determine when these reduced activities would show significant results.

(3) $58,000 for development of a foreign trade expansion program.

This will provide for a total program of $108,000, which is needed to provide the level of effort required to develop the untapped potential for the sale of U.S. fishery products in foreign markets. The record proves that the foreign trade expansion program conducted by the Office of International Trade Promotion has been extremely successful in effecting sales in many major European countries. These sales have resulted from promotional activities conducted through food trade fairs and trade center exhibits in Western Europe. Thus far, the Bureau has participated, in cooperation with the Foreign Agricultural Service, in 11 such food trade exhibits and, actual sales as reported by industry members have averaged approximately $100,000 per show. In addition, projected sales for a 12 month period are anticipated to average $275,000 as a result of each promotional effort. To date, approximately 40 U.S. fishery firms have participated in one or more of our shows, at which many varieties of fishery products were promoted. Each participant who has shared in the benefits derived from these endeavors is very enthusiastic about the foreign trade expansion program which has enabled them to test and develop foreign markets.

(4) $100,000 for Pacific anchovy studies.

This restoration would make available to the Bureau $222,000 for investigations of a resource estimated at 5 million tons with a potential annual harvest of 500,000 tons worth approximately $10 million to the fishermen. Of west coast fishes, the anchovy is one of the most promising sources of raw material for Fish Protein Concentrate (FPC). This is an international resource with much of the population occurring in international waters or in the territorial waters of Mexico. Investigations on the anchovy are conducted cooperatively with the California Department of Fish and Game, the University of California, and the Bureau of Commercial Fisheries sharing responsibilities for the research program.

The California Department of Fish and Game has just recommended to the State Fish and Game Commission that a quota of 200,000 tons of anchovy be set for the 1967–68 commercial season, and that the season be lengthened by 30 days. The quota for the 1966–67 season is 75,000 tons. There is every indication that this fishery will expand rapidly in the next several years, if the sport fishing interests can be assured that the resource is being adequately safeguarded.

The $100,000 is required for the Bureau to carry out its responsibilities in the cooperative anchovy research program and would be used for vessel charter for monitoring the abundance and distribution of the anchovy and to expand studies designed to gather the biological information that is essential for management of the fishery, particularly the setting of catch quotas and seasons. Because of the rather strong feeling in California between sport and commercial fishing interests, it is necessary that the anchovy stocks be monitored very closely to determine the effects of the fishery. If this restoration is not made, close monitoring of the stocks will be impossible and pressure will most likely be brought to bear on the Commission to close the fishery.

(5) $150,000 for EASTROPAC inter-agency oceanographic studies.

EASTROPAC is a cooperative inter-agency and international study with the Bureau of Commercial Fisheries playing the "lead agency" role. Eight U.S. agencies and two foreign countries, Peru and Chile, are taking part. In the United States, the program has been approved by the Interagency Committee on Oceanography, the National Academy of Sciences Committee on Oceanography, the Office of Naval Research, and the Eastern Pacific Oceanic Conference. The Bureau will not be able to carry out commitments made to other agencies participating in the program if the increase in funding is limited to $100,000.

Planning for the program started in FY 1966, and full-scale field operations got underway in January 1967. The plan for the study calls for the physical oceanographic work to be continued through FY 1968, and this to be followed by fishery surveys in FY 1969.

The full increase of $250,000 is required for vessel operations and to process and analyze the data ashore. If an increase of only $100,000 is received, the Bureau will have to terminate its participation in the field aspects of EASTROPAC in January 1968 and will have difficulty finding sufficient funds to process the data collected up to that point. The vessel operations cannot be terminated prior to June 1968 without great loss of information. As originally planned, the physical—oceanographic phase of the program was to extend for 18 months and would provide a comparison of the changes in the ocean between seasons and between years. If this phase is terminated in January 1968, only between-season comparisons can be made not between-year comparisons.

The program has been very carefully planned and any reduction in the field operations will result in the loss of data that are urgently needed to ensure the future success and effectiveness of our West Coast tuna industry. The Bureau's planned total investment in EASTROPAC in FY 1968, including direct and related programs, is approximately $1 million. It is estimated that the information resulting from this program could lead to an annual increase in our Pacific tuna catch of 100,000 tons valued at $25 million to the fishermen.

(6) $30,000 for research on fish migration over dams.

The reduction of the Fish Passage Research Program on the Columbia River by an additional $30,000 will necessitate curtailment of studies on Roosevelt Lake, the Grand Coulee impoundment, which are designed to develop methods of using landlocked sockeye salmon stock to establish sea-run populations below Grand Coulee and Chief Joseph Dams. This program is new and contributes to the objectives of preservation and enhancement of the more valuable Columbia River salmon runs and achieving full use of the productive potential of the entire river.

The reestablishment of runs in areas made inaccessible by high dams would put valuable spawning areas back into production and increase the size of the resource available to fishermen.

(7) $50,000 for the Columbia River fishery development program.

The reduction of $50,000 for operation and maintenance in the Columbia River fishery development program will result in curtailment of hatchery fish production and/or operation of some facilities. Through voluntary reductions of $74,000 below the fiscal year 1967 level, coupled with recent significant pay increases for State(s) employees, operation and maintenance already has been trimmed to a minimum level. Operation and maintenance of screens, fishways and stream clearance projects is at such a level that further reductions will necessitate closure or lack of operation of some facilities. The alternative is to curtail production of hatchery operations, with a subsequent decline in release of fish, ranging from one to seven million fish (depending on species). Preliminary results from the current hatchery evaluation program indicate that the hatcheries are playing a significant role, at favorable cost-benefit ratio, in maintaining the salmon runs of the Columbia River. In either case decreases in production or protection would effect, detrimentally, the size of future runs and would to that extent compromise the mitigation program of the Federal Government.

BUREAU OF COMMERCIAL FISHERIES

CONSTRUCTION OF FISHING VESSELS

(House hearings, pt. 1, pp. 440–441; Senate hearings, p. 1117)

(P. 20, line 1)

AMENDMENT REQUESTED

Page 20, line 1, after the amount "$6,000,000," insert the following:

to be immediately available and

HOUSE REPORT

The House Report made no statement concerning this item.

JUSTIFICATION

There is currently only about $1,000 unobligated in this appropriation for the payment of subsidies for the construction of fishing vessels. This amount, or more, could be required to meet increased subsidy costs if a positive change order of any significance should be necessary to continue the construction of a vessel involving a subsidy agreement. The possibility of delays in construction due to lack of funds to cover change orders involving increases in subsidy costs would be less if the funds in the FY 1968 appropriation became available prior to July 1, 1967.

BUREAU OF COMMERCIAL FISHERIES

GENERAL ADMINISTRATIVE EXPENSES

(House hearings, pt. 1, pp. 456–463; Senate hearings, p. 1131)

Appropriation, 1967	$739,000
Estimate, 1968	743,000
House Allowance, 1968	693,000
Restoration Requested	50,000

(P. 20, line 22)

AMENDMENT REQUESTED

Page 20, line 22, strike out "$693,000" and insert in lieu thereof "$743,000", an increase of $50,000.

HOUSE REPORT

"The Committee recommends an appropriation of $693,000, a reduction of $50,000 below the budget estimate. The additional funding requested for fiscal year 1968 was for executive direction and supervision of administrative services in the Washington, D.C. office.

"The Committee has no objection to the purpose for which the additional funding was requested, but it is of the opinion that the additional cost can be absorbed."

JUSTIFICATION

The amendment restores the reduction of $50,000 for departmental expenses in this appropriation.

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
Departmental expenses	$352,893	$344,893	$294,893	$50,000
Regional office expenses	386,107	398,107	398,107	
Total	739,000	743,000	693,000	50,000

A breakdown of the restoration request by objects of expenditure follows:

11	Personnel compensation	$42,400
12	Personnel benefits	3,400
21	Travel	3,000
31	Equipment	1,200
	Total	50,000

Restoration of the $50,000 reduction made by the House will enable the Bureau to strengthen its administrative staff by the addition of an automatic data processing officer, a finance officer and a labor relations officer. The House has no objection to the Bureau's effort to improve its administrative staff but feels that these costs can be absorbed. However, absorption of these additional costs by the Bureau's programs would unduly curtail and restrict their effectiveness.

BUREAU OF SPORT FISHERIES AND WILDLIFE

(Housing hearings, pt. 1, pp. 481, 484–486, 488–568, 580, 615; Senate hearings, p. 1163)

Appropriation 1967	$38,145,800
Estimate	43,159,000
House Allowance	43,010,000
Restoration Requested	624,000

(P. 22, line 16)

AMENDMENT REQUESTED

Page 22, line 16 strike out "$43,010,000" and insert in lieu thereof "$43,634,000", an increase of $624,000 in the appropriation.

HOUSE REPORT

"The amount allowed by the Committee by activity compared with the 1967 appropriation and the 1968 budget estimate is as follows:

"Activity	Committee bill, 1968	Bill compared with—	
		1967 appropriation	Estimate, 1968
Fish hatcheries	$8,816,000	+$674,300	−$90,000
Wildlife refuges	13,074,000	+2,710,384	−160,000
Soil and moisture conservation	713,000	+5,000	
Management and enforcement	3,679,000	+290,000	−13,000
Fishery research	3,666,500	+182,500	−58,500
Wildlife research	6,671,500	+790,500	+192,500
Fishery services	1,716,000	+159,000	−10,000
Wildlife services	2,845,000	+124,000	−5,000
River basin studies	1,457,000	+43,000	−5,000
Pesticides review	372,000	+9,000	
Transfers in the estimate		−123,484	
Total management and investigations of resources	43,010,000	+4,864,200	−149,000

"The net decrease of $149,000 below the budget estimate consists of various reductions in the budget estimates totaling $624,000 and increases recommended by the Committee totaling $475,000.

"Decreases below the budget estimates recommended by the Committee are as follows:

"Fish hatcheries

"$90,000 for the operation of new facilities.

"Wildlife refuges

"$70,000 for deferred maintenance.

"$90,000 for the operation of six new refuges and waterfowl production areas.

"Management and enforcement

"$13,000 for increased costs of operation and maintenance of automotive, aircraft, and boating equipment.

"Fishery research

"$14,000 for operations at existing facilities.

"$32,000 for operation of new facilities at four laboratories and an increased program at the fifth laboratory.

"Wildlife research

"$20,000 increased costs of current programs.

"$100,000 for handling an expanding volume of bird banding and recovery data, and to update data processing equipment.

"$150,000 for the initiation of a comprehensive rare and endangered species preservation program.

"Fishery services

"$10,000 for increased operational costs of current programs.

"Wildlife services

"$5,000 for maintenance of the wildlife enhancement field program at its present operational level.

"River basin studies

"$5,000 for increased operating costs.

"In addition, the Committee has recommended a decrease of $25,000 relative to the proposed acquisition of 17 automobiles which will not be necessary in fiscal year 1968.

"The Committee recommends the following increases over the budget estimate:

"$75,000 for additional staffing to work on forest animal damage research at Olympia, Washington.

"$400,000 for the control of blackbirds. Of this amount, $250,000 shall be allocated for research and $150,000 for operations. In addition, the Committee directs that of the $800,000 included in the budget estimate for bird control, the major portion of these funds be utilized for the control of blackbirds.

"During the hearings, the Committee received extensive testimony of the increasing severity of damage to corn and other crops by blackbirds. The Committee is not convinced that agency officials are giving this problem sufficient attention in proportion to the huge losses in farm income that are occurring.

"It is therefore the expressed desire of the Committee that activity in the blackbird control program be greatly accelerated and that the Committee be furnished with quarterly reports during the next fiscal year on progress that is being made in this connection.

"The Committee has had extensive discussion with officials of the Department of the Interior relative to obtaining more uniformity in the funding of cooperative fish units and cooperative wildlife research units. In fact, a special request was made of the Department to give this matter consideration in the submission of the 1968 budget estimate. The Committee is disappointed to find that no action had been taken to accomplish this in the 1968 budget estimate. Therefore, the Committee directs that the funding for the cooperative fish units in Idaho, Louisiana, Maine, New York and Pennsylvania be increased by $9,200 each in fiscal year 1968. In addition, the cooperative wildlife research unit in Massachusetts should be increased $24,500 over the amount provided in the budget estimate. The total cost of these increases amounts to $70,500 and shall be absorbed by the Bureau.

"Once again the Committee suggests that consideration be given to the uniform funding of the cooperative wildlife research units in the submission of the 1969 budget estimate. Unless this is done, the Committee undoubtedly will find it necessary next year to adjust the funding for wildlife research units accordingly, and to direct that the additional costs be absorbed by the agency.

"The Committee is gratified at the efforts which have been made to improve the administration of the predator control program. However, it would suggest that more effective results might be obtained if greater attention is given to improving operations at the field level in 1968 rather than concentrating efforts for program improvement at the Washington headquarters level."

JUSTIFICATION

This amendment restores the reduction of $624,000 made by the House in the Budget estimate, and retains $400,000 for the control of blackbirds, plus $75,000 for research on forest animal damage as added by the House.

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Fish hatcheries	$8,174,700	$8,906,000	$8,816,000	$90,000
2. Wildlife refuges	10,439,100	13,234,000	13,074,000	160,000
3. Soil and moisture conservation	708,000	713,000	713,000	
4. Management and enforcement	3,389,000	3,692,000	3,679,000	13,000
5. Fishery research	3,484,000	3,725,000	3,666,500	58,500
6. Wildlife research	5,891,000	6,479,000	6,671,500	282,500
7. Fishery services	1,562,000	1,726,000	1,716,000	10,000
8. Wildlife services	2,721,000	2,850,000	2,845,000	5,000
9. River basin studies	1,414,000	1,462,000	1,457,000	5,000
10. Pesticides registration	363,000	372,000	372,000	
Total	38,145,800	43,159,000	43,010,000	624,000

The President's Budget for fiscal year 1968, while being an austere one, is a well-balanced document. The fiscal program for 1968 was designed to meet three essential requirements. First, and uppermost, was the need for additional funds to carry out stepped-up activities in Vietnam. Second, it has to carry forward urgent domestic programs at the lowest possible cost, while curtailing all lower priority activities. And, third, it had to insure that the overall impact on the economy would be non-inflationary. The budget submitted to the Congress was carefully tailored to accommodate these constraints. Across the board, the Bureau is proposing to operate at levels substantially below the optimum. Hatcheries are scheduled to continue operations at 81% of full production capacity; refuges are operating at approximately 66% of most efficient management; and there is a belt-tightening in other activities.

Therefore, restoration is requested of the several reductions made in the various operating programs under this appropriation so as to bring them to the level reflected in the President's Budget. Specifically, we wish to emphasize the request for restoration in the Wildlife research activity of (1) the $150,000 reduction in the budget estimate of $300,000 in the rare and endangered species program and (2) the $100,000 reduction in the budget estimate of $137,000 in the bird banding recovery data program.

(1) Because of its sudden transition from primitive to highly civilized conditions, North America has experienced the most drastic changes in abundance of wildlife and the greatest number of extinctions in historic times. The technological ability that the nation possesses, if properly directed, can reverse this trend. To achieve this, the Congress recently authorized the rare and endangered species program by passing the Endangered Species Act, P.L. 89-669.

This reduction will delay the Regional coordination and servicing of a sound program for preservation and protection of endangered species. Liaison with Federal, State, and private agencies, provision of published information as well as direct technical assistance are required to insure complete cooperation in such a program. Personnel assigned to the program would also delineate and select suitable lands for the preservation of habitat required by these species and would provide guidance to other agencies in the improvement of habitats through management, development, and protection. This field level program is urgently needed to gain the complete understanding and cooperation of all agencies that should share the responsibility in protecting remaining populations of endangered wildlife.

(2) The processing and analysis of band recoveries, data from mail questionnaires and duck wing and goose tail surveys provide the factual basis for establishing migratory game bird hunting seasons and bag limits. An expanding volume of such data and the need to update data processing equipment to complete annual population dynamics studies of the individual species, prompted the requested increase in funds and manpower in FY 1968. Without the increase it will be impossible to continue the detailed analyses required to establish special seasons and bag limits on individual species of migratory birds. These special seasons have added materially to the recreation provided by migratory game bird hunting. The updating of ADP equipment, in addition to providing more efficient classification, storage, retrieval and analysis of data will result in more rapid response to hunters requesting information concerning returned bands.

The banding records for the entire continent are maintained at the Migratory Bird Populations Station at Laurel, Maryland. The United States has an obligation to see that this information is properly recorded in a manner that will permit rapid retrieval and analysis. The requested funds represent the minimal needs for continued, efficient operation of this program.

The House added $9,200 each for the cooperative fishery units in Idaho, Louisiana, Maine, New York and Pennsylvania and $24,500 for the cooperative wildlife research unit in Massachusetts. The total cost of these increases, $70,500, is to be absorbed by the Bureau. Since there are no other sources of funds, the increases for the units can be obtained only by reducing the funds available for other programs. This would be compounding the curtailments already imposed upon other programs by budgetary constraints. Such a circumstance would unquestionably further reduce program effectiveness, possibly even beyond tolerable limits.

BUREAU OF SPORT FISHERIES AND WILDLIFE

CONSTRUCTION

(Housing hearings, pt. 1, pp. 481–482, 486, 569–584, 614; Senate hearings, p. 1250)

Appropriation 1967	$8, 618, 600
Estimate	2, 568, 000
House allowance	2, 568, 000
Restoration requested	50, 000

(P. 22, line 22)

AMENDMENT REQUESTED

Page 22, line 22 strike out "$2,568,000" and insert in lieu thereof "*$2,618,000*",—an increase of $50,000 in the appropriation.

HOUSE REPORT

"This item finances the construction of fish hatchery and wildlife refuge facilities, and fishery and wildlife research facilities. The amount allowed includes the following items included in the budgeted program:

Fish hatchery facilities:	
McNenny, S. Dak	$20,000
Quinault, Wash	246,000
Wildlife facilities:	
Various wildlife refuge facilities	678,000
Sanitary facilities on national wildlife refuges	434,000
Advance planning and water rights	200,000
Wildlife research facilities:	
To plan and construct suitable sanitary facilities at the Patuxent Wildlife Research Center	200,000
To construct 16 ponds at the Northern Prairie Wildlife Research Center at Jamestown, N. Dak	50,000

"A general reduction of $83,000 is recommended on the basis of anticipated slippage in program activity.

"The recommended appropriation also includes increases of $240,000 for the second stage of construction on the Marine Game Fish Laboratory at Panama City, Florida; $200,000 for the second phase of construction on the Marine Game Fish Laboratory at Port Aransas, Texas; $100,000 for rehabilitation of facilities at the hatchery at Saratoga, Wyoming; and $233,000 for construction of the Wolf Creek Dam Hatchery in Kentucky.

"In addition, $50,000 is included for the site selection of a blackbird research center."

JUSTIFICATION

The amendment restores the program to the program as reflected in the President's Budget, which is a well-balanced document, and increases the budget estimate by $50,000, the amount added by the House for the site selection of a blackbird research center.

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Changes requested
1. Sport fish facilities	$3,431,000	$706,000	$1,039,000	−$333,000
2. Wildlife facilities	5,187,600	1,862,000	1,612,000	+300,000
Anticipated program slippage			−83,000	+83,000
Total	8,618,600	2,568,000	2,568,000	+50,000

Sportfish facilities

Eastern Fish Nutrition Laboratory, Cortland, New York—$440,000. This laboratory is one of the two oldest fishery research facilities in the Bureau of Sport Fisheries and Wildlife. The laboratory operates under a cooperative agreement with the New York Conservation Department and Cornell University.

The research conducted there during the past 25 years is justly world famous. These studies have formed a substantial part of the scientific foundation upon which most of today's commercially available trout feeds are based. It is notable that the feed costs to produce a pound of trout have decreased from 28 cents in 1959 to only 18 cents in 1965. Without this improvement it would have cost the Bureau $374,000 more for the 3,740,000 pounds of trout produced in 1965. A significant part of this annual saving is attributable to the research results achieved at Cortland.

The research facilities at Cortland are old and dilaplidated. It is not feasible to repair them and it is questionable how long we can safely work there. In FY 1967, $84,000 was appropriated for detailed engineering plans and site preparations and now the next logical step is to continue with the construction or the site preparation cost might very well be wasted. This laboratory is a vital part of the fishery research program which supports sport fishery conservation efforts.

Wildlife facilities

Wildlife refuges—$250,000. The Nation's wildlife habitat continues to shrink and deteriorate under the pressures of population growth and technological development. Only fragments of pristine water and marshland remain. Segments of excellent habitats are retained as national wildlife refuges and these must be developed intensively to partially offset the loss of wildland areas. Further, once the Bureau acquires land for refuge purposes, it becomes incumbent upon the Bureau to develop such lands in order to obviate local criticism. Because of the rapidly shrinking habitat, an enormous backlog in refuge development has resulted and any delay intensifies the situation.

Wildlife research facilities—$50,000. An essential unit of the Endangered Wildlife Research Program is the laboratory-administration building planned for construction in FY 1969. Fundamental studies on the less well known aspects of avian and mammalian biology and behavior are to be carried out in this laboratory. It will be staffed with specialists in nutrition, physiology, pathology, genetics behavior, biometry and closely related sciences, and will provide supporting services for the field investigations and propagation science programs.

The $50,000 requested in FY 1968 is for plans and specifications so that construction could be undertaken early in FY 1969. Postponement of the planning funds will mean nearly a year's delay in constructing this urgently needed facility.

Although other items added by the Congress through a shifting of program would represent reasonable additions to a future Bureau program, they are not considered appropriate in the contemplated use of resources for F.Y. 1968.

It is requested that the appropriation be restored to the program requested in the President's Budget for F.Y. 1968 and increased by the $50,000 added by the House for the site selection of a blackbird research center.

BUREAU OF SPORT FISHERIES AND WILDLIFE

MIGRATORY BIRD CONSERVATION ACCOUNT

(House hearings, p. 1, pp. 482, 591–599; Senate hearings, p. 1274)

(P. 23, line 4)

AMENDMENT REQUESTED

Page 23, line 4, after the amount "$7,500,000," insert the following:

to be immediately available and

HOUSE REPORT

The House Report made no statement concerning this item.

JUSTIFICATION

This language makes the funds immediately available for obligation upon approval of the appropriation bill by the President which may be before July 1 of the fiscal year for which the funds are appropriated.

The language is needed to permit the Bureau to enter into contracts for land acquisitions, negotiations for which may be concluded prior to the start of the fiscal year.

Currently, the Bureau is negotiating for two rather large tracts of land for which funds are not available in FY 1967. In land acquisitions, the availability of a tract is often a fleeting situation requiring ability to exercise options immediately or the lands may very well be sold to a higher or next-higher bidder.

The "immediately available" provision is needed so that in case the agreements are reached in the latter part of this fiscal year, the lands may be acquired.

BUREAU OF SPORT FISHERIES AND WILDLIFE

APPALACHIAN REGION FISH AND WILDLIFE RESTORATION PROJECTS

(House hearings, p. 1, pp. 599–604, 618; Senate hearings, p. 1282)

Appropriation 1967	$500,000
Estimate	400,000
House allowance	
Restoration requested	400,000

(P. 23, after line 5)

AMENDMENT REQUESTED

(1) Page 23, after line 5, insert the following:

Appalachian Region Fish and Wildlife Restoration Projects

For expenses necessary in carrying out a fish and wildlife restoration program, as authorized by section 205 of the Appalachian Regional Development Act of 1965, $400,000, to remain available until expended; Provided, That this appropriation shall not be available for the purchase, or for sharing in the cost of purchase, of lands or interests therein.

HOUSE REPORT

"Funds provided under this item are to implement a program for assisting the States in recovering from damages caused by stripmine operations where the land is exhausted of its mineral resources, and where mining operations have been abandoned, as provided in Section 205 of the Appalachian Regional Development Act of 1965, Public Law 89–4.

"Progress on this program has been extremely slow. As of January 31, 1967, there was an unobligated balance of $1,775,540 previously appropriated for this purpose. Therefore, it is the opinion of the Committee that activity under this program can continue unimpeded in fiscal year 1968 without the appropriation of additional funds."

JUSTIFICATION

This amendment restores the language eliminated because the House disallowed the entire amount requested. This amount is for the following activities:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Payments to States	$500,000	$360,000		$360,000
2. Administration		40,000		40,000
Total	500,000	400,000		400,000

A breakdown of the restoration by objects of expenditure follows:

11.1	Personnel compensation	$33,000
12.0	Personnel benefits	2,000
21.0	Travel and transportation of persons	4,000
26.0	Supplies and materials	1,000
41.0	Grants, subsidies, and contributions	860,000
	Total costs, funded	900,000
94.0	Change in selected resources	−500,000
99.0	Total obligations	400,000

Restoration of the $400,000 reduction made by the House is essential in order to permit an orderly development of the program.

The Appalachian Regional Development Act of 1965 (P.L. 89–4) was approved March 9, 1965 providing basic authority for development of Appalachia. Promptly after, the Second Supplemental Appropriation Act, 1965 (P.L. 89–16) was approved April 30, 1965 providing funds for Appalachia.

The following funds have been appropriated:

Fiscal year 1965 supplemental	$1, 350, 000
Fiscal year 1966	----------
Fiscal year 1967	500, 000
Total appropriated to date	1, 850, 000
Proposed for restoration—fiscal year 1968	400, 000
Total proposed funds	2, 250, 000
Less funds obligated for administrative purposes for fiscal year 1966, estimate for fiscal years 1967 and 1968	—190, 000
Total possible availability for payments to States	2, 060, 000

In accordance with the following tabulation projects presently approved and in various stages of development exceed by some $700,000 the total available funds if the proposed restoration is enacted.

Project and State	Status	Total cost	Federal cost	Obligated Federal funds
Harrison County and Jefferson County, Ohio.	Contract approved by Bureau, State to advertise bids May 1.	$610, 000	$457, 500	$457, 500
Perry County, Ohio	Partially approved by Commission.	885, 000	661, 770	None
Friendship Park, Ohio	Tentatively approved by Commission; documents being prepared.	1, 200, 000	900, 000	None
City of Jellico, Tenn	Approved by Commission and Department of the Interior.	306, 000	229, 500	[1] None
Jefferson National Forest, Va	Has tentative approval of Commission.	270, 000	270, 000	None
Daniel Boone National Forest, Ky	Under informal consideration by the Commission.	170, 000	170, 000	None
State game funds, Pennsylvania	Not formally proposed	18, 500	13, 875	None
Wayne National Forest, Ohio	do	40, 100	40, 100	None
Total, payments to States		3, 499, 600	2, 742, 745	457, 500

[1] Expected to be obligated in May 1967.

Numerous difficulties have been encountered in the development of a program; such as, rapid enactment of basic authority followed almost immediately by appropriation of funds; certain limiting provisions which tended to slow up the development of the program; approvals of regulations; the selection of a prospective project and development of a concrete proposal. All of these obstacles have been confronted and the program is now ready to get on its feet.

The welfare of the people in Appalachia is directly related to the full utilization of its land and resources. The proposed projects will in many ways develop such land and resources. The completion of the above projects will not only aid the people of Appalachia, but will, to an immeasurable extent, contribute to the recreational benefit of the millions within easy distance of the resource.

Restoration of the reduction will allow the program, now accelerating, to proceed at nearly the planned rate in FY 1968.

BUREAU OF SPORT FISHERIES AND WILDLIFE

GENERAL ADMINISTRATIVE EXPENSES

(House hearings, pt. 1, pp. 584–590; Senate hearings, p. 1267)

Appropriation 1967	$1,549,000
Estimate	1,613,000
House allowance	1,572,000
Restoration requested	41,000

(P. 23, line 12)

AMENDMENT REQUESTED

Page 23, line 12 strike out "$1,572,000" and insert in lieu thereof, "$1,613,000",—the estimate, or an increase of $41,000 in the appropriation.

HOUSE REPORT

"The reduction of $41,000 is in connection with the increase requested to replace refuge receipt funds no longer available to this appropriation. In the opinion of the Committee, the minor increase requested in the budget estimate can be absorbed."

JUSTIFICATION

The amendment restores the $41,000 reduction made by the House in the Budget estimate. This amount is for the following activities:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Departmental expense	$214,000	$183,000	$182,000	$1,000
2. Regional office expense	1,335,000	1,430,000	1,390,000	40,000
Total	1,549,000	1,613,000	1,572,000	41,000

The restoration of $41,000 will replace refuge receipts funds no longer available due to increased payments to counties pursuant to the August 30, 1964 amendments to the Refuge Revenue Sharing Act.

The General Administrative Expenses appropriation, for the last several years, has not been increased in proportion to the expansion of operating programs. This has resulted in reduced services to other programs and unless these funds are restored, that situation will be further aggravated.

Personal services and associated benefits account for 87 percent of this appropriation, the remainder providing for other objects of expenditure at a minimal level. Although the restoration requested is only about 2½% of the total appropriation, it is of significant importance. Little flexibility exists for making program adjustments to absorb even a modest reduction because of the high proportion of personal services in this appropriation and the relative stability of the staff.

The total amount requested for the administrative program is only 1.9% of the total funding for the entire Bureau. This ratio is extremely low.

NATIONAL PARK SERVICE

MANAGEMENT AND PROTECTION

(House hearings, pt. 1, pp. 1285–1352, Senate hearings, p. 555)

Appropriation 1967	$35, 932, 800
Estimate	40, 822, 000
House allowance	40, 442, 000
Restoration requested	380, 000

(P. 25, line 5)

AMENDMENT REQUESTED

Page 25, line 5 strike out "$40,442,000" and insert in lieu thereof "$40,822,000"—the estimate, or an increase of $380,000 in the appropriation.

HOUSE REPORT

"Appropriation, 1967	$35, 932, 800
Estimate, 1968	40, 822, 000
Recommended, 1968	40, 442, 000
Comparison:	
Appropriation, 1967	+4, 509, 200
Estimate, 1968	−380, 000

"The following table summarizes the increases recommended by the Committee and the reductions made in the budget estimate:

"Activity	Committee bill, 1968	Bill compared with—	
		1967 appropriation	Estimate, 1968
Management of park and other areas	$33, 725, 900	+$3, 279, 100	−$380, 000
Forestry and fire control	1, 835, 000	+127, 000	
Soil and moisture conservation	206, 900	+900	
Park and recreation programs	4, 376, 700	+89, 700	
Concessions management	297, 500	+7, 500	
Transfers in the estimates		+1, 005, 000	
Total, management and protection	40, 442, 000	+4, 509, 200	−380, 000

"The decrease of $380,000 includes the following items:

"Cape Lookout	$20, 000
Delaware Water Gap	20, 000
Guadalupe Mountains	70, 800
Herbert Hoover	27, 000
Indiana Dunes	108, 700
Jefferson National Expansion Memorial	54, 400
New York City Group	40, 000
San Juan Island	6, 500
Wolf Trap Farm	32, 600
Total	380, 000

"The Committee has received estensive adverse comment on the control of elk herds in Yellowstone National Park. It is suggested that this problem be given concerted attention by officials of the National Park Service with the view of controlling these herds through the use of suitable traps. Any additional costs occasioned by this activity shall be absorbed within available funds of the agency."

JUSTIFICATION

The amendment restores the following reductions made by the House in the Budget estimate for this appropriation:

Operation of new park areas	$238, 600
Operation of new facilities and requirements generated by increased visitor use and extension of the visitor season in existing park areas	141, 400
Total	380, 000

The amendment restores the reduction of $380,000 made by the House in the Budget estimate for this appropriation. This amount is distributed to actiivties as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Management of park and other areas	$30, 468, 800	$34, 105, 900	$33, 725, 900	$380, 000
2. Forestry and fire control	1, 708, 000	1, 835, 000	1, 835, 000	
3. Soil and moisture conservation	206, 000	206, 900	206, 900	
4. Park and recreation programs	3, 260, 000	4, 376, 700	4, 376, 700	
5. Concessions management	290, 000	297, 500	297, 500	
Total	35, 932, 800	40, 822, 000	40, 442, 000	380, 000

A breakdown of the restoration request by objects of expenditure follows:

11.0	Personnel compensation	$218, 000
12.0	Personnel benefits	23, 000
21.0	Travel and transportation of persons	12, 000
22.0	Transportation of things	11, 000
23.0	Rent, communications, and utilities	20, 000
24.0	Printing and reproduction	9, 000
25.1	Other services	32, 000
25.2	Services of other agencies	5, 000
26.0	Supplies and materials	31, 000
31.0	Equipment	19, 000
	Total	380, 000

1. *Management of park and other areas.*—The restoration of $380,000 requested under this actiivty is for the following:

Operation of new park areas	$238, 600
Operation of new facilities and requirements generated by increased visitor use and extension of the visitor season in existing park areas	141, 400
Total	380, 000

NEW PARK AREAS

Ten new park areas have recently been authorized for addition to the National Park System for which funds are required but for which no funds have heretofore been provided. The amount requested under this item was determined to be the minimum amount required to activate these areas in fiscal year 1968, including making provision for initial staffing, general expenses, and equipment. Funds were not requested for full-year salaries of permanent positions in most cases, as it was planned that some positions would be filled at such times during the year as the visitor and administrative workload gradually increased in them.

The House action in reducing the budget request for operations in these new park areas has eliminated entirely the funds requested for three of them (Guadalupe Mountains National Park, Texas; Indiana Dunes National Lakeshore, Indiana; and Wolf Trap Farm Park, Virginia) and reduced the funds requested for two others (Cape Lookout National Seashore, North Carolina and San Juan Island National Historical Park, Washington) to what is considered to be less than an adequate level.

It is necessary to provide some staffing without delay in newly authorized park areas to perform a wide variety of duties, and to gradually expand the staffs as needed. Experience has indicated that the presence of Service personnel is needed, among other things, to establish and to expand public and community relationships; to prepare and coordinate land acquisition programs; to prepare plans for developing interpretation, resource management, and maintenance programs to meet visitor needs, etc. It is also essential to have an adequate number of qualified Service representatives assigned to each park area on a full-time basis to protect the Government's interests, and also so that vital cooperative relationships with State, Federal, and municipal agencies can be maintained or established on a continuing basis. It should also be pointed out that during the formative stages of a new park area many important policy decisions must be made.

The restoration herein requested will provide funds for the following new park areas:

Cape Lookout National Seashore, N.C	$20,000
Guadalupe Mountains National Park, Tex	70,800
Indiana Dunes National Lakeshore, Ind	108,700
San Juan Island National Historical Park, Wash	6,500
Wolf Trap Farm Park, Va	32,600
Total	238,600

It is respectfully requested that the $238,600 disallowed by the House be restored so that all of the 10 recently authorized park areas can be staffed and activated early in the 1968 fiscal year on the limited basis contemplated in the budget.

OPERATION OF NEW FACIITIES AND REQUIREMENTS GENERATED BY INCREASED VISITOR USE AND EXTENSION OF THE VISITOR SEASON IN EXISTING PARK AREAS

The amount of $141,400 was disallowed by the House under this category for the following park areas:

Delaware Water Gap National Recreation Area, N.J.-Pa	$20,000
Herbert Hoover National Historic Site, Iowa	27,000
Jefferson National Expansion Memorial National Historic Site, Mo	54,400
New York City Group, N.Y	40,000
Total	141,400

The full amount of the increase requested under this category is needed to meet visitor needs and the related minimum requirements for management, protection, and interpretation of the park areas. In two of the parks (Herbert Hoover and Jefferson National Expansion Memorial National Historic Sites) the entire increase requested in the 1968 budget estimate was eliminated and in the other two (Delaware Water Gap National Recreation Area and New York City Group) the increase requested was partially allowed.

Pertinent information with respect to each of the areas follows:

DELAWARE WATER GAP NATIONAL RECREATION AREA, PA. AND N.J.

With the imminent transfer to the Service by the Corps of Engineers of acquired lands at Delaware Water Gap National Recreation Area, protection (both of Federal property and park visitors) will become increasingly important. It is anticipated that the area will cover an estimated 30,000 acres by the end of 1968 fiscal year. An important aspect of the authorizing legislation pertains to the preservation of scenic and scientific values which must also be evaluated and interpreted for visitor enjoyment. The House reduction of $20,000 should be restored so that the full increase requested for the area will be available to supplement the funds that were provided in the 1967 fiscal year appropriation to cover the initial activation of this recently authorized park area.

HERBERT HOOVER NATIONAL HISTORIC SITE, IOWA

The National Park Service will assume full operating and management responsibilities at Herbert Hoover National Historic Site from the General Services Administration on July 1, 1967, including the employment of 3 Park Guards, GS-3.

The services now provided by that Agency include public contact and protection duties at the grave site, blacksmith shop, Quaker church, and the birthplace cottage. These services are required on a 7-day week basis and the $27,000 is needed to finance these services in the 1968 fiscal year.

JEFFERSON NATIONAL EXPANSION MEMORIAL, MO.

The increase of $54,400 and seven permanent positions for Jefferson National Expansion Memorial will provide for meeting a greatly expanded workload incident to management and operation of newly constructed facilities, including the Memorial Gateway Arch and related improvements, and for meeting increased visitor use. The dimension of the management, interpretation and protection programs at this area will change materially when the Memorial Gateway Arch is opened to the public. This will take place and the full operating function will be assumed prior to the beginning of the 1968 fiscal year. In the 1968 fiscal year, this will involve the employment of four park guides, GS-4, at the arch for a 7-day week operation; 10 hours per day in winter and 14 hours per day in summer. It will also involve the employment of three additional guards, GS-4, to provide for adequate night guard services at the arch and Old Court House. Without the increased funds and staffing requested, the Service's current responsibility to the public cannot be fulfilled.

NEW YORK CITY GROUP, NEW YORK

The budget request includes a Curator, Museum Specialist, and interpretive, protective, and guide staffing and related general expense funds (a total of 15 permanent positions) to provide for rapidly expanding developments and increased visitation at the American Museum of Immigration, Federal Hall National Memorial, Castle Clinton National Monument, and Sagamore Hill National Historic Site. It should be noted that there was a total of 1,345,900 visits to the New York City areas during the 1966 calendar year. The House allowance would provide for less than full-year funding requirements to operate the newly constructed facilities and to meet the increased work load at these areas. The reduction of $40,000 made by the House should be restored so that adequate funds and staffing will be available to fulfill the Service's responsibility in the New York City Group of Park areas.

It is respectfully requested that the amount of $141,400 disallowed by the House be restored in order that the standard of operation contemplated in the estimate will not have to be lowered.

NATIONAL PARK SERVICE

MAINTENANCE AND REHABILITATION OF PHYSICAL FACILITIES

(House hearings, pt. 1, pp. 1353–1369; Senate hearings, p. 616)

Appropriation 1967	$26,680,000
Estimate	29,942,000
House allowance	29,581,000
Restoration requested	361,000

(P. 25, line 13)

AMENDMENT REQUESTED

Page 25, line 13 strike out "$29,581,000" and insert in lieu thereof "$29,942,000"—the estimate, or an increase of $361,000 in the appropriation.

HOUSE REPORT

"Appropriation, 1967	$26,680,000
Estimate, 1968	29,942,000
Recommended, 1968	29,581,000
Comparison:	
Appropriation, 1967	+2,901,000
Estimate, 1968	−361,000

"The decrease of $361,000 includes the following items:

"Guadalupe Mountains	$30,000
Indiana Dunes	19,200
Jefferson National Expansion Memorial	100,000
National Capital Parks	100,000
New York City Group	10,000
San Juan Island	20,900
Wolf Trap Farm	34,800
General	46,100
Total	361,000"

JUSTIFICATION

The amendment restores the following reductions made by the House in the Budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Roads and trails	$10,621,200	$11,665,200	$11,606,800	$58,400
2. Buildings, utilities, and other facilities	16,058,800	18,276,800	17,974,200	302,600
Total	26,680,000	29,942,000	29,581,000	361,000

A breakdown of the restoration request by objects of expenditure follows:

11 Personnel compensation	$183,000
12 Personnel benefits	12,000
21 Travel and transportation of persons	5,000
22 Transportation of things	6,000
23 Rent, communications, and utilities	25,000
24 Printing and reproduction	2,000
25 Other services	32,000
Services of other agencies	2,000
26 Supplies and materials	69,000
31 Equipment	25,000
Total	361,000

The restoration of $361,000 requested under this appropriation item is for the following:

	Roads and trails	Buildings, utilities, etc.	Total
Operation of new park areas	$22,300	$82,600	$104,900
Operation of new facilities and requirements generated by increased visitor use and extension of the visitor season in existing park areas	36,100	220,000	256,100
Total	58,400	302,600	361,000

NEW PARK AREAS

Nine new park areas have recently been authorized for addition to the National Park System for which funds are required under this appropriation item but for which no funds have heretofore been provided. The amount requested under this item was determined to be the minimum amount required for maintenance and operation of the new areas when activated in fiscal year 1968, including making provision for initial staffing, general expenses and equipment. Funds were not requested for full-year salaries of permanent positions in most cases, as it was planned that some positions would be filled at such times during the year as the visitor and maintenance workload increased in them.

The House action in reducing the budget request for maintenance and operations in these new park areas has eliminated the funds requested under this appropriation for three of them (Indiana Dunes National Lakeshore, Indiana; San Juan Island National Historical Park, Washington; and Wolf Trap Farm Park, Virginia) and reduced the funds requested for Guadalupe Mountains National Park to what is considered to be less than an adequate level.

Experience has indicated that maintenance personnel are needed at the time of activation of new areas to prepare existing buildings for occupancy, install or repair sewage and water systems, etc., and for clean up and general maintenance of the grounds for the benefit of the visiting public.

The restoration herein requested will provide funds for the following new park areas:

	Roads and trails	Buildings, utilities, etc.	Total
Guadalupe Mountains National Park, Tex	$15,000	$15,000	$30,000
Indiana Dunes National Lakeshore, Ind	2,300	16,900	19,200
San Juan Island National Historical Park, Wash	5,000	15,900	20,900
Wolf Trap Farm Park, Va	----------	34,800	34,800
Total	22,300	82,600	104,900

It is respectfully requested that the $104,900 disallowed by the House be restored so that all of the nine new park areas for which funds are required under this appropriation can be activated early in the 1968 fiscal year.

OPERATION OF NEW FACILITIES AND REQUIREMENTS GENERATED BY INCREASED VISITOR USE AND EXTENSION OF THE VISITOR SEASON IN EXISTING PARK AREAS

The amount of $256,100 was disallowed by the House under this category for the following park areas:

	Roads and trails	Buildings, utilities, etc.	Total
Jefferson National Expansion Memorial	----------	$100,000	$100,000
National Capital Parks	----------	100,000	100,000
New York City Group	----------	10,000	10,000
General	$36,100	10,000	46,100
Total	36,100	220,000	256,100

The full amount of the increase requested under this heading is needed to meet visitor needs and the related minimum requirements for maintenance and operations of the park areas.

For Jefferson National Expansion Memorial the entire increase requested in the 1968 budget estimate plus $11,100 of the Park's base was eliminated and for the National Capital Parks and the New York City Group the increase requested was only partially allowed.

Pertinent information with respect to each of the areas follows:

JEFFERSON NATIONAL EXPANSION MEMORIAL

The scope, complexity and workload incident to the maintenance and operation of the physical facilities at this area will change materially when the Memorial Gateway Arch, including a 10,000 square feet visitor center and related facilities, is opened to the public. The uniqueness of the Arch is certain to substantially increase visitor use. A technically trained employee (Chief of Maintenance) must be provided to supervise the maintenance and operation of the stainless steel arch which is 630 feet high and which includes air-conditioning and heating systems, two elevators and two electrically driven eight-car trains which run to the top of the Arch. A maintenanceman, a caretaker and a laborer will be required for painting, cleaning, adjusting, servicing, and performing minor repair work. This force will be assisted by temporary employees for which the budget increase requested includes $39,000 for five man-years. To meet peak loads, it is planned that the staff requested for the Arch will be fully integrated with the staff presently available. Without the increased funds and staffing requested, the Service cannot meet the greatly expanded workload and fulfill its responsibility to the public.

NATIONAL CAPITAL PARKS

The increase included in the budget was requested to meet wage rate increases and to provide for meeting a greatly expanded workload incident to maintenance and operation of newly constructed facilities in the National Capital area and for meeting increased visitor use. A police substation, a sub-maintenance unit, three comfort stations, 50 picnic areas, and 100-site campground at Greenbelt Park; a 50-site campground, 25 picnic areas and three comfort stations at Catoctin Mountain Park; newly reconstructed roadways and additional parking areas and drainage structures in East Potomac Park; and the program for a more beautiful Capital are just a few of the many additional improvements and facilities that must be operated and maintained in the National Capital area. The maintenance of the floral displays provided under the Construction appropriation and through donations is a very costly item. Based on experience since July 1, 1966, annual cost of Class A maintenance of these displays is from 25 to 30% of the capital investment. The reduction of $100,000 made by the House should be restored so that the funds and staffing will be available to fulfill the Service's responsibility in the Nation's Capital.

NEW YORK CITY GROUP

The reduction of $10,000 made by the House should be restored as the full amount of increase requested in the budget is needed for operation and maintenance of newly opened Old Orchard Museum at Sagamore Hill National Historic Site; expanded nightboat service for Ellis-Liberty Islands; additional janitorial and maintenance services at Castle Clinton National Monument, General Grant National Memorial, and Federal Hall; and to meet the rise in cost of supplies, materials and equipment.

GENERAL

The amount of $46,100 disallowed by the House under this item should be restored as the full amount of the increase requested in the budget is needed so that maintenance and operating requirements of existing park areas can be met. The additional funds are needed to operate and maintain new or reconstructed roads, trails, buildings, utilities, campgrounds, visitor centers, etc., and to meet increased operating costs brought about by increased visitor use and the increased costs of supplies, materials, and equipment.

It is respectfully requested that the amount of $256,100 disallowed by the House be restored in order that the standard of maintenance and operation contemplated in the estimate will not have to be lowered.

NATIONAL PARK SERVICE

CONSTRUCTION

(House hearings, pt. 1, pp. 1369–1376; Senate hearings, p. 627)

Appropriation 1967	$22, 894, 000
Estimate	17, 579, 000
House allowance	11,197,000
Restoration requested	5,427,000

(P. 25, line 23)

AMENDMENT REQUESTED

Page 25, line 23 strike out "$11,197,000" and insert in lieu thereof "$16,624,000"—an increase of $5,427,000 in the appropriation.

HOUSE REPORT

"Appropriation, 1967	$22, 894, 000
Estimate, 1968	17, 579, 000
Recommended, 1968	11, 197, 000
Appropriation, 1967	—11, 697, 000
Estimate, 1968	—6, 382, 000

"The net decrease of $6,382,000 consists of the following reductions:

Interpretive production facility, Harper's Ferry, W. Va	$618, 000
Replica locomotives and tenders, Golden Spike, Utah	326, 500
Completion of visitor center, Jefferson National Expansion Memorial, Missouri	2, 325, 000
Amphitheater, Yellowstone, Wyo	200, 000
Various projects in park system general, District of Columbia	600, 000
Various facilities—Wolf Trap Farm Park, Va	157, 500
Recreation building, Catoctin Mountain Park, Md	200, 000
Total	4, 427, 000

"While the Committee approves the construction program with the exceptions noted above, it is of the opinion that there will be sufficient delay in the construction program as a result of the 1967 deferrals to warrant a further reduction of $1,000,000 for slippage in the program.

"The Committee recommends the transfer to the construction program of $1,000,000 of the unobligated balance of funds previously appropriated under this appropriation for the acquisition of land and water rights.

"The Committee also recommends an increase of $45,000 for land acquisition and planning of the East Glacier Airport.

"The amount provided by activity consists of the following:

Camping and picnicking facilities	$2, 338, 000
Public service and administrative units	5, 002, 000
Utilities	3, 755, 000
Employee housing	462, 000
Miscellaneous	1, 140, 000
Acquisition of water rights	500, 000
Total	13, 197, 000
Less:	
Slippage	—1, 000, 000
Transfer of unobligated land acquisition funds	—1, 000, 000
Net appropriation	11, 197, 000"

JUSTIFICATION

The amendment restores $5,427,000 of the reduction of $6,382,000 made by the House in the Budget Estimates. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Buildings, utilities, and other facilities	$22,394,000	$17,079,000	$11,652,000	$4,427,000
2. Acquisition of:				
(a) Lands			−955,000	1,000,000
(b) Water rights	500,000	500,000	500,000	
Total	22,894,000	17,579,000	11,197,000	5,427,000

A breakdown of the restoration request by objects of expenditure follows:

25.1	Other services	$400,000
32.0	Lands and structures	5,027,000
	Total	5,427,000

1. *Buildings, utilities, and other facilities.*—The restoration of $4,427,000 requested under this activity is for the following:

Interpretive production facility, Harpers Ferry, West Virginia

This facility is programed to meet the enormously expanding responsibility of the Service to provide information and interpretation to park visitors, to achieve more efficient and effective use of manpower, effect cost savings through centralization of space, equipment, and administrative services, and to achieve higher standards of quality in the interpretive services provided to visitors in the parks. As the National Park System expands, and the number of park visitors accelerates, the providing of information and interpretation program materials by the Harpers Ferry production facility will be increasingly important. Traditional personal services can provide only a small part of the needs.

It is proposed to consolidate the staff people who now produce all publications, museum and wayside exhibits, graphics, and audiovisual programs. Present production facilities are inadequate, widely separated, and as a result, inefficient. The 45 museum production people are now located in two laboratories, resulting in duplication of equipment and facilities.

It is planned that the building will be a three-story masonry structure—probably concrete block. While construction of the new facility can be accomplished in two phases, if the amount of $618,000 disallowed by the House is restored, the construction schedule can be integrated with resulting savings and economies: avoiding expense of advertising and administering two contracts and perhaps having two different contractors working on the same building; avoiding a possible increase in construction costs involved in stretching out the construction period and avoiding the difficulty in occupying a building while construction is underway. Additionally, the above described annual savings in staff and operating expenses will not be realized until the second phase is completed. It is recommended that the reduction of $618,000 made by the House be restored so that the combined facility can be constructed at one time.

Replica locomotives and tenders, Golden Spike, Utah

The National Park Service has assured the Utah Governor's Centennial Commission that, if possible, major interpretive features will be installed at Golden Spike National Historic Site, Utah, prior to the commemoration of the completion of the first transcontinental railroad. The centennial anniversary of the joining of the rails will occur on May 10, 1969. The replica locomotives and tenders are to be the principal interpretive facility at Promontory Summit. The Union Pacific Railroad has donated a mile of period 56-pound rail on which the replicas will stand. The Golden Spike site itself and most of the historic railroad grade is now in Federal ownership. Planning has been underway for appropriate commemoration of the event with funds authorized in the 1967 fiscal year. It is respectfully requested that the $326,500 for the replica locomotives and tenders be restored. If the funds are not available prior to the 1969 fiscal year, it will be most difficult to complete construction of these replica locomotives prior to the 1969 anniversary date.

Completion of Visitor Center, Jefferson National Expansion Memorial, Missouri

Pursuant to the Act of May 17, 1954, as amended, the Secretary of the Interior is authorized to construct upon the Jefferson National Expansion Memorial National Historic Site, St. Louis, Missouri, an appropriate national memorial to those persons who made possible the territorial expansion of the United States. Visitation to the memorial is approaching five million persons per year who come to visit, among other things, the completed Arch. The transportation system to the top of the Arch and a small lobby area to serve as an interim Visitor Center, are now under contract and will be completed before the end of the 1968 fiscal year. These facilities will accommodate about 7,000 persons per day. Average daily visitation during the months of June, July, and August was approximately 16,600 in 1965 and 21,100 in 1966. This figure is expected to reach 25,000 for the same period in 1967 and 28,000 in 1968. The theater, and the Museum of Westward Expansion, which are included in this project, are designated to accommodate 30,000 persons per day. Completion of the Visitor Center, theater, restrooms, and supporting facilities within the programed project are urgently needed to accommodate this anticipated visitation. The $2,325,000 requested for the Federal portion of this project is to be matched by $775,000 in donations (on a $1 to $3 basis) by the Albert P. Greensfelder Trust, St. Louis, Missouri. It is recommended that the reduction made by the House be restored so that this portion of the project can be completed to fulfill the Service's responsibility to the public.

Amphitheater, Yellowstone, Wyoming

The Old Faithful Geyser has the heaviest vistor use and concentration of traffic in Yellowstone National Park. Present visitor facilities and traffic circulation are obsolete and completely inadequate to serve the millions who enjoy a visit to Old Faithful Geyser and other thermal features each year. To alleviate the situation, a road to provide a bypass of the Old Faithful area for through traffic and to provide a better access for the heavy traffic into and out of the Old Faithful Geyser area was authorized in the 1967 fiscal year. This rerouting of the Grand Loop Road at Old Faithful will eliminate several old and deteriorated structures, among them being the visistor center, amphitheater, public comfort station and employee residences, some of which are located so close to the Old Faithful cone as to be an intrusion on the natural feature and an impediment to visitor enjoyment. The amphitheater is estimated to cost only $42,700. A reduction of $200,000 as proposed by the House would also take away funds for about eight of the 20 employee apartment units proposed in the budget. In order to provide for this public need, it is recommended that the reduction of $200,000 made by the House be restored.

Various projects in park system general, District of Columbia

The construction program under this heading includes the following projects:

Reconstruct small parks and reservations	$300, 000
Beautification and development of the Mall	500, 000
Ford's Theater (sound and light)	400, 000
Development of the Ellipse	400, 000
Total	1, 600, 000

The reduction of $600,000 would be applied to the three projects other than the Ford's Theater (sound and light).

Although the consultant's plan for developing The Mall and the Ellipse is not yet final, the plans propose expansion of "people serving" facilities as well as beautification. They will include among other things, additional fountains, a sculpture garden and sitting areas in the vicinity of the skating rink, facilities for on foot visitors to The Mall area and additional planting. The reconstruction of small parks and reservations item will permit continued redevelopment and refurbishing of a portion of the more than 700 small parks and reservations administered by the National Capital Region. This work will include adding floral displays, providing utilities, and in some cases, walks, benches, play areas, replanting of dead and overgrown plant material to implement the Administration's program for a more beautiful National Capital. The reduction of $600,000 made by the House will seriously impair these programs and it is respectfully requested that the reduction be restored so that all of the foregoing may be accomplished.

Various facilities—Wolf Trap Farm Park, Virginia

The construction projects proposed in the National Park Service 1968 development program for the Wolf Trap Farm Park would fulfill the Government's commitment which was made when P.L. 89–671 was enacted. Planning is proceeding for the construction of the amphitheater on lands being donated. The amphitheater will be funded from the $1,750,000 being provided by donation of Mrs. Jouett Shouse. The $157,500 requested in the National Park Service budget is required to provide for a comfort station, utilities, the conversion of a farm house to an administration building and related facilities necessary in connection with the operation of the amphitheater and the park. It is recommended that the reduction of $157,500 made by the House be restored so that all required development can be accomplished in a logical order.

Recreation building, Catoctin Mountin Park, Maryland

The 1968 development program includes $317,400 for Catoctin Mountain Park, of which $200,000 was disallowed by the House. The program included two projects: (1) the construction of a shower and laundry building and a recreation building at Camp Misty Mount; and (2) the reconstruction of the utility systems in the Camp Misty Mount headquarters area and the Park's main power line. The first project consists of an assembly room, storage and toilet rooms, visual aid rooms, laundry and shower facilities, etc., which will provide community type facilities to be used by organized group campers such as Girl Scouts, 4-H Clubs and Washington County School Children and Mentally Retarded Adults. The second project includes the replacement of sewer lines and disposal fields, replacement of water feeder lines and installation of fire hydrants, replacement of water main from the supply and well to the headquarters area. The existing storage supply (37,000 gallons) is not adequate to supply the new fire hydrants and the need for larger quantities of water in case of fire necessitates a new 50,000 gallon storage supply. In addition the existing main powerline is partly on poles and in places the poles have rotted and are in danger of collapse. The amount of power is inadequate since construction of the visitor center-administration building, an employee residence and location of the maintenance building on the south side of the Park.

The reduction of $200,000 made by the House would completely eliminate the first project and seriously hamper the second. It is respectfully requested that the reduction be restored so that the necessary developments may be accomplished to meet the public need.

2. *Acquisition of lands and water rights.*—The restoration of $1,000,000 of the unobligated balance of funds previously appropriated for acquisition of lands is requested under this activity.

Of the $1,885,932 unobligated balance carried forward at the beginning of the 1967 fiscal year, only $510,000 remains unobligated on April 30, 1967, which is needed to meet programing commitments already made or underway, as follows:

Area	Amount to be obligated	Reason for obligation
Blue Ridge Parkway	$900	Committed for a declaration of taking.
Grand Teton	8, 758	Being held to supplement funds donated for land acquisition.
Home of Franklin Delano Roosevelt	123, 083	Being held to satisfy pending court judgment
Independence	79, 654	$46,200 earmarked for St. Joseph's Church property; agreement now being negotiated.
Manassas	9, 867	For acceptance of option and related expenses.
Minute Man	14, 627	To be used for options under negotiation.
Point Reyes	221, 410	Being held to satisfy pending court judgments.
	51, 682	Contingencies for overruns, appraisals, surveys, title, etc.
Total	509, 981	

So that the land acquisition commitments under way may continue unabated and that the accounting records may remain intact with respect to the many obligation documents already recorded, it is respectfully requested that the $1,000,000 transfer to the construction program as proposed by the House be restored to the lands program.

NATIONAL PARK SERVICE

PRESERVATION OF HISTORIC PROPERTIES

(House hearings, pt. 1, pp. 1386–1404; Senate hearings, p. 645)

Appropriation 1967	----------
Estimate	$2, 323, 000
House allowance	1, 000, 000
Restoration requested	1, 323, 000

(P. 26, lines 17 and 18)

AMENDMENT REQUESTED

Page 26, lines 17 and 18 strike out "$1,000,000" and insert in lieu thereof "$2,323,000", the estimate, or an increase of $1,323,000 in the appropriation.

HOUSE REPORT

"Appropriation, 1967	----------
Estimate, 1968	$2, 323, 000
Recommended, 1968	1, 000, 000
Comparison:	
Appropriation, 1967	+1, 000, 000
Estimate, 1968	–1, 323, 000

"Funds recommended under this appropriation item are required to carry out the provisions of Public Law 89–665, approved October 15, 1966. This legislation was enacted to establish a program for the preservation of additional historic properties throughout the nation.

"Of the amount provided, $677,000 is for matching grants-in-aid, and $323,000 is for administrative and technical support."

JUSTIFICATION

The amendment restores the reduction of $1,323,000 made by the House in the Budget estimate for this appropriation. This amount is distributed to activities as follows:

	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Matching grants-in-aid	----------	$1, 853, 000	$677, 000	$1, 176, 000
2. Administrative and technical support	----------	470, 000	323, 000	147, 000
Total	----------	2, 323, 000	1, 000, 000	1, 323, 000

A breakdown of the restoration request by objects of expenditure follows:

11.0	Personnel compensation	$101, 000
12.0	Personnel benefits	6, 000
21.0	Travel and transportation of persons	14, 000
22.0	Transportation of things	2, 000
23.0	Rent, communications, and utilities	4, 000
24.0	Printing and reproduction	5, 000
25.1	Other services	6, 000
26.0	Supplies and materials	5, 000
31.0	Equipment	4, 000
41.0	Grants, subsidies, and contributions	1, 176, 000
	Total	1, 323, 000

PRESERVATION OF HISTORIC PROPERTIES

The House action reduces the total request for $2,323,000 to $1 million, $677,000 of which is earmarked for grants-in-aid and $323,000 for administrative and technical support. Actually, the $323,000 for administrative and technical support represents amounts currently available for the Historic Sites Survey and the Historic American Buildings Survey programs which have previously been funded in the Service's Management and Protection appropriation. This amount is being transferred in the estimates from the Management and Protection appropriation to the new Preservation of Historic Properties appropriation and does not represent an increase. Also, as the entire $323,000 will be required in 1968 for execution of the Historic Sites Survey and the Historic American Buildings Survey programs at the same level as that currently obtaining, the House action actually makes no provision for additional staffing for administrative and technical support to handle the functions authorized by Public Law 89–665. The estimate requested, within the total increase of $2 million, an increase of $147,000 for administrative and technical support over and above the $323,000 included for Historic Sites Survey and Historic American Buildings Survey.

A detailed breakdown of the $147,000 request is as follows:

Additional staffing and general expense funds required for program execution:	
Permanent full-time positions:	
Chief, Office of Archeology and Historic Preservation, GS–16	$20, 075
Historian (architectural), GS–13	12, 873
Historian, GS–13	12, 873
Administrative assistant, GS–9	7, 696
Clerk-stenographer, GS–5	5, 331
Total salaries (5 positions)	58, 848
Less estimated lapse	8, 000
Net salaries	50, 848
Other general expenses, including personnel benefits, travel, supplies and materials, equipment, space rental, etc	24, 152
Subtotal	75, 000
Additional staffing and general expense funds required to support National Advisory Council:	
Permanent full-time positions:	
Staff assistant, GS–14	15, 106
Clerk-stenographer, GS–6	5, 867
Clerk-stenographer, GS–4	4, 776
Total salaries (3 positions)	25, 749
Less estimated lapse	2, 749
Net salaries	23, 000
Positions other than permanent:	
10 Council members ($100 per day, based on an estimate of 6 meetings of 5 days each, including travel time)	30, 000
General expenses, including personnel benefits, travel for Council and staff assistant, supplies, equipment, etc	19, 000
Subtotal	72, 000
Total	147, 000

The passage of P.L. 89-665 and the subsequent appointment by the President of the National Advisory Council on Historic Preservation has aroused intense interest throughout the Nation, and the pressure on the Service for information and guidelines for the execution of the program has already become more than the existing staff can cope with. Without the modest additional staff requested, the Service would be unable to expand the National Register or promulgate the criteria and guidelines essential for the States to be prepared to participate in the program when funds become available. Programs of survey and planning already initiated in many States in anticipation of the Federal program would lose momentum or be deferred altogether. Much of the stimulus to the historic preservation movement caused by enactment of P.L. 89–665 would be lost. Restoration of the $75,000 requested for additional staffing would enable the Service to form a skeleton staff to establish the working relationships with the States that will be essential if a State grant program is to be activated in the 1969 fiscal year as anticipated.

Elimination of the $72,000 requested for the National Advisory Council would, if sustained, mean that no meeting can be held for more than a year. The Council is charged with important responsibilities by Section 106 of P.L. 89–665, which has already invoked interagency procedures that will present issues to the Council for consideration during the 1968 fiscal year. It is therefore vital that activation of the Council not be delayed until the 1969 fiscal year. Restoration of the $72,000 would permit the work of the Council to proceed at once.

The budget submission called for $1,750,000 in grants to the National Trust in 1968. Pending the establishment of the grants program to the States, the Trust was conceived as the principal mechanism for making the new program immediately effective in emergency cases and in stimulating maximum participation and effort in the private sector—a mission for which the Trust is peculiarly well equipped.

Restoration of the full sum requested is essential to sustain the momentum throughout the Nation generated by passage of the Act.

OFFICE OF SALINE WATER

SALARIES AND EXPENSES

(House hearings, pp. 625–694; Senate hearings, p. 1571)

Appropriation, 1967	$27,500,000
Estimate, 1968	20,982,000
House allowance	7,500,000
Restoration requested	13,482,000

(P. 27, line 15)

AMENDMENT REQUESTED

(1) Page 27, line 15, strike out "$7,500,000" and insert in lieu thereof "$20,982,000", the estimate or an increase of $13,482,000 in the appropriation.

HOUSE REPORT

"The amount allowed includes $5,950,000 for research and development and $1,550,000 for administration and coordination."

"The total amount approved for this appropriation represents the balance of authorized funds not yet appropriated. Legislative action is currently in process for the extension of this authorization. However, pending the enactment of the legislation, the Committee has decided to pass over without prejudice the remaining balance of funds requested."

JUSTIFICATION

Explanation of amendment

The amendment restores the reduction of $13,482,000 made by the House in the budget estimate. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Research and development:				
(a) Contracts and grants (non-Federal)	$25,695,000	$18,637,000	$5,655,000	$12,982,000
(b) Federal laboratories	320,000	795,000	295,000	500,000
2. Administration and coordination	1,485,000	1,550,000	1,550,000	----------
Total	27,500,000	20,982,000	7,500,000	13,482,000

The restoration is distributed by objects of expenditudes as follows:

25 Other services	$12,982,000
Services of other agencies	500,000
Total	13,482,000

Legislation to extend and increase the Office of Saline Water authorization is currently under consideration by the appropriate Congressional Committees. This legislation, when approved by the Congress, will be sufficient to cover the restoration requested herein. Therefore, it is requested that the reduction of $13,482,000 within this activity be restored contingent upon the passage of the authorizing legislation. This action would also eliminate the necessity of requesting a supplemental appropriation if the authorizing legislation was approved subsequent to the passage of the appropriation act.

OFFICE OF WATER RESOURCES RESEARCH

SALARIES AND EXPENSES

(House hearings, pt. 1, pp. 695–741; Senate hearings, p. 271)

Appropriation, 1967	$6,894,000
Estimate, 1968	12,700,000
House allowance, 1968	11,130,000
Restoration requested	1,500,000

(P. 28, line 7)

AMENDMENT REQUESTED

Page 28, line 7 strike out "$11,130,000" and insert in lieu thereof "$12,630,000", an increase of $1,500,000 in the appropriation.

HOUSE REPORT

"The Committee recommends an allowance of $11,130,000 for administration of the Water Resources Research Act of 1964 (Public Law 88–379), as amended.

Funds included in this item will provide a total of $5,100,000 for assistance to States. This provides $100,000 for each of the 51 Institutes as authorized under the Act.

The recommended amount also includes $3,000,000 for matching grants to Institutes as provided by the Act, an increase of $1,000,000 over 1967.

The amount recommended by the Committee also includes $2,000,000, a reduction of $1,000,000 below the budget estimate, for water resources research to be performed by any qualified entity or individual as provided under Title II of the Act. The Committee is not convinced that plans and guidelines have been sufficiently developed for this phase of the program to warrant approval of the total budget request.

The budget estimate included an increase of $1,000,000 to operate a Water Resources Scientific Information Center. The amount recommended by the Committee provides $500,000 for this activity.

Of the amount approved by the Committee, $530,000 is included for administrative expenses in fiscal year 1968."

JUSTIFICATION

The amendment restores $1,500,000 of the reduction of $1,570,000 made by the House in the Budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Assistance to States for institutes	$4,463,000	$5,100,000	$5,100,000	
2. Matching grants to institutes	2,000,000	3,000,000	3,000,000	
3. Additional water research		3,000,000	2,000,000	1,000,000
4. Scientific information center		1,000,000	500,000	500,000
5 Administration	431,000	600,000	530,000	
Total	6,894,000	12,700,000	11,130,000	1,500,000

A breakdown of the restoration by objects of expenditure follows:

21	Travel and transportation of persons	$3,000
23	Rent, communications, and utilities	2,000
24	Printing and reproduction	4,000
25.1	Other services	25,000
25.2	Services of other agencies	463,000
26	Supplies and materials	1,000
31	Equipment	2,000
41	Grants, subsidies, and contributions	1,000,000
	Total	1,500,000

It is essential that the recommended reductions of $1,000,000 for water research to be performed by qualified entities or individuals under Title II of the Water Resources Research Act, and $500,000 for operation of a water resources scientific information center, be restored to the fiscal year 1968 budget estimate. Such restoration is required to ensure a well-balanced, effective, and productive water resources research program pursuant to the objectives of the Act, and to promote improved coordination of Federally supported water research activities, thus serving to avoid undesirable duplication of research effort and promoting effective dissemination of research results to scientists and managers working in the water resources field.

Additional water research

The proposed reduction of $1,000,000 for water research under Title II would have a serious adverse impact upon the Title II program. The funds originally requested ($3,000,000) represent only 50 percent of the amount authorized for Title II research in 1968, and the additional proposed reduction would seriously impair the opportunity that currently exists for making effective use of the water research talent that is available, at many universities and private research organizations, to seek new ways, discoveries, and bases essential for solution of critical Nation-wide water problems relating to such priority subject areas as: water resources planning and management, and socio-economic aspects of water resource problems; processes of the hydrologic cycle; and conservation of water quantity and quality.

Positive actions to implement the Title II program immediately following program funding have already been taken by our office. Title II policies, supplementary to those contained in the Act, have been developed and were distributed to potential program participants in January 1967. Similarly, research proposal preparation guidelines and a statement of suggested areas for priority research attention were prepared and distributed. Several meetings have also been held with officials of Federal agencies, both within and outside the Department of the Interior, in order to establish effective lines of communications for the evaluation of specific research project proposals and the coordination of the Title II research effort so as to achieve most effective research results with funds made available.

Within the past several weeks the Office of Water Resources Research has already received 245 Title II research proposals involving requests for approximately $29 million. It is expected that many additional proposals will be received following announcement of the availability of fiscal year 1968 funds. The 245 already received, which were submitted by competent research organizations from the private sector of the economy, by public and private universities, by private research foundations, and by others, have confirmed that a wide spectrum of highly qualified scientists, engineers, and research organizations are desirous of and qualified to undertake water resources research with Title II support. These proposals also demonstrate that Title II research can be oriented toward finding solutions for major water resources problems and, further, they demonstrate that Title II research-performing organizations, and the individual scientists and engineers associated with them as principal investigators and consultants, will significantly enhance the technical strength and diversity of the Federal Government's research capability. Additionally, it is evident that water research organizations not effectively reached through the Title I authorization can, under Title II, open up new research approaches. This is notable particularly in such scientific research areas as operations research and in the coupling of hydrologic and economic models for water resources research.

It is apparent that a balanced water resources research program will be unable to operate most effectively in the absence of participation by eligible and qualified organizations under Title II of the program. Therefore, restoration of the $1,000,000 House Committee reduction is requested.

Scientific Information Center

The House Committee reduction of $500,000 for operation of a Water Resources Scientific Information Center, leaving $500,000 for this program activity, would seriously impair the opportunity for achieving effective center operations. If only $500,000 is made available for center operations in fiscal year 1968, it will not be possible to provide the quality and scope of technical information dissemination, storage, and retrieval activities that is urgently desired by Federal agencies and other organizations engaged in Federal water resources research activities.

The principal objectives sought by the center are: the avoidance of undesirable duplication of research; insuring improved coordination of efforts among persons engaged in Federal water-related research activities; and extending the capacity of the water resource scientist and manager to carry out productive and additional urgent research, program operations, and management work, as well as to facilitate the application of newly developed knowledge to the water resource scientist's and manager's activities. With only $500,000 available for center activities these objectives could not be achieved. Rather, center operations would need to be restricted so as to encompass only a very limited percentage of the total number of persons who would profit from being participants, or customers, in the information system, and severe restrictions would need to be placed on the number of scientific and technical water resources publications and documents taken into the center for processing. Or, as an alternative, the center could be staffed and equipped only to the extent necessary to ensure collection and processing of system inputs, including customers interest profiles, but providing no selective dissemination of information and copy services to system customers until fiscal year 1969 at which time, with adequate funding, full-scale service would be available.

All Federal agencies with significant water-related program activities, and collaborating state water research institutes, have expressed a keen interest in being participants in an effective Government-wide water resources technical information center. In the absence of such a center these agencies would likely need to establish separate individual systems responsive to their urgent and immediate scientific information handling needs. Quite possibly, such individual systems would not be compatible with the planned Government-wide system that is involved in this appropriation request. Hence, the establishment of a single, consolidated water resources scientific information center to effectively serve all Federal interests, at the earliest possible date, would appear to be in the best interest of achieving overall cost savings to the Government.

Much work has already gone into the design of the proposed Governmentwide water resources information system. In fact, the system to be used will represent an extension, with certain modifications as may be appropriate, of a technical information handling system currently in operation by the Bureau of Reclamation but now meeting that bureau's needs only. Hence, with this ongoing system to build upon, it will be possible to rapidly expand system inputs, customers, etc., to meet the needs of other agencies. Only a minimum amount of time will be required for system planning and implementation.

In view of these circumstances, and in order to achieve a fully effective information center operation in 1968, the full amount of funds requested for center operations should be made available.

OFFICE OF THE SECRETARY

SALARIES AND EXPENSES

(House hearings, pt. 2, pp. 20–99; Senate hearings, p. 81)

Appropriation, 1967	$4,998,900
Estimate, 1968	7,570,000
House allowance	6,776,500
Restoration requested	607,500

(P. 28, line 23)

AMENDMENT REQUESTED

Page 28, line 23, strike out "$6,776,500" and insert in lieu thereof "$7,384,000", an increase of $607,500 in the appropriation.

HOUSE REPORT

"The total decrease of $793,500 includes $74,300 for salary and related cost increases in the Office of the Secretary and the Office of the Under Secretary; $65,100 for the Office of Program Analysis; $184,000 for the Office for Equal Opportunity; $49,100 for the Office of the Science Advisor; $8,000 for Interior coordination, Water Resources Council; $75,000 for the Office of Ecology; $105,000 for the Office of the Assistant Secretary for Water Pollution; and $47,000 for the Office of Survey and Review.

In addition, the recommended decrease includes a reduction of $186,000 representing defense funds previously carried in the schedules for Civil Defense and Defense Mobilization Functions, Federal Agencies, Office of Emergency Planning. This item will be considered in the appropriation for the Office of Emergency Planning.

As was noted in the hearings, the Committee is becoming increasingly concerned with the funding practices being followed by the Office of the Secretary. The total appropriations for the Office of the Secretary in the 1967 fiscal year amounted to $4,998,900. Yet in the budget justifications for the 1968 estimate, the total amount available in fiscal year 1967 was shown as $6,795,500. This of course resulted from the transfer of various functions and funds, some of which the Committee is not inclined to question.

However, there seems to be an increasing tendency in the Office of the Secretary to revise organizational structures and realign the application of funds regardless of the pattern set forth in the budget submission. The Committee recognizes that to a certain extent such practices are feasible and practicable when done within reason. Notwithstanding, the Committee wishes to go on record that it will not countenance the continued manipulation of appropriated funds to the extent that has occurred during the past few years."

Justification

The amendment restores $607,500 of the $793,500 reduction made by the House in the Budget estimate for this appropriation. This amount is distributed to activities as follows:

Activity	Appropriation, 1967	Budget estimate, 1968	House allowance, 1968	Restoration requested
1. Departmental direction	$1,026,100	$1,694,100	$1,238,600	$455,500
2. Program direction and coordination	1,520,200	1,880,000	1,589,000	105,000
3. Administrative management	2,125,300	3,656,800	3,609,800	47,000
4. Commissioner of Fish and Wildlife	148,300	150,500	150,500	----------
5. General services	179,000	188,600	188,600	----------
Total	4,998,900	7,570,000	6,776,500	607,500

A breakdown of the restoration by objects of expenditures follows:

11	Personnel compensation	$469,400
12	Personnel benefits	33,100
21	Travel and transportation of persons	37,000
22	Transportation of things	500
23	Rent, communications, and utilities	8,900
24	Printing and reproduction	8,300
25.1	Other services	9,000
25.2	Services of other agencies	24,500
26	Supplies and materials	6,800
31	Equipment	10,000
	Total	607,500

Office of the Secretary

Restoration of $50,300 for the immediate Office of the Secretary is requested. Reflecting the requirements placed upon the Secretary, he continually finds it necessary to make adjustments in his immediate staff. This may involve the employment of a consultant to perform a special assignment; an addition to the staff to assist him in a new assignment; or changes in staff which may result in the employment of an individual at a higher grade. The Secretary must be permitted this flexibility.

The increase requested is required to assure sufficient funds to continue at the current operating level. Unless the additional funds are available, positions in this or other areas must be held vacant, placing a very difficult burden on available staff.

Office of the Under Secretary

An increase of $24,000 is requested for the Office of the Under Secretary. Substantially the same situation exists here as in the immediate Office of the Secretary. Relief is urgently needed.

Office for Equal Opportunity

During the current year the Office for Equal Opportunity is operating under a total budget of $285,000 of which $81,200 is made available as part of the direct appropriation for the Office of the Secretary. The remainder is being provided by reimbursements from the bureaus and offices of the Department. An increase of $184,000 has been requested for the Fiscal Year 1968 in direct funding but this has been eliminated by the House. The reimbursable arrangement is not considered to be a satisfactory method of financing and restoration of the $184,000 is requested.

The Department's workload in equal opportunity continues heavy. Although it is contemplated that bureaus and offices will assume the major responsibility and workload in equal opportunity, rapid developments in the regulatory requirements of the Federal agencies charged with coordinating responsibility have made it necessary to retain major operational responsibilities and program direction in the Office of the Secretary.

The Department administers over 80 programs which are subject to Title VI of the Civil Rights Act of 1964, and which are widely diversified. The accession of the Federal Water Pollution Control Administration to this Department has added major new responsibilities and programs.

Office of Program Analysis

A reduction of $65,100 was made in the funds requested for the Office of Program Analysis. Restoration of this reduction is essential for effective operation of the Department's planning-programming-budgeting system.

The President and the Congress repeatedly have emphasized the need for efficient and effective operation of Federal programs. This can be greatly facilitated by using the most modern management techniques and skills available.

The President's direction for the initiation of a fully coordinated and integrated planning-programming-budgeting system was particularly timely for the Department of the Interior. The urgency and challenge of meeting the major problems associated with a soaring population, constantly improving standards of living, a shrinking share of space and natural resources combined with increased demand per person, the need for the most effective management of both renewable and non-renewable natural resources, and the need to restore and protect the quality of our environment both for present and future generations have focused attention on the vital and expanding role that must be played by the Department of the Interior. This has been recognized by recent enlargement of Interior's responsibilities and authorities in major resource areas such as water, recreation, and the multiple use management of public lands.

Interior programs involve every natural resource. Specific resource assignments are widely dispersed throughout the Federal government. For example, there are over 70 bureaus and offices having direct or indirect involvement in outdoor recreational activities. Within the Department of the Interior there are 12 bureaus having significant recreational involvement. Similarly the management of the Nation's water resources involve over 40 bureaus and offices with 14 Interior units having major responsibilities and involvement. In view of the importance of these and our other resources, planning must be fully coordinated at all levels of the Federal government—bureau, department, President, and the Congress. Federal/State resource management relationships are of constantly increasing importance. Proper consideration of State and local roles in Federal programs is essential.

The PPB system is an important tool that can provide the necessary analysis, data, program evaluation and formulation, and planning concepts that must be made available to the bureau head, the Secretary, the President, and the Congress as a basis for making the hard and essential decisions that must be made. The need and demand for Federal services will continue to increase. Decisions must be made relative to providing for such programs within the dimensions of Federal funds that are or can be made available. Relative priorities must be established and evaluated. Alternatives and related factors must be adequately developed, appraised, and presented to the decision maker.

The Office of Program Analysis has been established in the Department of the Interior to meet this need. It has been in operation for approximately a year and a half. Fourteen of its twenty positions have been provided for by internal adjustments within the Office of the Secretary through consolidation of the major planning and analysis effort into this one central unit. The new system is now operational but not fully staffed. In developing the departmental system, primary emphasis has been given to:

The identification of national needs and goals with greater precision.

The determination of specific objectives and goals and the determination of relative priorities and urgencies.

The development of alternative means of reaching these goals most effectively.

The determination of probable costs and relative effectiveness of both ongoing and proposed programs.

The evaluation of accomplishments for both current program management and as a basis for improved program planning.

The development of fully coordinated long-range plans.

The PPB system does not make decisions but it will provide the decision maker with the best possible data for the making of necessary decisions. The quality of the planning and programming effort is primarily dependent upon the quality of the data and analysis which forms the basis for program plans, determination of alternative courses of action, and other considerations for evaluating program proposals and making program decisions.

In installing the departmental system, first attention was given to the development of a uniform, fully integrated system. This is now fully operational. Next provision was made for both initial and continuing comprehensive review and coordination of departmental programs and evaluation of public needs and benefits. This too now is in operation. Additional skills are needed to round out the system and its related organization to provide for adequate in-depth analysis of existing and proposed programs. Initial staffing concentrated on technical resource oriented professional disciplines and skills such as hydrology, engineering, minerals, forestry, recreation, public administration, etc. In order to complete the essential mix of skills, additional staffing in the areas of economics, statistics, systems analysis, etc. are required. These are the positions involved in the reduction proposed.

The $65,000 reduction would make it impossible to fill 5 analyst positions which are required for operation of an effective system incorporating the proper mix of professional skills which must be applied to the wide variety and complexity of departmental programs. Without these additional skills, the effectiveness of the Department's planning-programming and analysis effort will be seriously impaired as fully adequate professional leadership, direction, analysis, and program evaluation must be provided at the level of the Secretary. The staffing proposed in the Fiscal Year 1968 budget is the minimum for effective operation of the departmental PPB system. It, therefore, is requested that the $65,100 be restored.

Office of the Science Adviser

This request relates to restoration of $49,100 for the Office of the Science Adviser.

The Science Adviser has assumed a growing role in the planning and management of the Department's scientific efforts. He has provided the top leadership in weather modification planning, for resources satellites, for earthquake prediction and other solid earth sciences programs, for marine resource questions and for numerous international scientific activities. These functions have been performed in addition to those arising from the growing requirements in water resources research.

There is need for full time staff on water resources research which cannot be provided by the present staff. This is caused by the rapid increase in the size and diversity of water resources research activities in the Department, the lack of water research specialists on the present staff, and the high volume of work on other scientific affairs expected of the Science Adviser.

The importance of the application of science and engineering to the solution of our water problems is evidenced by the support of the Congress for such activity in many of Interior's Bureaus. The role of the Science Adviser for coordination, increasing communication and prevention of duplication must, as a result, receive high priority in the light of this greatly increased effort. These funds will provide a capability for review and oversight which the Congress would expect for the efficient management of water resources research.

Office of Ecology

The budget included a request for $75,000 for a new Office of Ecology. Restoration of this amount is requested.

The proposal to expand leadership and planning capabilities so that we can learn more about trends in the quality of our environment is very timely. The Department places a high priority on this matter. The reasons for this are several.

1. The system within the federal and national structure to determine potential environmental hazards is poorly organized. There is no one focal point which is charged to think about and furnish the technical capability to determine broad trends in the total environmental complex. Increased efficiencies for purposes of environmental protection can be realized from present programs if improved coordination and leadership are provided.

2. Baseline information in a form useful for comparison purposes is lacking.

3. There are numerous places such as weather modification where it is obvious that problems and misunderstandings will develop from environmental modification which is planned or is already in process. Information on these

from an unbiased source will be helpful for improved decision making and in successful project accomplishment.

We believe this program offers a start on solutions to many problems of national significance. It is not in the nation's best interest to delay further organization for improved ecological research.

Assistant Secretary for Water Pollution Control

Within the past year, the responsibility for water pollution control has been transferred to the Secretary of the Interior while at the same time these responsibilities have increased due to the intensified Federal and State effort to prevent further water pollution and to clean up what pollution remains. The Office of the Assistant Secretary of the Interior for Water Pollution Control was, therefore, created to give this program the urgently needed impetus and policy direction which are required for the Department of the Interior:

(1) To fulfill its responsibility to control water pollution;

(2) To discover economic means to convert saline water to fresh water;

(3) To provide critically necessary coordination with other Federal and State water use and waste management activities;

(4) To provide an adequate supply of fresh water to meet the increasing demands of the United States' expanding population. The reduction of $105,000 in the increase requested for the Assistant Secretary for Water Pollution Control will seriously handicap him in these increasingly important tasks.

The amount requested would permit attainment of an operating level commensurate with the other Assistant Secretaries.

Interior coordination—Water Resources Council

An increase of $23,000 was requested for providing a staff assistant to the Secretary together with a secretary and other expenses for the purpose of assisting the Secretary in coordinating the work of the Water Resources Council as it relates to the programs of the Department of the Interior. The activities of the Council as they develop will require a geat deal of participation by the various bureaus. This participation must be coordinated within the Department and the Secretary must be kept advised regarding the plans and the effect on Department programs, as well as providing guidance to the bureaus in this cooperative program. This is particularly true since the Secretary is the Chairman of the Council.

The increase of $15,000 authorized by the House would not be sufficient to cover the full salary and benefits of the staff assistant and restoration of $8,000 is requested to provide full coverage of his salary and expenses as well as that of a secretary.

Office of Survey and Review

The increase of $94,000 in the Budget request for the Audit Operations activity in the Office of Survey and Review represented a bare minimum to cope with workload developments traceable directly to expansion in key Department programs. The fund increase, if granted, will permit only a very reasonable amount of internal audit activity related to the Federal Water Pollution Control Administration. No funds for this purpose were available when the Audit Operations consolidation took place. In a relatively new and growing agency like Federal Water Pollution Control Administration some internal auditing is essential to good management. With respect to the same agency, certain grant auditing is exceeding original estimates with program volume substantially above the level at which the agency operated in Health, Education and Welfare.

In the interest of staffing economy and efficiency, the Office of Survey and Review makes selective use of non-Interior agency staffs in contract audit. Of the increased fund request for 1968 ($94,000) $20,000 is to finance (1) additional audit assistance by the Defense Contract Audit Agency in relation to Federal Water Pollution Control Administration and other contracts and (2) audit services by Housing Assistance Administration for Indian Public Housing Projects which are expected to increase 100 percent over fiscal year 1967.

The House Committee action, which reduced the requested increase by half, will seriously impair the ability of Survey and Review to render vital audit services to Federal Water Pollution Control Administration; will make it impossible to arrange audits of certain Interior contracts involving substantial values; and will impose new structures on a function already operating under a self-imposed economy factor of 25 percent and already handling a workload far above normal ratios to staffing and funds.

GENERAL PROVISIONS, DEPARTMENT OF THE INTERIOR

SEC. 104

(Limitation on funds for hiring of consultants)

(House hearings, pt. 2, pp. 77–78; Senate hearings, p. 113)

(P. 30, line 16)

AMENDMENT REQUESTED

Page 30, line 16 after the word "Secretary" strike out the following: ", in total amount not to exceed $250,000".

HOUSE REPORT

No statement is made in the House Report concerning this provision.

JUSTIFICATION

It is recommended that the language limiting the use of appropriations made to the Department of the Interior in this Bill and in the Public Works Appropriation Bill for consultant services to $250,000 be eliminated from the Bill.

The Department has established procedures which limit the employment of consultants to those cases which are absolutely necessary.

However, with the transfer in 1967 of the Water Pollution Control Administration to the Department of the Interior, the hire of consulants for that organization will fall within the limitation in this Bill. We have been unable to estimate with any degree of accuracy to what extent the limitation on the use of appropriated funds for the hire of consutlants should be increased because of the transfer of that organization. Another difficulty in trying to gage the amount of limitation that will be needed in 1968 is the fact that the water pollution control programs are expanding because of the increased responsibilities resulting from legislation enacted during the last session of Congress. Furthermore, we feel that some margin should exist for taking care of unforeseen problems which may arise in connection with the programs of the other bureaus of the Department.

The most economic and advantageous means of obtaining needed talent to help solve the many problems which confront the Department is to hire consultants on a relatively short-term basis. The alternative is to hire more employees. With the inclusion in this section of the words "*when authorized by the Secretary*", the employment of consultants is under the administration of the Office of the Secretary, thereby assuring that a very tight control is exercised on the use of consultant services. We shall continue to hold expenditures for this purpose to as low an amount as practicable.

DEPARTMENT OF AGRICULTURE,
Washington, D.C., April 28, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: Enclosed are statements in support of the amendments which we request be made in the Forest Service portion of the Department of the Interior and Related Agencies Appropriation Bill, 1968, as passed by the House.

These proposed amendments would restore the budget estimates, with the exception noted below. The House reductions are particularly serious since the budget estimates provided only the minimum needed to do an effective job of protecting and managing the National Forest resources and conducting our Forestry Research Programs.

The House Bill, page 33, line 1, under heading "Forest Roads and Trails (Liquidation of Contract Authorization)" provides $110,000,000 for construction and maintenance of forest development roads and trails. The amount requested was $110,500,000. We are not requesting restoration of the $500,000 even though the need for construction and maintenance of forest development roads and trails continues to increase with expanding programs. The Forest Service now estimates, based on later information, that increased receipts from Forest Service activities, (10% of which are appropriated for roads and trails) will likely offset this decrease.

Representatives of the Department will be glad to furnish any additional information you may need, or to appear before your Committee as necessary to further discuss the 1968 budget estimates of the Forest Service.

Sincerely yours,

John A. Schnittker,
Under Secretary.

Forest Service

Forest Projection and Utilization

FOREST LAND MANAGEMENT

(House hearings, pt. 2, p. 1074; Senate hearings, p. 1639)

1967 appropriation	$176,150,000
1967 appropriation (including pending pay cost supplemental)	178,707,000
1968 budget estimate	186,238,000
House bill	185,063,000
Restoration requested	1,175,000

AMENDMENT REQUESTED

Page 31, line 21, strike out "$185,063,000" and insert in lieu thereof "$186,238,000", an increase of $1,175,000 to restore the budget estimate.

HOUSE REPORT (P. 34)

"Total reductions of $1,350,000 below the budget estimate include: $750,000 for the upgrading of waste treatment systems at 25 recreation sites and the development of recreation facilities; $100,000 for development and operation of a mechanical gravel cleaner; and $500,000 for management and development needs relating from water development projects proposed and constructed by other agencies.

"The amount recommended by the Committee also includes an increase of $175,000 to complete the water system at Blanchard Springs Caverns, Arkansas.

"If the anticipated regular harvest program fails to materialize, the Forest Service indicates that savings can be shifted to additional sales of salvage and thinning material to the extent that such can be marketed. Should this occur, the Committee will consider reprogramming available funds from within the total timber sales item for additional thinning and salvage work."

JUSTIFICATION OF THE AMENDMENT BY THE DEPARTMENT

The amendment proposed by the Department would eliminate the $175,000 increase added by the House and restore the reductions totaling $1,350,000 in the House Bill. These amounts are distributed to subactivities as follows:

Forest protection and utilization

	Fiscal year 1967		1968 budget estimates	1968 House bill	Restoration or amendment requested
	Appropriations	Appropriations (including pending pay cost supplemental)			
Forest land management:					
National forest protection and management:					
Timber resource management:					
(*a*) Sales administration and management	$33,935,000	$34,575,000	$35,900,000	$35,900,000	
(*b*) Reforestation and stand improvement	17,430,000	17,640,000	17,640,000	17,640,000	
Recreation, public use	30,770,000	31,248,000	34,638,000	34,063,000	+$575,000 (1)
Wildlife habitat management	3,897,000	3,971,000	4,301,000	4,201,000	+100,000 (2)
Range resource management:					
(*a*) Management	5,404,000	5,527,000	5,682,000	5,682,000	
(*b*) Revegetation	2,820,000	2,854,000	2,854,000	2,854,000	
(*c*) Improvements	3,395,000	3,442,000	3,442,000	3,442,000	
Soil and water management	6,261,000	6,361,000	6,361,000	6,361,000	
Mineral claims, leases, and special uses	4,004,000	4,097,000	4,097,000	4,097,000	
Land classification, adjustment, and surveys	5,605,000	5,725,000	6,349,000	6,349,000	
Forest fire protection	25,120,000	25,577,000	26,172,000	26,172,000	
Structural improvement for fire and general purposes (construction and maintenance)	10,909,000	11,040,000	11,040,000	11,040,000	
Payments to employees' compensation fund	733,000	733,000	759,000	759,000	
Subtotal	150,283,000	152,790,000	159,235,000	158,560,000	+675,000
Amounts advanced from cooperative range improvements	−700,000	−700,000	−700,000	−700,000	
Subtotal, national forest protection and management	149,583,000	152,090,000	158,535,000	157,860,000	+675,000
Water resource development related activities	6,716,000	6,766,000	8,660,000	8,160,000	+500,000 (3)
Fighting forest fires	5,000,000	5,000,000	5,000,000	5,000,000	
Insect and disease control:					
White pine blister rust control	3,695,000	3,695,000	2,270,800	2,270,800	
Other pest control	8,676,000	8,676,000	9,292,200	9,292,200	
Subtotal, insect and disease control	12,371,000	12,371,000	11,563,000	11,563,000	
Acquisition of lands, Weeks Act	2,480,000	2,480,000	2,480,000	2,480,000	
Total, forest land management	176,150,000	178,707,000	[1] 186,238,000	[1] 185,063,000	+1,175,000

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[1] Excludes $319,000 for space rental which was transferred to the General Services Administration in 1967.

(1) *The Department recommends that the reduction of $750,000 for recreation facilities be restored and the House increase of $175,000 for improvements at Blanchard Springs Caverns, Arkansas be eliminated.*—A reduction of $750,000 in the increase of $1,951,000 for the upgrading of waste treatment systems proposed in the 1968 budget would curtail critically needed facilities. It would prevent the Forest Service from taking effective measures to abate water pollution from these facilities, pursuant to administration policy in Executive Order 11258 (November 17, 1965). Facilities and sites are now receiving human use beyond designed capacity. To delay the installation of these critically needed facilities another year would result in added damage to the vegetation and soils and create more serious pollution problems. To restore this damage to the basic resources would increase costs and in some cases a delay would result in irreparable loss. The $750,000 reduction would be made as follows:

Project and State:	*Reduction*
Gull Lake Campground, Calif	$144, 700
Wright Lake, Fla	13, 800
Big Scrub, Fla	27, 600
Mill Dam, Fla	13, 800
Glenn Ellis, N.H	20, 000
South Pond, N.H	35, 000
Russel Pond, N.H	30, 000
Lake Dorr, Fla	33, 100
Fore Lake, Fla	33, 200
Garden's Bluff, Tenn	30, 400
Shook Branch, Tenn	18, 300
Parksville Lake, Tenn	32, 200
Choctaw Lake, Miss	90, 000
Campton Pond, N.H	40, 000
Diamond Lake, Oreg	187, 900
Total	750, 000

The House increase of $175,000 to complete the water system at Blanchard Springs Caverns, Arkansas should be eliminated in view of high priority needs for other projects as reflected in the budget estimates.

(2) *The Department recommends restoration of the $100,000 for wildlife habitat management.*—A reduction of $100,000 in the budget increase of $155,000 for development and operation of a mechanical gravel cleaner will substantially reduce test operations, evaluation of equipment, and adaption to inland tributary streams of equipment designed to desilt or remove the silt and other fine material from salmon spawning beds. This equipment, developed during the past two years under contract, is adapted for operation in the larger coastal streams of Alaska and the Pacific Coast States. A modified design is needed so that the machine could effectively operate in smaller headwater streams. Sedimentation of spawning beds, as a result of flood and erosion due to man's activities, reduces salmon reproduction potential unless these gravels can be cleaned and restored.

(3) *The Department recommends restoration of the reduction of $500,000 for water resource development related activities.*—The reduction of $500,000 in the budget increase of $1,894,000 for the planned water resource development related activities item would curtail critically needed public use, management, and access facilities at authorized water development projects of other agencies. The shortage of these facilities will result in our inability to properly manage public use at these water bodies with the resultant threat to project investment, water quality and public health through human contamination. A deterioration of natural beauty because of unmanaged use will result in greater long term costs for rehabilitation. Public use, management, and access facilities are urgently needed on National Forest lands at many water development project locations. This work is essential in making the areas suitable and safe for public use and to prevent water pollution.

The Forest Service has less than the usual amount of flexibility in the programming of funds for public use, management and access development. This is because construction of such public facilities called for in the project authorization is in direct response to programs of the construction agencies, Corps of Engineers, Bureau of Reclamation and others—the timing of which is beyond Forest Service control. The reduction would be made as follows:

Project and State:	*Reduction*
Boundary Reservoir, Mont	$30,000
Lyman, Wyo	50,000
Courtright, Calif	47,000
Wishon, Calif	43,000
Cle-Elem Kachees, Wash	80,000
Laurel River, Ky	50,000
Allegheny Reservair, Pa	200,000
Total	500,000

FOREST SERVICE

FOREST PROTECTION AND UTILIZATION

FOREST RESEARCH

(House hearings pt. 2, p. 1140; Senate hearings, p. 1639)

1967 appropriation	$37,821,000
1967 appropriation (including pending pay cost supplemental)	38,567,000
1968 budget estimate	40,032,000
House bill	40,180,000

AMENDMENT REQUESTED

Page 32, line 11, strike out "$40,180,000" and in lieu thereof insert "$40,032,000", decrease of $148,000 to restore the budget estimate.

HOUSE REPORT (P. 35)

"Total decreases of $1,482,000 below the budget estimate include $700,000 for the construction of a forestry sciences laboratory at Albuquerque, New Mexico; $200,000 for forest genetics research; $182,000 for research on ecology, protection, and management of areas, and measurement of recreation use and trends; $100,000 for research on electronic fire detection systems; $100,000 for the expansion and acceleration of research on wood fiber products and related chemical research; $100,000 for research on aerial logging systems; and $100,000 for research on the cost and benefits of forestry investments and the effectiveness of forestry programs for small forest owners.

"The increases recommended by the Committee over the budget estimate include: $950,000 for the construction of a forest insect and disease laboratory at Delaware, Ohio; $350,000 for the construction of a range and wildlife habitat laboratory at LaGrande, Oregon; $290,000 for the construction of a forest seed laboratory at State College, Mississippi; and $40,000 to provide additional staffing at the wildlife habitat research laboratory in Columbia, Missouri."

JUSTIFICATION OF THE AMENDMENT BY THE DEPARTMENT

The amendment proposed by the Department would eliminate the increase of $1,630,000 made by the House Bill. Also, this amendment would restore the $1,482,000 reduction in the House Bill. The net adjustment totaling $148,000 is distributed to subactivities as follows:

	Fiscal year 1967				
	Appropriations	Appropriations (including pending pay cost supplemental)	1968 budget estimates	1968 House bill	Restoration or amendment requested
FOREST RESEARCH					
Forest and range management research:					
Timber management research	$8,240,000	$8,417,000	$8,937,000	$8,737,000	+$200,000 (1)
Watershed management research	3,403,000	3,477,000	3,650,000	3,650,000	
Range management research	1,267,000	1,294,000	1,294,000	1,294,000	
Wildlife habitat research	893,000	912,000	912,000	[1] 952,000	−40,000 (2)
Forest recreation research	469,000	479,000	811,000	629,000	+182,000 (3)
Subtotal, forest and range management research	14,272,000	14,579,000	15,604,000	15,262,000	342,000
Forest protection research:					
Forest fire research	2,880,000	2,942,000	3,112,000	3,012,000	+100,000 (4)
Forest insect research	3,913,000	3,998,000	4,103,000	4,103,000	
Forest disease research	2,126,000	2,171,000	2,358,000	2,358,000	
Subtotal, forest protection research	8,919,000	9,111,000	9,573,000	9,473,000	+100,000
Forest products and engineering research:					
Forest products utilization research	6,355,000	6,493,000	6,863,000	6,763,000	+100,000 (5)
Forest engineering research	571,000	583,000	798,000	698,000	+100,000 (6)
Subtotal, forest products and engineering research	6,926,000	7,076,000	7,661,000	7,461,000	+200,000
Forest resource economics research:					
Forest survey	2,055,000	2,100,000	2,203,000	2,203,000	
Forest products marketing research	1,591,000	1,625,000	1,625,000	1,625,000	
Forest economics research	773,000	791,000	1,088,000	988,000	+100,000 (7)
Subtotal, forest resource economics research	4,419,000	4,516,000	4,916,000	4,816,000	+100,000
Forest research construction	3,285,000	3,285,000	2,278,000	[1] 3,168,000	−890,000 (8)
Total, forest research	37,821,000	38,567,000	[2] 40,032,000	[2] 40,180,000	−148,000

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[1] The House recommended an increase of $40,000 over the 1968 budget for additional staffing for wildlife habitat research in Columbia, Mo., under the subactivity "Forest research construction". This increase does not involve construction and, for clarity, is included under the subactivity "Wildlife habitat research in this tabulation.

[2] Excludes $108,000 for space rental which was transferred to the General Services Administration in 1967.

(1) *The Department recommends restoration of the reduction of $200,000 made by the House for forest genetics research.*—The increased forestry research program contained in the President's fiscal year 1968 budget was developed after carefully considering the alternatives available for meeting the Nation's need for timber in the year 2000 and beyond. None of the alternatives offered more promise than a stepped-up research program of forest genetics and tree improvement to develop fast-growing, pest resistant trees. This cut in the $560,000 increase for genetics research in the budget would prolong the time needed to develop superior forest trees.

Forest genetics research primarily concerned with Douglas fir in Oregon and Washington, Northern conifers in Wisconsin, and the Southern pines in Mississippi, Georgia, and Florida would be seriously curtailed.

These are the important conifers that must supply the vast bulk of wood to meet the Nation's needs for pulp, paper, and construction lumber in the decades ahead.

(2) *The Department recommends elimination of the $40,000 increase added by the House for wildlife habitat research.*—Page 35 of the report stated that $40,000 was being made available to provide additional staffing at a "wildlife habitat research laboratory" in Columbia, Missouri. The Forest Service does not now conduct wildlife habitat research at Columbia. The need for initiating wildlife habitat research there was considered during the formulation of the budget. This research program can be deferred until higher priority needs are met.

(3) *The Department recommends restoration of the reduction of $182,000 made by the House for Forest Recreation Research.*—The state of the art of measuring recreation use—"How many people are where, doing what?"—is not good, and the manager's ability to estimate accurate trends in land use is even worse. As a consequence, managers are unable to measure amount and types of recreation use and to predict future use for which they must provide. Research has developed approaches to these and related user problems. If the House cut in the $332,000 increase proposed in the budget is sustained, research on recreation use and trends in North Carolina and Washington cannot be pursued effectively. As a result, managers in some situations will not have adequate information on which to plan multi-million dollar investments. The maintenance and management of facilities will suffer.

Similarly, without a considerably strengthened program of research in Montana, California, and Minnesota dealing with the ecology, management, and protection of wilderness areas, costly mistakes will be made. The 1964 Wilderness Act demands that wilderness areas be maintained as they exist today or, in some cases, restored as they once were. Increasing numbers of visitors have generated new problems. Even in the wilderness, vegetation is trampled, soils are compacted and eroded, and water supplies are polluted. Man-caused fires and disease and insect pests are changing scenic vistas and desired ecological relationships. Wilderness use is increasing faster than any other recreation use, and wilderness values have no price. If needed research is not done now, managers of recreation areas, particularly wildernesses, may make mistakes that will be costly or impossible to repair.

(4) *The Department recommends restoration of the reduction of $100,000 made by the House for electronic fire detection research.*—This research, headquartered at the Northern Forest Fire Laboratory, Missoula, Montana, is developing a new and improved forest fire detection system urgently needed by all forest protection agencies throughout the United States.

Work performed to date has been a cooperative effort of the Forest Service and the Department of Defense. Research results show that an airborne infrared scanner can quickly and accurately locate tiny heat sources in a variety of forest types. This discovery provides the basis for a heat sensing detection system. The system can locate fires at night or in the daytime under conditions of dense smoke. Presently used visual systems fail under these conditions. The heat sensing system can perform the fire detection job more efficiently. Thus, it can be a major factor in reducing costly forest fires resulting from delayed, inaccurate or incomplete fire detection information.

Defense aspects of this research will be completed in 1967. However, these new techniques can be made useful to forest protection organizations. Increased research is needed to develop and test a complete electronic system designed to meet the specific requirements of forest fire detection. This essential research would be halted by the proposed reduction in funds because Department of Defense funds would no longer be available. A highly efficient team of scientists and technicians, available to perform the research, could not be maintained. The reduction would result in serious delay of needed improvements in forest fire control which are heavily dependent upon an efficient fire detection system.

(5) *The Department recommends restoration of the reduction of $100,000 made by the House for the expansion and acceleration of research on wood fiber products and related chemical research.*—Current forest products utilization research on wood fiber products and wood chemistry is grossly inadequate in terms of potential economic and consumer benefits. The accelerated and expanded program proposed in the 1968 budget is now possible because of the completion of new laboratories for wood fiber and fiber products research at the Forest Products Laboratory, Madison Wisconsin.

The proposed program reduction would delay accomplishment and benefits from research on promising new pulping processes. Cost/benefit ratios from such research are highly favorable, as they involve process improvement for high pulp yield with resulting lesser manufacturing costs or reduction of the cost of a product. An important benefit from intensified research on pulping and fiber and chemical processes is the reduction of water and air pollution. Success in this work would eliminate harmful impacts of pulpmills on the environment and would multiply the number of feasible locations for pulpmills.

(6) *The Department recommends restoration of the reduction of $100,000 made by the House for research on aerial logging systems.*—Without increased funds aerial logging systems research conducted in Washington and Oregon would be stagnated for all practicable purposes. Very limited funding to date permitted researchers to pinpoint the critical problems in these systems and to formulate approaches for their solution. The solutions will require increased funding. The budget cuts proposed by the House would delay solutions to the critical problems of harvesting timber from inaccessible lands and would result in a loss of many millions of dollars to timberland owners, to industry, to communities, and to the Nation.

Development of successful aerial logging systems will permit the capture of 500 million board feet of annual allowable cut lost on timberlands not now loggable with conventional systems in the Douglas-fir region of the West. This additional harvest is urgently needed since the wood industries of the Pacific Northwest are currently using the full allowable cut from accessible public and private lands. An annual increase of 500 million board feet would mean about $5 million annually to the owners of these timberlands with $3 million going to the Federal Treasury from public timber sales. Over $800,000 will be returned to the counties as their share of stumpage receipts.

In Alaska, an additional 440 million board feet of annual allowable cut on National Forest lands could be captured—adding over $1 million each year to stumpage receipts.

(7) *The Department recommends restoration of the reduction of $100,000 made by the House for research on the costs and benefits of forestry investments and on the effectiveness of forestry programs for small forest owners.*—A reduction of the increased funds budgeted for this research would curtail studies of forest investment opportunities in important timber growing regions such as the South and the Pacific Coast region. Work would be curtailed in Louisiana, Oregon, and California especially. Studies of the costs and benefits of alternative forestry measures are essential for more efficient program planning and budgeting analyses of forest conservation programs. A reduced level of effort would not provide the management guides that are urgently needed by both public and private forestry agencies. Increased knowledge and improved guidelines are necessary for improving the efficiency of management of the Nation's timber resources.

(8) *The Department recommends elimination of the net increase of $930,000 for research construction.*—The House Bill provides for a decrease of $700,000 for the construction of the Forestry Sciences Laboratory at Albuquerque, New Mexico, and it provides an increase for construction at three other locations:

Delaware, Ohio	$950,000
LaGrande, Oreg	350,000
State College, Miss	290,000

The Department recommends that both the $1,590,000 increase by the House for constructing three laboratories be eliminated and that the $700,000 decrease by the House be restored.—The construction of the laboratory at Albuquerque, New Mexico, planned with funds appropriated in fiscal year 1965, is of high priority because it will provide facilities for insect, disease, and watershed research important to New Mexico, Arizona, and adjacent States. The construction of the other three laboratories proposed by the House is also important but of lower priority than the Albuquerque project. They were planned with funds appropriated in fiscal years 1966 and 1967.

THE SECRETARY OF HEALTH, EDUCATION, AND WELFARE,
Washington.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: On Thursday, April 27, the House of Representatives completed action on H.R. 9029, the bill making appropriations for the Department of the Interior and related agencies for the fiscal year ending June 30, 1968. The Department of Health, Education, and Welfare receives appropriations in this bill for the arts and humanities educational program of the Office of Education and for the Public Health Service's Indian health program.

For arts and humanities educational activities, the House recommended an appropriation of $1,000,000, the full amount of the President's budget request.

For the account, "Indian health activities," the House included $82,000,000 in the bill, a reduction of $133,000 from the President's request. Although we are not appealing for restoration of this reduction, we would prefer to absorb it in a different budget activity than recommended by the House. The report of the House Committee on Appropriations indicated that the entire reduction should be made in the amount requested for headquarters administrative staff of the Division of Indian Health. This would not only completely eliminate the nine new positions requested for this activity for fiscal year 1968, but it would also reduce available man-years below the level of the current fiscal year. In view of the expansion of the Indian health program over the past several years, this small increase in headquarters staff is vital if we are to maintain and improve the quality of our program management. Therefore, instead of reducing our request for administrative support, I would propose reducing the amount requested for the purchase of equipment by $133,000, the amount of the House reduction in this appropriation account. This action would entail a decrease from $2,276,000 to $2,143,000 in funds budgeted for equipment and would require us to postpone a small portion of our planned equipment replacement program until fiscal year 1969.

Within the Indian health construction account, the House recommended an appropriation of $14,733,000, a net reduction of $7,478,000 from the President's budget request of $22,211,000. The House made the following reductions: (1) $6,542,000 for construction of a 125-bed replacement hospital and 121 units of personnel quarters at Tuba City, Arizona; and (2) an unallocated reduction of $1,000,000 based on the assumption that such an amount could not be used in 1968 due to slippage in the schedule for constructing Indian health facilities. The House also added $64,000 for an alteration project which would consolidate shop space and provide a new incinerator for the Indian hospital at Talihina, Oklahoma.

The 1968 budget plan for the Tuba City, Arizona project provided for an expanded replacement hospital and personnel quarters to both replace existing substandard housing and provide housing for the additional staff required to operate the new hospital. Our original plans called for the award of a contract for construction of this hospital toward the end of fiscal year 1968. There has since been some delay in awarding the contract for architectural planning so that it is now unlikely that we could be in a position to award a construction contract during the next fiscal year. Consequently, we are not appealing for the restoration of construction funds for the hospital or for the quarters needed to house the additional personnel to staff the new facility. We do request, however, that the Senate restore $1,100,000 to permit us to construct 55 units of personnel quarters which would replace 43 temporary units of World War II vintage now in use and provide 12 additional units to accommodate staff planned to be assigned to the existing hospital during 1968. The adequacy of personnel quarters is a critical problem at Tuba City and we want to make every effort to at least overcome existing deficiences and provide for newly authorized staff in 1968.

As a result of the unallocated reduction of $1,000,000 recommended by the House we have re-examined our entire Indian health construction program to see what slippage in the award of planning or construction contracts might occur outside of the Tuba City project. As a result of this review we have determined that all pending projects as well as those other projects contained in the 1968 appropriation request can reasonably be expected to be under contract before the end of fiscal year 1968. We, therefore, request that the $1,000,000 unallocated reduction be restored by the Senate. In the enclosed tabular material detailing the effect of the House action we have identified a series of projects which would have to be deferred if these funds cannot be restored. As indicated in this material, work would have to be postponed on 5 health centers, 2 health stations, and 5 alteration projects. I want to emphasize that these projects would be deferred until fiscal 1969 only because we would take specific action to postpone them and not because it is impossible to proceed with construction in 1968.

In addition to the tabular material on the effect of House action, we have also enclosed language which would amend the bill as enacted by the House to reflect our recommendations as set forth above. We shall be happy to supply any additional information which the Committee might need.

Sincerely,

JOHN W. GARDNER, *Secretary.*

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

CONSTRUCTION OF INDIAN HEALTH FACILITIES

On page 37, line 17, delete "$14,733,000" and insert in lieu thereof "$16,833,000."

INDIAN HEALTH ACTIVITIES

EFFECT OF HOUSE ACTION

The House allowed $82,000,000, an increase of $5,676,000 over the amount anticipated to be available in 1967 and a decrease of $133,000 from the 1968 budget request.

The House Committee on Appropriations recommended that the decrease of $133,000 be absorbed in the Administration Activity. The House action would eliminate 9 new positions requested for this activity as well as make it necessary to reduce the average employment in previously authorized positions below the current level.

Resources required to provide administrative direction have not been commensurate with the over-all growth of the program both in volume and complexity as evidenced by the fact that there has been no increase in staff for the Administration Activity in the last ten years. Accordingly, it is requested that the reduction of $133,000 be absorbed in the equipment replacement program. As a result, a small quantity of equipment planned to be replaced in 1968 will not be replaced until 1969.

Obligations by activity

Activity	1967 amount available		1968 estimate		1968 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Hospital health service	4,647	$43,900,000	4,829	$46,770,000	4,829	$46,770,000
Contract medical care	20	14,106,000	20	13,906,000	20	13,906,000
Field health services	1,446	15,631,000	1,719	18,951,000	1,719	18,951,000
Special assistance to the Menominee Indian people		800,000		350,000		350,000
Administration	119	1,887,000	128	2,156,000	119	2,023,000
Total	6,232	76,324,000	6,696	82,133,000	6,687	82,000,000

Obligations by object

	1967 amount available	1968 estimate	1968 House allowance
Total number of permanent positions	6,232	6,696	6,687
Full-time equivalent of other positions	85	85	85
Average number of all employees	5,796	6,266	6,254
11 Total personnel compensation	$42,298,000	$46,522,000	$46,399,000
12 Personnel benefits	3,909,000	4,393,000	4,383,000
21 Travel and transportation of persons	2,338,000	2,657,000	2,657,000
22 Transportation of things	972,000	1,147,000	1,147,000
23 Rent, communications, and utilities	2,184,000	2,283,000	2,283,000
24 Printing and reproduction	167,000	186,000	186,000
25 Other services	17,452,000	17,135,000	17,135,000
26 Supplies and materials	5,831,000	6,024,000	6,024,000
31 Equipment	1,663,000	2,276,000	2,276,000
41 Grants, subsidies, and contributions	350,000	350,000	350,000
Subtotal	77,164,000	82,973,000	82,840,000
Deduct quarters and subsistence charges	840,000	840,000	840,000
Total obligations	76,324,000	82,133,000	82,000,000

Summary of changes

Enacted appropriation, 1967	$73,671,000
Transferred from "Economic Opportunity Program" Office of Economic Opportunity (80 Stat. 1063)	800,000
Transferred to "Operating Expenses, Public Buildings Service" (79 Stat. 531) (80 Stat. 674)	−12,000
Proposed supplemental to cover P.L. 89–504 pay act increase	1,190,000
Proposed supplemental to cover P.L. 89–501 pay act increase	177,000
Proposed supplemental to cover wage board increases	498,000
Total amount available 1967	76,324,000
Appropriation estimate for 1968	82,133,000
Net change requested	5,809,000

	1968 estimate		1968 House allowance	
	Positions	Amount	Positions	Amount
A. Mandatory items:				
Increases:				
1. Statutory salary (within grade) increases		$841,000		$841,000
2. Annualization of 1967 wage board increases		121,000		121,000
3. Social security rate increase		17,000		17,000
4. Price increases for contract medical care hospitalization		775,000		775,000
Subtotal, mandatory items		1,754,000		1,754,000
B. Program increases and decreases:				
1. Hospital health services:				
Increases:				
To improve inpatient and outpatient employee-patient ratio	132	967,000	132	967,000
To initiate an operations research program	19	240,000	19	240,000
To permit direct operations of medical facilities on the Pribilof Islands	8	117,000	8	117,000
To continue the Alaska pediatric residency training program	4	65,000	4	65,000
To permit a pediatric residency training program at the Phoenix Hospital	13	112,000	13	112,000
To permit a supervisory food service training program	2	92,000	2	92,000
To initiate a pharmacy residency program at the Gallup Hospital	4	29,000	4	29,000
To expand the commissioned officer student training extern program (COSTEP)		25,000		25,000
For maintenance and repair		200,000		200,000
For equipment		310,000		310,000
Total, hospital health program increase	182	2,157,000	182	2,157,000
2. Contract medical care: Decrease from anticipated effect of medicare (title XIX) on the program		−980,000		−980,000
3. Field health services: Increase for the preventive health activities of sanitation, dental, public health nursing, health education, and field medical services	273	3,098,000	273	3,098,000
4. Special assistance to the Menominee Indian people: Decrease due to nonrecurring construction program		−450,000		−450,000
5. Administration:				
Increases:				
For administrative and program management	9	107,000		0
For Office of the Bureau Director management fund		123,000		123,000
Decrease: Delay in filling vacancies		0		−26,000
Net program increase, administration	9	230,000		97,000
Net program increase	464	4,055,000	455	3,922,000
Total increases	464	5,809,000	455	5,676,000

CONSTRUCTION OF INDIAN HEALTH FACILITIES

EFFECT OF HOUSE ACTION

The House allowed $14,733,000, an increase of $244,000 over the 1967 appropriation and a decrease of $7,478,000 from the budget estimate of $22,211,000.

The House allowance excluded $6,542,000 requested for construction a 125-bed replacement hospital and 121 units of personnel quarters at Tuba City, Arizona. Some delay has been experienced in awarding a contract for architectural planning for the new hospital, making it unlikely that a construction contract could be awarded in fiscal year 1968. Sixty-six units of the personnel quarters planned for Tuba City are directly related to the new hospital facility which will have a significantly larger capacity than the existing facility. However, 55 of the proposed units are needed to replace 43 substandard temporary units dating from World War II and provide 12 units for staff increases planned for 1968. It is requested that $1,100,000 be restored so that work can proceed on these 55 units in 1968.

The House made an unallocated reduction of $1,000,000 anticipating that there would be at least that much slippage in the total Indian health construction program. A review of currently authorized and requested projects indicates that all projects can reasonably be expected to be under contract within fiscal year 1968. Consequently, it is requested that the unallocated reduction of $1,000,000 be restored. Should these funds not be restored, specific action would be taken to postpone work on the following projects: health centers at Stewart, Nevada; Chilocco, Oklahoma; and Teec Nos Pos, Nazlini and Oraibi, Arizona; health stations at Red Water, Mississippi and Rock Point, Arizona; and alteration projects at Sells, Arizona; Crownpoint, New Mexico; Cass Lake, Minnesota; Winterhaven, California; and Kotzebue, Alaska.

The House also added $64,000 for an alteration project which would consolidate shop space and provide a new incinerator for the Indian hospital at Talihina, Oklahoma.

Amounts available for obligation

Description	1967, appropriation	1968, budget estimate	1968, House allowance
Appropriation or estimate	$14,489,000	$22,211,000	$14,733,000
Unobligated balance brought forward	9,212,522	1,303,100	1,303,100
Unobligated balance carried forward	−1,303,100	−989,100	−1,004,100
Total, obligations	22,398,422	22,525,000	15,032,000

Obligations by objects

		1967, estimate	1968, estimate	1968, House allowance
11	Personnel compensation	$2,196,000	$3,116,000	$3,016,000
12	Personnel benefits	108,000	148,000	140,000
21	Travel and transportation of persons	100,000	149,000	140,000
22	Transportation of things	254,000	417,000	350,000
23	Rent, communications, and utilities	36,000	49,000	40,000
24	Printing and reproduction	18,000	19,000	15,000
25	Other services	3,119,000	2,570,000	2,500,000
26	Supplies and materials	153,000	180,000	120,000
31	Equipment	148,000	328,000	320,000
32	Lands and structures	16,266,422	15,299,000	8,141,000
41	Grants, subsidies, and contributions	----------------	250,000	250,000
	Total, obligations	22,398,422	22,525,000	15,032,000

Obligations by activities

Description	1967 estimate		1968 estimate		1968 House allowance	
	Positions	Amount	Positions	Amount	Positions	Amount
Hospitals and clinics	--------	$9, 334, 377	--------	$6, 777, 400	--------	$2, 138, 900
Personnel quarters	--------	4, 208, 666	--------	3, 886, 700	--------	1, 574, 700
Alterations	--------	2, 763, 520	--------	1, 194, 900	--------	652, 400
Community facilities (Public Law 85-151)	--------	--------	--------	250, 000	--------	250, 000
Construction of Indian sanitation facilities	--------	6, 091, 859	--------	10, 416, 000	--------	10, 416, 000
Total obligations	--------	22, 398, 422	--------	22, 525, 000	--------	15, 032, 000

New obligational authority by activity

Activity	1967	1968 budget request	1968 House allowance
Hospitals and clinics	$2, 392, 000	$6, 853, 000	$1, 900, 500
Personnel quarters	3, 800, 000	3, 734, 000	1, 422, 000
Alterations	2, 561, 000	910, 000	696, 500
Community facilities (Public Law 85-151)	--------	250, 000	250, 000
Construction of Indian sanitation facilities	5, 736, 000	10, 464, 000	10, 464, 000
Appropriation request	14, 489, 000	22, 211, 000	14, 733, 000

Summary of changes

1967 actual appropriation	$14, 489, 000
1968 appropriation request	22, 211, 000
Net change requested	+7, 722, 000

Increases	1968 budget request	1968 House allowance
Hospitals and clinics:		
Hospitals:		
Tuba City, Ariz	$4,230,000	0
Mescalero, N. Mex	50,000	$50,000
Chinle, Ariz	288,000	288,000
Subtotal, hospitals	4,568,000	338,000
Health centers and school health centers:		
Many Farms, Ariz	372,000	372,000
Chilocco, Okla	270,000	0
Riverside, Calif	434,000	434,000
White Shield, N. Dak	236,000	263,000
Teec Nos Pos, Ariz	105,000	0
Beshbito, Ariz	104,500	104,500
Dilkon, Ariz	104,500	104,500
Nazlini, Ariz	104,500	0
Sanostee, N. Mex	105,000	105,000
Oraibi, Ariz	105,000	0
San Felipe, N. Mex	104,500	104,500
Albuquerque, N. Mex	22,000	22,000
Stewart, Nev	26,000	0
Subtotal, centers	2,120,000	1,509,500
Health stations:		
New Town, N. Dak	53,000	53,000
Rock Point, Ariz	56,000	0
Red Water, Miss	56,000	0
Subtotal, stations	165,000	53,000
Total, hospitals and clinics	6,853,000	1,900,500
Personnel quarters:		
Taholah, Wash	60,000 (3)	60,000 (3)
Warm Springs, Oreg	100,000 (5)	100,000 (5)
Fort Hall, Idaho	80,000 (4)	80,000 (4)
Beshbito, Ariz	94,000 (5)	94,000 (5)
Sanostee, N. Mex	94,000 (5)	94,000 (5)
Teec Nos Pos, Ariz	94,000 (5)	94,000 (5)
Nazlini, Ariz	94,000 (5)	94,000 (5)
Dilkon, Ariz	94,000 (5)	94,000 (5)
Tuba City, Ariz	2,312,000 (121)	0
Wagner, S. Dak	60,000 (3)	60,000 (3)
White Shield, N. Dak	288,000 (15)	288,000 (15)
Owyhee, Nev	120,000 (6)	120,000 (6)
Many Farms, Ariz	244,000 (13)	244,000 (13)
Total, personnel quarters	3,734,000 (195)	1,422,000 (74)
Alterations:		
Sells, Ariz., fire remedy	8,000	0
Shiprock, N. Mex., addition and expansion	102,600	102,600
Pine Ridge, S. Dak., water mains	10,000	10,000
Crownpoint, N. Mex., feasibility study	29,000	0
Gallup, N. Mex., expand dental	226,000	225,000
Sacaton, Ariz., fire remedy	7,000	7,000
Crow, Mont.:		
Sewage	7,000	7,000
Fire remedy	20,000	20,000
Keams Canyon, Ariz.:		
Boiler plant	66,600	66,600
Fire remedy	7,000	7,000
Cass Lake, Minn., delivery room-dietary	54,500	0
Winterhaven, Calif., fire remedy	18,000	0
Talihina, Okla., shop-incinerator	0	64,000
Kotzebue, Alaska:		
Sewage treatment plant	167,000	0
Rehabilitate foundation	80,300	80,300
Bethel, Alaska, foundation study funds	27,000	27,000
Mount Edgecumbe, Alaska, incinerator	80,000	80,000
Total, alterations	910,000	696,500
Community facilities (Public Law 85-151)	250,000	250,000
Sanitation facilities (Public Law 86-121)	10,464,000	10,464,000
Total request	22,211,000	14,733,000

NATIONAL CAPITAL PLANNING COMMISSION,
Washington, D.C., May 1, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate,
Washington, D.C.

DEAR SENATOR HAYDEN: The House of Representatives has passed H.R. 9029 containing an appropriation for the National Capital Planning Commission for Fiscal Year 1968 in the amount of $995,000 for salaries and expenses. This represents a $105,000 decrease from the $1,100,000 requested.

The Commission respectfully requests that the $105,000 deleted by the House of Representatives be restored in full by the Senate Committee on Appropriations.

The House Committee on Appropriations recommended the $105,000 reduction because of (1) the elimination of the National Capital Regional Planning Council, (2) its belief that the District of Columbia should finance "more of the planning that relates directly to the District's facilities," and (3) "the increasing probability of the transfer of funds from other agencies on joint planning projects."

The Regional Planning Council was abolished by Reorganization Plan No. 5 in 1966. In his message transmitting the reorganization plan to the Congress, the President stated:

"The reorganization plan will not alter the basic responsibilities of the National Capital Planning Commission. That Commission will continue to represent the Federal interest in the planning and development of the Region. Indeed, its work should increase as comprehensive regional planning by the Council of Governments is accelerated. In accord with the reorganization plan, the Commission will work closely with the Council of Governments in regional planning. The Commission will also deal directly with the suburban jurisdictions and assume the liaison functions now exercised by the National Capital Regional Planning Council."

A reduction predicated in part on the elimination of the Regional Planning Council will seriously impair the Commission's ability to meet its increased responsibilities in representing the Federal interest in the National Capital region.

The Commission was created by the National Capital Planning Act of 1952 as the central planning agency for the Federal and District of Columbia Governments in the National Capital Region. The Commission will examine carefully the possibility of the District of Columbia financing part of the Commission's planning activities, as suggested by the House Committee on Appropriations. In the meantime, it is essential that the Commission continue to perform the District planning functions with funds appropriated to it in the Department of the Interior and Related Agencies Appropriation Act. The requested increase in appropriations results from an increased number of projects and proposals submitted to the Commission by the various agencies of the Federal and District of Columbia Governments. The increases are entirely consistent with the objectives of the National Capital Planning Act of 1952. However, in order to properly carry out its responsibilities under an increased work load the Commission requires additional qualified staff.

We are unable to concur in the view of the House Committee on Appropriations that transfers of funds from other agencies for joint planning projects is a potential source of meeting the increased staff needs of the Commission. Our experience in recent years indicates that such joint studies usually require matching funds not ordinarily available to the Commission from its appropriations and do not meet the problem of the increasing number of Federal and District projects and proposals toward which a substantial part of the requested increase is directed.

H.R. 9029, as passed by the House of Representatives, prohibits the use of appropriations to the Commission for foreign travel. We believe that this limitation is unnecessarily restrictive. Members of the Commission staff have, in the past, represented the United States at meetings of the World Congress for Housing and Planning. These trips have enabled the Commission's representatives to examine outstanding examples of contemporary city and regional planning in other countries and to participate in exchanges of information on important new concepts and techniques concerning urban development and growth.

As shown on the attached table, the Commission's expenditures for this purpose have been modest. We do not feel that the Commission should be precluded from occasional attendance at such meetings in the future. In addition, the American Society of Planning Officials and other professional societies sometimes meet in Canada. This provision would preclude Commission representation at such meetings as well.

Amendatory language to restore the $105,000 deleted by the House of Representatives and to eliminate the travel restriction is as follows:

DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATION BILL, 1968—H.R. 9029

SALARIES AND EXPENSES

On page 39, line 7, strike out "$995,000" and insert in lieu thereof "$1,100,000."

On page 39, lines 7 and 8, delete "*Provided*, That none of the funds provided herein shall be used for foreign travel".

Sincerely yours,

CHARLES H. CONRAD,
Executive Director.

Foreign travel from January 1962 to Mar. 2, 1967

Name and title	Date	Amount	Remarks
Daniel H. Shear, General Counsel	Sept. 1-8, 1962	$164.50	World Congress for Housing and Planning, Paris. Government paid per diem, registration and local travel only. Employees paid for air transportation.
Charles W. Hanke, urban planner	Sept. 1-7, 1962	156.90	Do.
Mary R. Small, urban planner	Sept. 1-8, 1962	160.62	Do.
William E. Finley, Director	Aug. 30-Sept. 11, 1962.	736.30	Amsterdam, Rome, and World Congress for Housing and Planning, Paris. Government paid 1-way fare Washington to Rome and per diem, etc.
G. Louis Heller, Director, Regional Council.	Nov. 7-9, 1962	62.00	Toronto, to study urban transit system.
Robert W. Harris, highway engineer	Aug. 25-28, 1963	165.75	Toronto, annual meeting of Institute of Traffic Engineers.
Wilmer C. Dutton, Jr., Director	June 21-July 11, 1964.	917.50	Jerusalem, World Planning Congress.
Sydnor F. Hodges, Assistant Director	do	944.50	Do.
Mary R. Small, urban planner	June 21-28, 1964	271.75	Jerusalem, World Planning Congress, plus 6 days in Europe visiting capital cities. Employee paid own air transportation.
Daniel H. Shear, General Counsel	do	244.75	Jerusalem, World Planning Congress, plus 3 days in Europe visiting capital cities. Employee paid own air transportation.
Total	January 1962-Mar. 2, 1967.	3,824.57	

Mrs. HANSEN. Is any contemplated in the near future?

Mrs. ROWE. Yes.

Mrs. HANSEN. Would you give us the details?

Mrs. ROWE. Yes.

(The information follows:)

"Contemplated travel:

"Charles H. Conrad, executive director—Capital cities of Western Europe, March 20 to April 5, 1967	[1] 1,000
"Donald F. Bozarth, director, current planning and programming, Capital cities of Western Europe, March 20 to April 5, 1967	[1] 1,000

"[1] Estimated."

NATIONAL CAPITAL TRANSPORTATION AGENCY,
Washington, D.C., April 28, 1967.

Hon. CARL HAYDEN,
Chairman, Subcommittee on Department of Interior and Related Agencies, Committee on Appropriations, United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: As requested by Mr. Paul Eaton, Staff Assistant to the Subcommittee, attached are the Agency's proposed amendments to the Interior and Related Agencies Appropriation Act, 1968, (H.R. 9029) as enacted by the House of Representatives on April 27, 1967.

The amendments proposed by the Agency are self-explanatory and I trust that the justification material is persuasive. I feel very strongly about the effect of the House action and believe that the amount requested for restoration is the minimum required for our operations during the three months of the fiscal year. I would hope that we might have the fiscal capability of meeting the transitional problems to the interstate Authority in a proper manner. To impose any delay in terminal leave and severance payments after the Agency goes out of existance would, in my opinion, be unfair. I am also concerned about how a supplemental request would be handled after the Agency has been phased out. Administrative difficulties such as this could be avoided by providing adequate funds as a part of the regular appropriation process.

I would be very pleased to discuss this matter further with you, if you so desire.

Sincerely yours,

WALTER J. MCCARTER, *Administrator.*

NATIONAL CAPITAL TRANSPORTATION AGENCY

SALARIES AND EXPENSES

(House hearings, pp. 414–446)

(Senate hearings, p. 1933)

Appropriation 1967	$1, 400, 000
Estimate 1968	400, 000
House Allowance	250, 000
Restoration Requested	70, 000

(P. 39, lines 11, 12 and 13)

AMENDMENTS REQUESTED

Page 39, line 11, strike out "$250,000" and insert in lieu thereof "$320,000"—an increase of $70,000 in the appropriation.

Page 39, lines 12 and 13, strike out "Construction, Rail Rapid Transit System shall be" and insert in lieu thereof "this heading for the fiscal year 1967 shall remain"—the original language proposed in the President's budget.

HOUSE REPORT

"Effective September 30, 1967, the National Capital Transportation Agency will go out of existence. In accordance with the provisions of Public Law 89–774, enacted November 6, 1966, its functions will be transferred to the Washington Metropolitan Area Transit Authority.

"The Budget estimate proposed appropriation language that would make $400,000 of unobligated funds appropriated in 1967 for salaries and expenses available during fiscal year 1968.

"The Committee recommends that $250,000 be transferred from funds available in the 'Construction, Rail Rapid Transit System' appropriation for necessary expenses to be incurred in fiscal year 1968.

"The Committee is most disappointed in the progress that has been made on the construction of this system. Despite the expenditure of several millions of dollars already on this project, it would appear that a definite routing of the system has not yet been decided upon. The metropolitan area of the Nation's Capital urgently needs a rapid transit system at the earliest possible date. To achieve this will take a determined and concerted effort by those responsible for its construction, with the fortitude to repel the multitude of recommendations on how the system should be built and which sections of the area the system should serve. Otherwise, completion of the system will be materially delayed, and the construction costs will soar to astronomical heights."

JUSTIFICATION

The proposed amendments requesting restoration of $70,000 and providing for reappropriation of funds from unobligated balances of the appropriation "Salaries and expenses", are considered essential to orderly phasing out of activities of the Agency and transition to the Washington Metropolitan Area Transit Authority on September 30, 1967.

The basis for the Agency's estimate is as follows:

Salary payments for present staff of 42 employees for 3 months at $50,000 per month[1]	$150,000
Personnel benefits for above	10,800
Terminal leave payments	54,800
Severance pay	97,400
Minimal support costs at $2,000 per month	6,000
Uptown Centers Study	20,000
Subtotal	339,000
Less anticipated reimbursements from WMATA	19,000
Total	320,000

[1] Actual obligations, March 1967, $49,202.

The amount recommended by the House would preclude the payment of entitlements to some career employees for terminal leave or severance pay as prescribed by law. Payment of terminal leave is authorized by the Lump Sum Leave Payment Act, as amended, (5 U.S.C. 61b) and payment of severance pay is authorized by section (9) of the Federal Employees Salary Act of 1965 (79 Stat. 1111). The right to a lump sum leave payment vests on the date of separation (33 Comp. Gen. 85) and the right to severance pay not only vests at the time of separation but, pursuant to statute, payments are to be made in the same pay period intervals as if the individual were still employed. Thus, it would clearly be in derogation of employees' rights for the Government to delay such payments until other funding could be arranged. If requested to wait for a supplemental appropriation, for example, this delay could amount to several months, with obvious injustice to the individuals so affected.

Upon the transfer of functions from NCTA to the Authority on September 30, 1967, the processing of final personnel actions should include the payment of terminal leave to employees entitled to such payments and it was expected that funds would be deposited with the Agency's fiscal agent to make the severance pay disbursements on a bi-weekly basis. Since the Agency will be out of existence after that date there is no regular procedure for the preparation of a supplemental request on behalf of the Agency.

The transfer of funds for this purpose from the appropriation "Construction, Rail Rapid Transit System", as proposed by the House, would establish a precedent which could adversely affect future participation of regional organizations in funding for the operations of the Washington Metropolitan Area Transit Authority. All funds provided under the title "Construction, Rail Rapid Tranist System" were justified as a part of the scientific programs authorized by the Congress in the National Capital Transportation Act of 1965 (P.L. 89–173, 79 Stat. 663) and expressly precludes administrative support costs. Except in one instance, the Agency has always requested funds for administrative operations under a separate appropriation and, in that one instance—fiscal year 1966, funds were requested by transfer from the appropriation "Land Acquisition and Construction" only after Congress had initiated a similar transfer in fiscal year 1965. These two instances, however, should not be used as a precedent because there had been no obligational activity under the particular appropriation for some time and it was scheduled to be eliminated.

An essential feature of the regional approach to transit planning is joint participation by each of the regional governmental entities, including financial support. This concept has been emphasized by the Congress on many occasions.

Funding arrangements for the currently authorized system provide for the raising of funds, over and above the $150 million in grants, through the sale of bonds underwritten by the signatories to the Authority. It was never contemplated that the administrative costs of the Authority would be provided in this fashion but rather by direct appropriation of funds by the participating members of the Authority. To transfer funds from the Construction appropriation, as proposed by the House, would set a precedent which could make it difficult for the Authority to impose administrative budget requirements on its signatories.

If the Congress is concerned that the unobligated balances of any appropriation made for the purpose of terminating the Agency might transfer to the Authority and provide an additional benefit, the Agency suggests that language be included to provide that such unobligated balances should revert to the Treasury of the United States.

CONCLUSION

For the reasons stated and in order for the Agency to meet its statutory obligations to career employees who are to be separated from Federal Civil Service benefits through no fault of their own, the appropriation of $320,000 and the provision of these funds from the unobligated balance of "Salaries and Expenses" rather than the Construction appropriation are most strongly urged.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Estimate, 1968	$16, 370, 000
House Allowance	11, 700, 000
Restoration Requested	4, 670, 000

AMENDMENTS REQUESTED

Page 39, line 20, delete "$10,700,000" and substitute "$14,370,000."
Page 39, lines 20 and 21, delete "$4,500,000" and substitute "$5,000,000."
Page 40, line 1, delete "$3,000,000" and substitute "$5,000,000."
Page 40, line 2, delete "$2,000,000" and substitute "$2,750,000."
Page 40, line 9, delete "$1,000,000" and substitute "$2,000,000."

The effect of these amendments would be to restore the total appropriation to the amount requested in the President's budget.

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES,
Washington, D.C., April 27, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations, United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: In his budget for fiscal 1968, the President has recommended for the National Endowment for the Arts (a) $5 million to carry out national programs which will be beneficial to the arts throughout our country and (b) $2.75 million to assist the States in the development of their own effective agencies for the encouragement of the arts.

Action taken by the House of Representatives on the Endowment's programs for 1968 reduces the President's budget request as follows:

> Instead of the $5 million recommended to carry out the national programs under section 5(c) of our enabling legislation, $4.5 million was approved—representing a cut of $500,000.
>
> Instead of the $2.75 million recommended for assistance to the states under section 5(h) of the enabling legislation, $2 million was approved—representing a cut of $750,000.

We respectfully appeal for a restoration of funds to the levels recommended in the President's Budget.

We are convinced that any cut in the funds recommended by the President would seriously hinder the Endowment's ability to carry out its mandate from the Congress.

The arts in the enabling legislation cover some 16 major categories in the performing and creative fields. In music alone, to take one category, the authorized $5 million could not begin to answer the needs in this area. The same applies to other categories. The performing arts, in particular, as has been carefully documented by The Rockefeller Panel Report and a current study sponsored by the Twentieth Century Fund, are facing a time of acute financial crisis which now threatens the very existence of our most renowned arts institutions and places most difficult burdens on any new or developing arts organizations. The volume of mail daily received by the Endowment underscores this time of crisis. It also emphasizes the hope artists and arts organizations throughout the country have placed in the Endowment, to whom they are turning in ever increasing numbers. A cut in the President's Budget would compel the Endowment to curtail its minimal plans for 1968, to eliminate hopes which have already been too long postponed. To date the Endowment's pilot projects have received general acclaim from the press, both liberal and conservative in philosophy. The program has been hailed as a milestone in Government. Its basic purpose is to develop a beneficial partnership between the Government and the private community in behalf of our nation's cultural progress.

There are hundreds of thousands of our citizens who have never had the opportunity of hearing great music performed or seeing excellence in the living theatre. The goal of the Endowment is to make excellence in the arts available to the widest possible audience, and at the same time to encourage our nation's artists and to recognize the value of their inspirational and creative work. These efforts are of particular importance at this time. They are important to young people, as well as to our older citizens who have greater leisure time and a longer retirement to enjoy. They are important to an increasingly educated people and to the whole process of education. They are important to the impact we make throughout the world and to the image we project of ourselves abroad, especially at this moment in our history. The arts speak in an international language and can cross boundaries which otherwise may be closed.

In particular, these efforts are important because of the crisis facing the arts at home. The traditional sources which sustained the arts in the United States in the past are manifestly unable to meet new demands. The arts do not lend themselves to the economics of mass production. They must receive substantial transfusions of new support if they are to fluorish. The "seed money" which the Endowment can supply is necessary to their growth. To reduce the Endowment's ability to provide this urgently required "seed money" would appear to us a most unwise economy, considering the magnitude of the need and the investment which full funding could provide in terms of our country's future, and the hopes of its artists in all fields.

With regard to the support of State arts agencies, all fifty States and four special jurisdictions have again applied for assistance under the Federal-State partnership provisions of our Act.

In the first year, 295 new projects were submitted for funding and $3 million of non-Federal money was spent on these new services. Last Spring, no more than one dozen States were employing full-time professional executive directors for their State agencies. By April 1st, 1967, forty-seven States had full-time executives on the job. More than half the States were able to secure enabling Acts in State legislatures to establish permanent arts councils during this year, bringing the total number of permanent councils to fifty-one.

This year, applications list more than 700 separate new projects designed to serve 27,500,000 people in all the States. These projects require $2.75 million of Federal funds, but will generate $4 million in non-Federal funds. In other words, at a Federal cost of ten cents per person, more than 10 percent of our national population will be served and non-Federal funds will bear more than half the cost of these new programs.

This State partnership program is the most far-reaching of the Endowment's efforts, and relates to the development of the arts at a local and community grass-roots level. The enabling legislation requires that appropriations for this program be allotted equally among the States. If the House appropriation stands, all the States will receive only $36,363 for their cultural plan instead of $50,000. The State arts councils and legislatures have organized and worked in terms of $50,000 units for State and private support to match Federal grants. To receive less support than planned from the Federal Government will seriously damage the future development of State programs and our developing partnership with the States. Since almost all of the States have now established permanent agencies for the arts and can qualify for announced Federal grants, restoration of curtailed appropriations is requested.

Finally, the Endowment appeals for restoration of its appropriate share of the $2 million recommended by the President to match the receipt of unrestricted gifts. The figure approved by the House would reduce this total by $1 million, and assumes equal distribution of the available funds between the Arts Endowment and the Humanities Endowment, or $500,000 each. Restoration of the funding in this case would mean an additional $500,000 for the Arts Endowment.

It should be stressed that this provision in the Public Law, under Section 11(b) means that one Federal dollar appropriated can generate three additional dollars from the private community in behalf of the arts. One dollar in an unrestricted gift is equalled by a Federal dollar and these two dollars must in turn be matched by the private arts organization receiving a grant.

The Arts Endowment has made strenuous efforts to encourage private philanthropy to donate unrestricted gifts to the Endowment. The present ceiling of Federal appropriations, in this respect, is $2 million, covering two fiscal years. There are now strong indications that unrestricted gifts totaling the current $2 million ceiling in effect will be made before the conclusion of fiscal 1967. Because we believe the Endowment can generate at least $1 million in unrestricted gifts in 1968, we respectfully appeal for full restoration of this funding. It involves a basic purpose of the Public Law which is to stimulate additional private philanthropy to support worthwhile cultural endeavors.

Should you desire any additional information with respect to this appeal, we would be most happy to supply it.

Very truly yours,

ROGER L. STEVENS, *Chairman.*

SUMMARIES OF TYPICAL STATE PLANS

Arizona: Although the Arizona Commission on the Arts and Humanities has no State subvention, the members of the Commission intend to raise privately more than $86,000 for programs, plus funds for the administration of the Commission's activities which will more than match the Federal grant under Section 5(h). The program funds will support 22 on-the-road concerts by the Phoenix, Tucson, and Flagstaff Symphonies—$34,080; 10 tour performances by the Francesco Chamber Music Trio—$5,000; and 6 concerts by the Arizona Chamber Orchestra—$2,600. In dance, the funds will support 50 touring performances in Arizona schools by the Desert Arts Ballet, the Janey Jones Dance Company, the Kadimah Dancers and Arizona State University's Orchesis Dancers—$10,000. Theatre is represented in the Commission's touring program through 24 performances of the Arizona Repertory Theatre, Actor's Inner Circle, and the Arizona Mobile Theatre—$26,400. The Commission will also assist in the expansion of the Flagstaff Summer Festival of the Arts from one week to three weeks—$30,935; sponsor the first Arizona Film Festival—$1,500; and assist the Phoenix Art Museum, the Tucson Art Center, and the University of Arizona Art Gallery in making materials and exhibitions available to out-lying communities—$7,000. One additional $6,000 project may be submitted shortly.

Total program cost: $130,015; Federal share: $47,000.

Arkansas has elected to provide a series of grants-in-aid to selected State arts organizations for the purpose of strengthening their operations and raising their artistic quality. Six community theatre organizations will receive aid for purposes, such as, hiring professional actors, directors and technicians and to aid in beginning tour activities—$13,076. Eight organizations active in the visual arts will receive grants to assist them in expanding their educational services, exhibit activities, and art competitions—$27,424. Four music organizations, including an opera producing group, will receive aid for obtaining professional musicians and raising the standards of their performances—$39,000. In addition, the Arkansas Educational Television Commission will benefit through a grant to lease performing art films for general broadcast—$500; and the Arkansas State Ballet Company will be assisted in mounting touring performances throughout the State—$20,000.

Total program cost: $100,000; Federal share: $50,000.

Georgia: The Georgia Art Commission proposes seven projects for FY 1968. *Visual Arts*—$66,000—the continuation and expansion of a pilot project begun in FY 1967 whereby three additional centers will be established in addition to the two existing centers for the housing of art collections which are made available to the public schools of the State. The materials in the collections will also be made available for a video-tape series on art to be produced for the State's ETV network. *Music*—$5,200—the commissioning, scoring and premier performance by the Atlanta Symphony of a major new orchestral work by a Georgia composer. *Dance Workshop*—$7,400—a series of dance workshops for teachers and serious students to be conducted by a nationally recognized modern dancer. *Poetry*—$8,400—a series of poetry readings by promising young writers to be made available to colleges, universities and community groups. *Chattahoochee Literary Magazine*—$4,000—to encourage and assist in the development of a new literary magazine in the State. *Appletree Theatre*—$4,000—to assist the Georgia Mountain Planning and Development Commission in this project to bring understanding and active participation in live theatre to persons in a four-county underdeveloped area of Georgia. *Financial Assistance*—$12,500—to establish a low-interest emergency loan found for Georgia writers, composers and artists.

Total program cost: $107,500; Federal Share: $50,000.

Hawaii intends to continue its wide-ranging program in all the arts using both private funds and State appropriations which more than match the requested Federal grant. *Music*—$14,500—to extend the music resources of the major islands to the outlying islands through tours, workshops and festivals, and provide technical assistance to these same groups for improving their quality. Very similar programs would be supported in *Dance*—$14,500 and *Theatre*—$22,000. In the *Visual Arts*—$35,000—the program would include traveling exhibits, workshops, studio and master classes, competitions, marketing studies for the craft artists on the islands, and an artist-in-residence project. *Environmental Design*—$18,000 would receive extensive attention through audio/visual promotional techniques, international exchange of ideas through the Hawaii Chapter, A.I.A. advisory services, and a two-week post-professional urban design course for architetsts, engineers, and planners. *Education in the Arts*—$12,000—would be supported through assistance to the State's educational agencies and master classes for teachers in all of the art disciplines. In addition, a *Newsletter* and *Calendar* would be published to promote and publicize the art activities of the islands—$12,000.

Total program cost: $134,000; Federal share: $50,000.

Iowa: The Iowa State Arts Council has elected to open a two-pronged attack on the artistic problems of this predominantly rural State. One aspect of this effort is to provide technical assistance in the organization of community effort as well as the technical problems faced by individual art organizations. The other inter-related aspect is to provide support for an extensive touring program. The *Technical Assistance* program—$40,000—will use the services of professional consultants and artists-in-residence to provide communities and art organizations advice and service in both administrative and artistic matters. The consultants will also advise the Council on how to improve its services and how to solve new problems uncovered within the State. It is estimated that the *Touring Program*—$60,000—will provide the means to sponsor five symphony orchestra concerts or opera productions, ten major one-month art exhibitions, eight small music ensemble concerts, 10 college or community theatre dramatic productions, 10 month-long low-cost art exhibits, 10 solo musical performances, 15 month-long craft shows, and four dance productions. All of these attractions would receive up to 75 per cent support from the Council.

Total program cost: $100,000 (plus local support for touring productions); Federal share: $50,000.

Kansas: The Kansas Cultural Arts Commission has submitted a well documented proposal supporting their State-wide program. The program makes provision for 10 touring performances by the Wichita Symphony—$25,000; six pairs of concerts by the Kansas City Philharmonic—$33,000; and four touring performances by the Kansas City Lyric Opera—$30,000. A technical assistance program for the State's art organizations will be implemented through the use of professional consultants—$10,000. Through the efforts of the Commission, a Kansas Chapter of Young Audiences is being organized and the Commission will support its goal of 200 musical performances during the 1967–68 school year—$30,000. In the visual arts, a series of circulating art exhibits will be funded—$20,000. An allocation has been requested for the support of various special projects as they arise during the year—$20,000, and the Commission will undertake limited publication responsibilities as well as the sponsorship of the second State Conference on the Arts—$32,000.

Total program cost: $200,000; Federal share: $50,000.

Massachusetts: The Commonwealth of Massachusetts in 1966 created through legislative action a permanent Council on the arts and Humanities which is proposing a varied course of action in four program areas. Program Area I (Professional Touring Performances) provides support for the touring projects of three professional theatre groups: the Charles Playhouse, the Theatre Company of Boston, and a newly created street theatre organization, Mobile Theatre of Boston—$82,000. Program Area II (Visual Arts) is made up of a State-wide exhibition of the works of Massachusetts artists—$7,000. Program Area III (Educational and Special Projects) gives support for the expansion of three existing projects: a workshop for professional playwrights created through the cooperation of Tanglewood's Berkshire Festival Committee and Boston University, a series of chamber music concerts offered through Young Audiences, Inc., and a regional workshop and festival for art teachers and their most promising students—$41,000. Program Area IV (Technical Assistance) consists of providing professional consultants to the amateur art organizations of the State as well as a program of assistance to the community orchestras of the State in obtaining additional professional musicians—$31,000.

Total program cost: $161,000; Federal share: $50,000.

New Jersey's proposal is its first under their new legislative authority and contains 14 projects with all of the art forms represented. The projects include: Theatre—$12,000—assistance in the development of a semi-professional theatre company to present 18th Century American plays in the amphitheatre at Washington Crossing Park; to provide a professional writer-producer of children's theatre for the Rider College Childrens Theatre, and a pilot project in theatre audience development using a series of video-taped plays presented in local libraries with professional personnel available on the scene for interepretation; *Music*—$32,000—support a new touring activities by six of the State's music organizations and to organize 20 all-day contemporary music workshops for high school students; Visual Arts—$27,500—encouragement of the art of print-making by touring a printmaker and his press on a circuit of art centers, museums, and classrooms, to provide extensive visual arts experiences for the people of six Northwest New Jersey communities lasting nine days in each center, and a project similar to the previous one for Southern New Jersey; *Dance*—$7,000—the commissioning of new dance works to be performed before college and university audiences; *Literature*—$1,000—to organize a one-day Creative Writing Conference; and Special Projects—$20,500—a novel program to train public school teachers in such topics as urban design, city planning, architecture and the relation of these to the welfare of the population so that the teachers may introduce these materials in their classes, a similar project with the art of photography as its subject, to add significant films on art subjects to the existing Garden State Film Circuit which uses the facilities of local libraries, and a public opinion survey of public attitudes and involvement in the arts for the purpose of helpng the Council plan its long-range programs.

Total program cost: $100,000; Federal share: $50,000.

New Mexico proposes 31 projects for their 1967–68 program. *Music*—$26,610—to assist the Albuquerque and Roswell Symphonies, to support two professional touring chamber music series, to sponsor a demonstration and performance by Shinichi Suzuki and 10 of his students at the New Mexico Music Educators Association convention, to assist the Santa Fe Opera prepare two American premieres, to provide scholarships for advanced chamber music study, and to copy a wax cylinder collection of Navajo songs and chants onto modern tapes. *Dance*—$6,000—to sponsor a 15-city tour of a flamenco dance troupe, the Teodoro Morca Group. *Theatre*—$31,034—to help sponsor the tours of two theatre groups and provide technical and production assistance to seven others. *Craft and Folk Arts*—$16,738—assistance in exhibitions, competitions and lecture/demonstrations to six craft organizations. *Graphic and Visual Arts*—$2,440—to provide for a traveling art exhibition and to sponsor a painting workshop instructor. *Literature*—$1,000—to provide funds for increasing the circulation of a booklet containing award winning stories and poems by high school students of the State. *Architecture*—$5,600—to establish an award for New Mexico architects and for publishing a book on the history of the architecture of New Mexico. In addition, two special projects will be funded—to publish a monthly State-wide calendar of cultural events—$8,000, and to provide New Mexico's share of the expense of a regional art exhibit—$3,808.

Total program cost: $101,230; Federal share: $50,000.

NATIONAL ENDOWMENT FOR THE HUMANITIES,
Washington, D.C., April 28, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: In the letter of April 28th signed jointly by Roger Stevens and me, we appealed for the action taken on April 27th by the House of Representatives in reducing the fiscal year 1968 request for the National Foundation on the Arts and the Humanities. That letter set forth the grounds for an appeal in regard to the administrative funds of the Foundation. This letter urges restoration of program funds for the National Endowment for the Humanities to the level of the President's budget request.

The President's budget asked that the sum of $5 million authorized by Public Law 89–209, Section 11(a) be appropriated for fiscal year 1968 to carry out the purposes of Section 7(c) of that Act and that $2 million authorized by Section 11(b), which provides for matching private gifts with appropriated funds, be appropriated in accord with the provisions of Section 10(a)(2) without allocation by Endowment. The House of Representatives on April 28th acting on the Department of the Interior and Related Agencies Act, 1968, HR–9029, fixed the appropriation for the National Endowment for the Humanities at $3 million to conduct programs authorized by Section 7(c) and fixed the level of matching private gifts with appropriated funds at $500,000.

Specifically, this letter respectfully requests the restoration of funds to carry out the purposes of Section 7(c) to $5 million, the amount authorized by law and requested by the President. Additionally it requests that the level of funds to match private gifts be restored to $1 million, the amount requested by the President.

The committee has requested this Endowment to indicate wherein it would make reductions in the programs proposed for the fiscal year 1968 to achieve the program levels established by the House action and further requested the Endowment to justify the requested restoration.

The most salient aspect of the reductions imposed by the House action is not that it would cut the President's request by 40%—which is in itself an unusual action even in this year of fiscal restraint, the reduction in the Interior and related agencies as a whole being 6.9%—but that it would force a decrease by 33% of programs actually conducted this year. The 1957 appropriation was 2,000,000 but about 2,500,000 was available in carryover funds, a total of 4,500,000. These programs, although dwarfed by the magnitude of needs in the humanities, have been hailed by scholars, educators, community cultural leaders, and a wide range of concerned citizens as a most promising beginning. By the end of fiscal 1967, the Endowment will have made grants totalling about 4,500,000. By March, it had received requests for grants totalling 53,000,000. The volume of requests is expected to increase in fiscal 1968, and with a reduction in funds, the Endowment will be unable to make more than a token response.

In complying with the committee's request that it delineate the outlines of a program consistent with the funds appropriated by the House, the Endowment is painfully aware that to set forth the dimensions of such a program is to raise a question of whether it is appropriate or meaningful to retain an agency of the United States Government to conduct so small a program.

A reduction in funds to 3,000,000 would permit a program as follows:

I. Fellowships: a reduction from 50 senior fellowships to about 25, thereby cutting in half the opportunity for our most mature scholars to complete work of great potential value to education and society as a whole.

A reduction in fellowships for younger scholars, from 100 to about 55, thereby reducing the opportunity for the development of our best young talent in the humanities.

A reduction in summer stipends for the same group of people from 200 to 115, thereby reducing the opportunity for significant short-term work.

There are approximately 39,000 humanists of professional rank in the more than 2,000 degree-granting institutions in the country. The reduction would mean that there would be one fellowship for a younger scholar for every 37 institutions and one summer fellowship for every 17 institutions.

II. Research: would permit the funding of about 3% of the anticipated requests for research grants from the nation's educational institutions, individuals, and research organizations. Among other programs that would be damaged would be the effort to prepare pure texts of the great American authors of the 19th century, a program which has already had considerable effect and great acclaim. It is estimated that federally supported research activities in sciences, mathematics and engineering, will be in excess of 15,000,000,000 as against roughly 1,000,000 that would be available under this appropriation for the humanities, thus further increasing the gap between federal support of science and technology and the humanities, deplored in the Declaration of Purpose of the Act establishing the National Foundation on the Arts and Humanities.

III. Educational and special programs: would permit a response to the mandate of the National Foundation on the Arts and Humanities "to foster public understanding and appreciation of the humanities" by holding educational and public programs at the level established in fiscal 1967. This level permitted the Endowment to conduct only six limited programs in curriculum dissemination, one for culturally deprived students, one to encourage institutional cooperation, one for a physically deprived group, and one to improve instructional television. It would permit the maintenance of a very promising program to improve college and university teaching only at its present level and would limit the program to upgrade the competence of the staffs of the 4,000 museums and historical societies in the country to only 13 persons, a trivial number in a vast pool of partly trained personnel. The program would allow no innovation and no effort to develop new methods of teaching the humanities in the colleges.

IV. Planning and analysis: would permit funds for planning and analysis, which are especially important to a new agency developing a new program in a new field, at a level 40% below that requested and 65% below fiscal 1967. It would interfere with careful evaluation of existing and new programs and would therefore reduce the care that must necessarily be taken in the expenditure of public funds.

It is perfectly clear, however, that the Endowment for the Humanities could continue to exist at this level of funding, but there is serious doubt as to whether or not it should.

An analysis of reduction in program expenditures required by the House action follows:

	Fiscal year 1967 actual (estimate)	Fiscal year 1968 request	Fiscal year 1968 appropriations H.R. 9029	Required reductions
Fellowships	$1,900,000	$1,950,000	$1,040,000	$910,000
Research and publication	1,508,000	1,750,000	1,040,000	710,000
Educational and special projects	832,000	1,150,000	830,000	320,000
Planning and analysis	260,000	150,000	90,000	60,000
Total	4,500,000	5,000,000	3,000,000	2,000,000

Since the Chairman of the Endowment is required by law to hear the advice of the Council on the Humanities, this reallocation must be presented to them. Therefore, it should be understood that we may subsequently need to request the Committee's permission to readjust the distribution.

The justification for restoring program funds of the National Endowment for the Humanities to the level of the President's budget request are as follows:

1. As a public agency, the National Endowment for the Humanities has the responsibility for encouraging the widest possible participation of the nation's educational and cultural institutions in NEH programs. In its second year of operation, the Endowment is certain of an increased volume of applications for support. The President's budget allows the Endowment to meet these increased applications with a minimally increased program. A smaller program can only mean a substantial increase in the percentage of meritorious and significant proposals which must be rejected.

2. The passage of the National Foundation on the Arts and Humanities Act of 1965 was hailed by the nation's academic and intellectual community as a belated but welcome recognition of their role in the nation's life. The President's request reinforces their belief in a national commitment to the fields of the humanities. A reduction in funds which borders on the punitive will be widely interpreted as a rejection of that prior commitment.

3. In the past decade the gap in the opportunities for teachers and scholars in the humanities and those in the physical sciences and technology has steadily widened. One ultimate result of sustained and adequate support of the humanities by the Federal Government will be the reduction of that gap. To decrease support for the humanities now can only confirm promising young students' conviction that economic security and professional reputation can only be attained in fields other than the humanities.

4. The nation's liberal arts colleges and university programs in the humanities have been largely unaided by massive Federal expenditures in higher education. This imbalance has deeply concerned educational leaders and was one of the major reasons for the establishment of the National Endowment for the Humanities. The President's budget request, small as it is, has encouraged educational leaders to hope for an amelioration of the present situation. Funding at a level lower than the President's request insures only an increasing imbalance between humane and scientific knowledge.

5. If the war in Vietnam is indeed a war for men's minds, then now is precisely the time to expand the resources which the humanities offer the nation's citizens to increase their knowledge of the nation's intellectual heritage and to clarify and refresh their understanding of the nation's aspirations.

Sincerely yours,

BARNABY C. KEENEY, *Chairman.*

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES,
Washington, D.C., April 27, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: As Chairman of the National Endowment for the Arts and the National Endowment for the Humanities, we are respectfully appealing for full restoration of the $420,000 by which the House of Representatives reduced the administrative budget of the National Foundation on the Arts and the Humanities.

The reduction approved by the House action if left unrestored will most seriously handicap both Endowments in administering their programs. At the present time best estimates of the effect of this reduction are as follows:

1. The present staff level of 32 positions for the Arts Endowment could not be increased. It should be pointed out that in order to effect necessary economies in the 1967 administrative budget, several Arts Endowment positions were lapsed. These included a public information specialist, a liaison officer acting in behalf of the Endowment with respect to other Federal agencies, and the assistant in the visual arts program.

Since early in this calendar year the Endowment has been without the assistance needed in these fields to maintain the level of efficiency considered essential at the beginning of 1967. Toward the end of fiscal 1966 the General Services Administration, which was then providing the Foundation with administrative assistance, estimated that there would be carry-over administrative funds amounting to approximately $180,000 which could be used by the Foundation in fiscal 1967. This estimate did not prove correct; it was lowered by approximately $87,000. Therefore, adjustment had to be made in the Arts Endowment staff, leaving positions vacant in order to live within available funds.

The Endowment submitted a budget for 1968 showing eight new positions above the present level of 32. All these positions were carefully planned on the basis of minimal needs and maximum efficiency. Particularly are assistants needed for the six program directors now serving the Endowment. However, in the interest of economy, we are actually requesting only three. We feel the program directors should constantly be assisting the needs in the arts outside Washington. When they are out of the office on such missions, as things now stand, their only back-up are their secretaries. The national scope of the program emphasizes the need for greater flexibility and service by the staff than is presently possible. Therefore, the minimum of three new program assistants is considered of utmost importance.

Similarly, the Arts Endowment requested provision for an Office of Planning and Analysis. This is urgently needed to develop the type of activity beneficial to the longer range needs in the arts. The heavy workload on the current small staff underscores the need for these two added positions whose responsibilities would focus on areas beyond day-to-day operations. Similarly also, the three added secretarial positions requested are considered important, especially in the area of state programs now served by one director and one secretary. In sum, merely to maintain the staff at its present level would not appear in the interests of the kind of effective administration we hope so much to provide.

2. If the House cut remains in effect, the staff of the Humanities Endowment would similarly be held to its current level of 26 positions. This level was reached late in the present fiscal year because of the need to postpone staffing to balance the budget. Efficiency suffered. The four new positions requested include one Public Information Officer, a secretary for this Officer, and two program analysts. The Endowment, due to limitations of the present administrative budget, has not yet had the opportunity to employ a full-time information specialist; and this position, with the one secretary to assist in this very important area, is considered urgently needed. The two program analysts are also considered of essential importance to the proper functioning of the Endowment to help handle the increased volume of applications anticipated in both the Division of Fellowships and the Division of Research and Publications. It should be emphasized that, regardless of whether the level of funding for the Endowment is increased, the volume of applications is expected to increase substantially over 1967, and that each must be considered very carefully, not only in the interest of common justice, but to insure wise use of public funds.

3. In-house operation of the Foundation's administrative procedures are an absolute necessity. To date, GSA at first and the National Science Foundation subsequently, have been assisting the Foundation on a reimbursable basis, of $25,000 per year. This arrangement is scheduled to terminate at the close of the present fiscal year. Thus the four new positions requested to begin in-house administrative capability cannot be altered. They are the basic minimum required. However, the House cuts would prevent the funding of any other administrative positions requested. These include two grant specialists, an additional research assistant, a secretary for the Federal Council on the Arts and the Humanities, and a second attorney and a secretary for the legal counsel's office. The needs for these positions were explained in our budget justification. To summarize: the present grants office staff is currently operating at a minimal level of positions. It very much needs strengthening for 1968; the same applies to the research staff; one assistant for the Federal Council is considered a minimum need by its members; and the two positions in the legal counsel's office are most urgently needed. Our legal counsel is extremely competent, but under present circumstances he has no back-up whatsoever, and as programs develop he will have a steadily increasing workload.

4. Our best estimates show that travel expenditures would have to remain substantially at the 1967 level for both Endowments if the House approved figures remain. Since travel by the National Council on the Arts and the National Council on the Humanities remain as fixed items, cuts in travel would apply to panels and staff. As indicated above, it is of the greatest importance to the programs of both Endowments for the staff to travel sufficiently to be fully cognizant of needs in their areas from first-hand observation. It is also of great value to our programs for the staff to develop new ideas to meet these needs. They cannot do this properly from their desks in Washington. Both Endowments have been handicapped to date by an acute shortage of travel money.

The House Report accompanying our appropriation legislation, on page 40, reads as follows:

"With proper and careful administration, this program offers distinct cultural benefits to our people that must be available if we as a nation are to participate in a full life spiritually and intellectually.

"This requires, prudent, sensitive, intelligent administration supervision in the highest degree. One of the best ways to achieve this is by continual appointment of panelists of the very highest caliber who are responsible for recommending awards of grants and loans. This not only materially assists in grant awards for the most meritorious projects, but also develops the highest quality of criteria available in this nation whose cultural heritage is magnificent."

Both Endowments share equally in the conviction that panels are most necessary and that we should utilize expert advice from the private community in all program areas and from all areas of the United States. The House cut makes it extremely difficult to carry out this concept, for travel is essential to the proper operation of panels, and these panels should have the widest possible geographic distribution.

5. The above section relates directly to the Endowments' ability to provide funds for intermittent employment and consultants. Panelists are paid from such funds. Again, these funds would have to remain at virtually their present levels if the House cut in administrative costs should remain. In addition, substantial cuts would have to be made in all other items of the administrative budget below the figures estimated in our proposed budget.

Current estimates of reductions can be summarized as follows:

a. Employment benefits cut by $17,000
b. Rent cut by $22,000
c. Communications cut by $18,000
d. Printing cut by $11,000
e. Other services cut by $49,000
f. Supplies and materials cut by $2,000
g. and Equipment cut by $45,000

Some of these cuts apply to the lower level of staff mentioned above. Others, such as printing and communication, would reflect serious cutbacks on the Endowments' plans. For example, in the area of printing, a cut of this magnitude would seriously handicap the Endowments' abilities to produce the type of information which is urgently needed to answer the increasing volume of requests for information we are receiving. It would seem essential that we have the capability of supplying the public with the materials required.

To summarize, it is our conviction that the administrative budget for 1968 was a thoroughly economical one, that it pertained to basic and minimal needs for 1968, and we therefore urge the Committee to restore these funds to the full amount requested in the President's Budget.

Sincerely,

BARNABY C. KEENEY,
Chairman, National Endowment for the Humanities.
ROGER L. STEVENS,
Chairman, National Endowment for the Arts.

SMITHSONIAN INSTITUTION,
Washington, D.C., April 29, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate, Washington, D. C.

DEAR SENATOR HAYDEN: The Smithsonian Institution respectfully submits this request for restoration of certain reductions in the appropriations for the fiscal year 1968 as now included in H. R. 9029, passed by the House of Representatives on April 27, 1967. The following tabulation summarizes our request.

Smithsonian Institution, fiscal year 1968

Appropriation	Budget estimates	House approved	Total request to Senate
Salaries and expenses	$25,100,000	$23,790,000	$25,030,000
Museum programs and related research (special foreign currency program)	6,100,000	3,000,000	4,000,000
Construction and improvements, National Zoological Park	485,000	400,000	400,000
Restoration and renovation of buildings	1,353,000	1,100,000	1,308,000
Construction	803,000	803,000	803,000
Total	33,841,000	29,093,000	31,541,000

We believe that the full amount carried in the 1968 Budget is needed for effective performance of the Institution's functions. The Budget request was held below the level of demonstrated needs in every area. Nevertheless, in order to strengthen this appeal for needs considered to be critical, our request is limited to $31,541,000, compared to the Budget amount of $33,841,000 and the House approved amount of $29,093,000.

The following justifications highlight critical needs which necessitate this appeal for restoration of 52 percent of the House reduction, a restoration of $2,448,000 of the House reduction of $4,748,000.

Your favorable consideration will be greatly appreciated.

Sincerely yours,

James Bradley,
Acting Secretary.

SMITHSONIAN INSTITUTION

"Salaries and Expenses"

CHANGE IN AMOUNT

On page 41, line 16, change $23,790,000 to $25,030,000.

Museums of science and history (including research)

1967 Appropriation	$8, 342, 000
1968 Increase Requested	598, 000
Increase by House	158, 000
Additional Increase Requested	390, 000

The United States National Museum requires an additional $156,000, primarily for the beginning of services to other museums as authorized by the new National Museum Act of 1966. Requests have been received from museums in every State for assistance to train personnel and to advise on preservation, education, and exhibition. The Museum of History and Technology is directly concerned with the directive of the House "that the Smithsonian Institution shall take a very active part in the celebration of the Bicentennial of the American Revolution." $35,000 for curators of history and related expenses are required to perform as directed.

The Museum of Natural History requires $199,000 for a high priority research program utilizing the largest collection of scientific specimens in the Nation. Supporting technicians should be employed to increase the effectiveness of the professional staff by relieving the professionals of subprofessional duties. The adaptation of the techniques of electronic data processing to the needs of the National Collections for data storage and retrieval will substantially increase effectiveness.

Art galleries

1967 Appropriation	$1, 381, 000
1968 Increase Requested	466, 000
Increased by House	343, 000
Additional Increase Requested	116, 000

The National Collection of Fine Arts and the National Portrait Gallery have just begun to occupy the completely reconditioned Fine Arts Building. Both of these major galleries will be opened to the public next year. Six years of planning and nearly $7,000,000 have been invested in the renovation of this historical structure. Both galleries now require additional funds urgently and immediately in order to prepare the galleries and collections for the opening.

Research bureaus

1967 Appropriation	$2, 703, 000
1968 Increase Requested	421, 000
Increase by House	132, 000
Additional Increase Requested	276, 000

The House Report directed that the Tropical Research Institute be scrutinized to assure that it is working toward achievement of specific and practical research projects and that the results of this research effort are commensurate with costs. The Smithsonian will follow these instructions diligently and will be prepared to report results periodically.

This research program requires $78,000 to strengthen the small staff of only 5 professional employees. In addition to conducting a limited program of tropical research, the Institution manages a biological research preserve for utilization by students and professional investigators from other institutions. The number of working scientific visitors in 1966 was 224 as compared with 109 scientists in 1965.

This valuable preserve requires a modest increase in funding in order to increase its research potential and productivity.

The Radiation Biology Laboratory is developing and supplying solar radiation information to scientists throughout the United States. No other laboratory is known to be attempting an attack on the same problems and unknowns. The Laboratory requires $35,000 to add laboratory technicians and to provide computer services for large volumes of data developed in scientific experimentation.

Traditional Smithsonian programs of research in the natural sciences are now identified as Ecology and Oceanography. For these purposes $163,000 are needed. The small staff of 5 in Ecology requires an addition of $42,000. This will develop a coordinated program of field and laboratory work within the Smithsonian's own research bureaus and in collaboration with the research of other Governmental agencies and universities. The availability of the Smithsonian's biological reference collections and the availability also of our Chesapeake Bay Center for Field Biology provide unique opportunities which can be realized with the increase requested.

The Oceanographic Sorting Center is utilized by Federal agencies and universities throughout the country for the initial identification of marine specimens which are collected by expeditions of other organizations. The shortage of competent taxonomists has retarded national progress in oceanic biology.

The Center increases the efficiency of available scientists by providing the sorting services and also by providing training for young biological technicians. The requested increase of $121,000 will assist in meeting the known demand for these services.

Buildings management department

1967 Appropriation	$6, 740, 000
1968 Increase Requested	530, 000
Increase by House	400, 000
Additional Increase Requested	130, 000

To maintain and operate additional building spaces, the Buildings Management Department needs an increase of $130,000.

The Fine Arts and Portrait Galleries Building is scheduled for public opening in fiscal year 1968. Also, four new major exhibition halls will be opened in the Museum of History and Technology. The operating budgets for these buildings have been most rigorously calculated in the light of our experience and in consultation with experts of the Public Buildings Service. The additional amount of $130,000 is necessary to provide minimal service for these extra building spaces and to cope with the increasing use of the buildings by over 12 million visitors annually.

Other activities (including administrative and technical support)

1967 Appropriation	$3, 357, 000
1968 Increase Requested	562, 000
Increase by House	234, 000
Additional Increase Requested	328, 000

Administrative and technical support at the level of the Budget Request is essential to enable the programs of the Institution to perform effectively. The Office of the Secretary requires $50,000 for technical and administrative services to enable the Secretary to direct and evaluate the programs of the Institution. To utilize the economy and efficiency of automatic data processing in the work of the Institution, $25,000 are needed. To enable one of the oldest and most carefully selected library collections of natural science and history to serve the scientists and scholars of the Institution, $50,000 are required to meet existing needs. In order to document the results of historical and scientific research, the Press requires $50,000 for increased editing and printing costs.

The Fiscal Division's accounting work is directly related to the volume of transactions of the Institution. $5,000 is required for an additional fiscal clerk to handle the increase workload.

To supplement the traditional museum exhibitions, special events of a cultural, educational, and historical nature are planned for the benefit of the millions of visitors to the city. $10,000 is needed for the services of one assistant to plan and produce these events.

The Personnel Division requires an additional amount of $16,000 to provide additional personnel to handle the workload resulting from the substantive programs of the Institution.

To assure that the resources of the Institution are used to maximum effectiveness by citizens and organizations throughout the country, the Institution promotes understanding of its programs in science, history, and art. This mass communication should be improved by more effective utilization of radio, TV, and film. An increase of $25,000 is requested for the employment of two professionals for this purpose.

The Photographic Services Division requires $17,000 for two employees and supplemental commercial photography in order to fill requests on a timely basis and to copy historically important prints to forestall their loss through deterioration.

An additional increase of $35,000 will enable the Office of Education and Training to make more effective educational use of the museums. Teachers would be instructed in the use of the museums, educational materials based on the museums' collections will be prepared, leaflets will be drafted to provide informative responses to thousands of inquiries received annually, research on the educational effectiveness of museum exhibits will be undertaken, and tours will be developed to serve the millions of visitors who come to the museums and art galleries.

For International Activities, an increase of $45,000 is requested. The Office of International Activities administers the foreign currency program and assists the Institution's professional staff in administering research projects and exhibits programs involving international cooperation. The increase in these activities requires additional administrative assistance for the existing staff of six employees. The International Exchange Service as the official agency for the exchange of Government documents and private scientific and literary publications with foreign governments requires an additional clerk to handle the increased volume of shipment and funds to meet increases in transportation costs.

SMITHSONIAN INSTITUTION

"ARCHEOLOGICAL RESEARCH AND EXCAVATION (SPECIAL FOREIGN CURRENCY PROGRAM)"

CHANGE IN AMOUNT

On page 42, line 5, change $3,000,000 to $4,000,000.

Museum programs and related research (special foreign currency program)

1967 Appropriation	$2,316,000
1968 Increase Requested	3,784,000
Increase by House	684,000
Additional Increase Requested	1,000,000

Restoration of $1,000,000 of the House reduction of $3,100,000 is requested for three urgent purposes:

$250,000 is needed to accelerate the translation of foreign reference works in systematic biology. With present funding, the Institution cannot obtain foreign monographs needed for comparative studies of materials in its own collection. For example, the urgently needed *Flora of the U.S.S.R.* in 30 volumes will not be received under present funding for over 20 years. This is an excellent scientific work which is considered indispensable to preparing a revised *Flora of North America.*

$400,000 is required for research in systematic and environmental biology as a part of the International Biological Program. This work would be carried out by the Institution in collaboration with other American institutions. It is needed to enlarge the National Collections in entomology, botany, and zoology.

$300,000 is required for cooperative programs with other museums of the United States and abroad. The funds would provide training courses and conferences for museum professionals, for advisory services of American museum professionals requested by foreign museums, and for the production of model science teaching exhibits in India, Egypt, and Israel under a plan submitted by the International Council of Museums.

$50,000 is needed for program development and administration, commensurate with the increased responsibilities under the program as passed by the House of Representatives.

SMITHSONIAN INSTITUTION

"RESTORATION AND RENOVATION OF BUILDINGS"

CHANGE IN AMOUNT

On page 42, line 21, change $1,100,000 to $1,308,000.

Restoration and renovation of buildings

1967 Appropriation	$2, 300, 000
1968 Estimate of Appropriation	1, 353, 000
Appropriation Approved by House	1, 100, 000
Appropriation Requested of the Senate	1, 308, 000

Restoration of $208,000 of the House reduction of $253,000 is necessary to accomplish the following improvements.

As a part of the current renovation of the original Smithsonian Institution Building, estimated to cost $2,744,000, a small kitchen and dining room are planned at an estimated cost of $100,000. The intensified use planned for this fine old building combined with the inadequacy of restaurants in this area have created the need for a small dining facility in this building. The facilities can be installed most economically during the general building renovation which will be placed under contract within 4 months.

The House allowance of $100,000 for additional renovation work in the Fine Arts and Portrait Galleries Building will make possible accomplishment of work excluded from the original contract because of the limitation of funds. Included are the repointing and cleaning of stone work, birdproofing, landscaping of the courtyard, cleaning of interior marble work, and correcting ceiling heights. Because of the general increase in construction costs, however, it is necessary to request restoration of $25,000 in order that all of these essential improvements can be completed.

To repair a portion of the existing farm structures and provide necessary utilities and roadways at the Chesapeake Bay Center for Field Biology, restoration of $40,000 of the House reduction of $75,000 is requested. By accomplishing minimum repairs and improvements, this unrivaled natural preserve of 700 acres will provide a unique opportunity for research in field biology, in cooperation with local universities.

The House allowance of $139,000 for relocation of the Radiation Biology Laboratory will finance a portion of the necessary repairs to a suitable laboratory building located on the reservation of the old Bureau of Standards. Restoration of the $43,000 which was not included by the House is urgently needed in order to accomplish sufficient improvements in the fiscal year 1968 to permit partial occupancy by the Radiation Biology Laboratory. The removal of the Laboratory from the basement of the original Smithsonian Institution Building is required as soon as possible in order to permit the scheduled renovation of that building to proceed this calendar year.

NATIONAL GALLERY OF ART,
Washington, D.C., May 1, 1967.

Hon. CARL HAYDEN,
Chairman, Committee on Appropriations,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: H.R. 9029, making appropriations for the Department of Interior and related agencies for the fiscal year ending June 30, 1968, was approved by the House of Representatives on April 27, 1967. We respectfully request that the appropriation provided thereby for "Salaries and Expenses, National Gallery of Art," be amended as follows:

Page 44, line 8, "$3,000,000," change to, "$3,054,000."

The requested change will restore the $54,000 reduction made by the House in the budget estimate of $193,000 for alterations and improvements in the Gallery building. We believe that the full amount requested for this item is justified for the following reasons:

> (1) The work covered by the $193,000 is a cohesive part of the total five-year program, and in our judgment can be accomplished at an estimated savings of $20,000 under the cost of doing the same work under two contracts over a two-year period.
>
> (2) Additional storage, office, and other work space for the supporting activities of the Gallery is urgently needed to permit modernization of facilities and to promote greater efficiency of the present staff. The five-year plan proposed on pages 13, 14, 15, and 16 of our budget submission represents minimal planning for the accommodation of growth in the Gallery's program. Any material deferment of parts composing logical segments thereof will seriously affect our ability to discharge our public-service responsibilities.

We are not unmindful, in requesting this restoration, of the necessity to curtail and defer some needs which in more normal times could be justified. For that reason we are restricting our request to the improvement item which we believe, in the best interest of the Government, should not be deferred.

Respectfully yours,

E. JAMES ADAMS, *Administrator.*

FEDERAL FIELD COMMITTEE FOR DEVELOPMENT PLANNING IN ALASKA,
Anchorage, Alaska, April 27, 1967.

Hon. CARL HAYDEN,
Charman, Committee on Appropriations,
United States Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reference to Title II of H.R. 9029, the Department of the Interior and Related Agencies Appropriation Act, 1968, and the accompanying House Report No. 206. This bill contains an appropriation of $190,000 for the Federal Development Planning Committees for Alaska, a reduction of $135,000 from the request of $325,000.

After a most thorough review of the effect of the House action on the program requirements and objectives of the Alaska Planning Committees, we are appealing for full restoration of the reduction of $135,000. Provided as an attachment to this letter is a data sheet and justification for the amendment requested.

Your favorable consideration of this amendment to H.R. 9029 is respectfully requested.

Sincerely yours,

DAVID M. HICKOK,
(For Joseph H. FitzGerald,
Chairman, Federal Field Committee).

FEDERAL DEVELOPMENT PLANNING COMMITTEES FOR ALASKA

Salaries and Expenses, Fiscal Year 1968

(House Hearings, pp. 488–518)

1967 appropriation	$190,000
1968 request	325,000
House allowance	190,000
House reduction	135,000
Amendment requested	135,000

AMENDMENTS REQUESTED

Page 45, line 3, strike out "$190,000" and insert "$325,000", an increase of $135,000 in the appropriation.

HOUSE REPORT

Salaries and expenses. The amount of $190,000 is provided for necessary expenses of the Federal Development Planning Committees for Alaska, as established by Executive Order 11182 of October 2, 1964. The hire of passenger motor vehicles and services, as authorized by 5 U.S.C. 3109 is included. This amount is $135,000 below the budget estimate and is the same amount as was appropriated for fiscal year 1967.

The Committee has serious reservations with regard to the effectiveness and objectivity of work being performed by the Federal Development Planning Committees for Alaska. It is of the opinion that there is a lack of practical purpose in a good portion of the economic research currently being performed by this agency. In addition, the Committee noted apparent duplication of effort along various lines of research.

The increasing assistance being received by this activity from the Economic Development Administration was taken into consideration when the Committee arrived at its recommended appropriation level.

Application of House allowance

[Amounts in thousands]

Activity	1967 appropriation		1968 request		House allowance		Increase (+) or decrease (−), bill compared with request		Amendment requested	
	Permanent positions	Amount	Permanent positions	Amount	Permanent positions	Amount	Permanent positions	Amount	Permanent positions	Amount
Field committee	7	$166	14	$325	7	$190	−7	−$135	+7	+$135
Review committee		24								
Total	7	190	14	325	7	190	−7	−135	+7	+135

EFFECTS OF HOUSE ACTION

The House allowance has not provided an increase over the 1967 appropriation.

JUSTIFICATION

The estimate for this appropriation in FY 1968 was $325,000. The House Report provides $190,000, a reduction of $135,000. Restoration of the entire amount is requested.

Impact of House Action on the Program

The House allowance will mean that the seven additional positions requested cannot be financed. Subsequently, the Federal Field Committee will be deprived of an adequate staff secretariat essential to achieve a high output in *all functional fields of planning.* Planning Officers in the several fields requested in the budget are required to correlate and coordinate State and Federal agency efforts.

It is axiomatic that such a small professional staff "speaking the language" and "knowing the territory" in their fields is the bare essential of any intelligent regional planning effort to enhance and speed the development of Alaska's economy. By comparison with the dollar outlays for regional planning in other sections of the United States: i.e. Appalachia, New England, the Upper Great Lakes, the Ozarks, the Four Corners, and the Atlantic Coastal Plains, the 1968 budgeting requirements of the Alaska Development Committees is of a ratio of 1 to 4.

Restoration of the full budgetary request of $325,000 is essential to the Committee's task at hand. Without full restoration the task is impossible at an acceptable quality level.

House Committee Comments

The House Committee made several comments pertaining to the operation of the Federal Development Planning Committees for Alaska. The following points are made in an effort to clarify the organization, mission, and accomplishments of these Committees.

Point 1.—Effectiveness, objectivity and practical purpose of Committee work. The mission of the Federal Field Committee for Development Planning in Alaska, as enunciated in Executive Order 11182, is precisely to achieve the greatest effectiveness, objectivity and practical purposes possible for the conduct of Federal agency programs and developments in Alaska through inter-agency coordinated effort and the close correlation of State and Federal program objectives.

With this end in mind the Field Committee initially organized and utilized several inter-agency (State and Federal) Task Force groups to examine the needs of Alaskan development and economic enhancement which could be met through State and Federal programs. Agency missions, objectives and specific programs were examined and questioned within an overall search for valid contributions to the Alaskan economy and identification of gaps in Federal and State efforts.

The Field Committee's report to the President, endorsed by the Cabinet Review Committee, provided an initial perspective of Federal and State activities in Alaska. Such an overview of the Alaska "frontier" economy had never before been undertaken. It provided a prerequisite conceptual view for the focus of combined State-Federal program efforts for Alaskan development. It enunciated program strengths and program weaknesses within the State agencies and particularly within Federal Departments and Agencies.

This initial overview provided analysis for programming a series of priority State-Federal research and planning efforts on particular nagging problems affecting the Alaska economy. Such priority efforts undertaken in FY 1967 encompass four goals:

(a) The economic development of the State on a long range basis with special emphasis placed upon the broadening of the private sector within the total economy;

(b) The mitigation of serious economic problems of many sectors of the economy, such as for Native populations who have only seasonal employment;

(c) The reduction of costs for a more competitive economy and broadened range of business opportunity within the State through public sphere activities to improve communications, provide low cost power and the development of transportation networks etc.; and

(d) The achievement of a better integration of the Alaskan economy within the economy of the United States as a whole and the international trade pattern of the United States.

Some of the specific practical steps toward these goals taken by the Field Committee are as follows:

1. Background analysis on the Alaska Communications System in support of legislation for sale to the private sector;
2. Recommendations to the bureau of the Budget, Civil Service Commission and individual Federal agencies for the hire of native Alaskans to fill Federal job opportunities in Alaska;
3. The integration of Federal and State agency efforts in a concerted analysis of the Native social, economic and resource problem;

4. The correlation of several State and Federal agency Alaska transportation studies and program efforts to pinpoint deficiencies and gaps in the achievement of an integrated land-sea-air transport system for Alaska;

5. Coordinated efforts with the Federal Power Commissions "Alaska Power Survey" leading to enunciation of Alaska power development policies.

6. In-depths analysis of Alaska-Japanese and Alaska-Canadian trade relations, problems and opportunties; and

7. Cooperation with the Public Land Law Review Commission in the funding and execution of the Alaska Public Land Law and Policy review.

Point 2.—Duplication of Agency Effort.

Rather than duplicating individual agency effort, exactly the opposite is true of the Committee program. All Alaska Federal and State agencies are for the first time currently aware of the efforts of others. Agencies are complementing each other and the staff of the Field Committee, in-house or by contract, further supplements and complements agency work to fill in gaps. Together all for the first time are being correlated toward the development of a comprehensive State-wide plan of development. To these coordinated ends the Federal Power Commission will contribute its Alaska Power Survey, the Federal Maritime Administration its marine transportation analysis and solutions, the Department of the Interior its several resource development planning efforts in minerals, mining, land management, fisheries and recreation and the Corps of Engineers and ESSA their recommendations for harbor and coastal developments, and so forth.

Most important of all is that for the first time on such a broad scale resource planning, transportation planning, industrial opportunity and human needs, etc. are being considered concurrently in joint effort. Personnel of individual agencies are detailed to work with the Field Committee staff as in the case of a Bureau of Indian Affairs Officer on the native problem. Field Committee staff has close contact with Washington and Regional Office personnel in their assigned study areas. For example, in the recreation field, close coordination is not only extant with the Bureau of Outdoor Recreation but also with the Federal recreation management agencies: National Park Service, U.S. Forest Service, Bureau of Sport Fisheries and Wildlife and Bureau of Land Management. Each agency contributes to staff activity through the interagency task force arrangement and high executive contact is frequent between the Field Committee Chairman and the Secretaries of Interior and Agriculture and their Bureau Directors in order to achieve broad policy understanding and control.

Point 3.—Increased Assistance from the Economic Development Administration.

Executive Order 11182 provides that assistance be rendered to the Alaska Field Committee from all Federal agencies. These contributions take various forms, the assignment of personnel, contributions of data, etc. Only the Economic Development Administration has provided financial support. This support has been drawn from the regional planning program of Title V of P.L. 89–136.

It was offered with the premise that the present Alaska Development Committee planning apparatus might evolve into a Regional Commission as authorized by P.L. 89–136. Because of the unique Federal-State involvement in Alaska it has been determined to continue the present organization. This decision precludes any further EDA assistance to the Alaska Committees under the Title V Regional Planning Program in FY 1968. Therefore, direct appropriations are required to carry on activities begun in part with EDA assistance in fiscal years 1966 and 1967.

LEWIS AND CLARK TRAIL COMMISSION

SALARIES AND EXPENSES

(House hearings, Pt. 2, pp. 518–523)
(Senate hearings, p. 1333)

Appropriation 1967	$25,000
Estimate	35,000
House Allowance	25,000
Restoration Requested	10,000

(P. 45, line 9)

AMENDMENT REQUESTED

Page 45, line 9 strike out "$25,000" and insert in lieu thereof "$35,000",—an increase of $10,000 in the appropriation.

HOUSE REPORT

"The Committee recommends an appropriation of $25,000, a reduction of $10,000 below the budget estimate, for operating expenses of the Lewis and Clark Trail Commission authorized by Public Law 88–630, as amended. This legislation provides for the establishment of a 28 member commission for a five-year period to advise on and coordinate activities of agencies and individuals interested in preserving and marking as much as possible of the route followed by Lewis and Clark in 1804–1806".

JUSTIFICATION

The amendment restores the reduction of $10,000 made by the House in the budget estimate. This amount is for the following activity:

Activity: Lewis and Clark Trail Commission:	
Appropriation, 1967	$25,000
Budget estimate, 1968	35,000
House allowance, 1968	25,000
Restoration requested	10,000

A breakdown of the restoration requested by object of expenditure follows:

11.0	Personnel compensation	$263
12.0	Personnel benefits	30
21.0	Travel and transportation of persons	607
24.0	Printing and reproduction	6,000
25.2	Services of other agencies	3,000
26.0	Supplies and materials	100
	Total	10,000

Restoration to the full amount of the estimate is required in order to finance the reprinting and reproduction costs of the study report "The Lewis and Clark Trail—a Proposal for Development", and to provide funds to carry out the preliminary work required toward the making of a movie to be produced by Metro-Goldwyn-Mayer Studios.

A limited number of copies of the report was produced a year ago and since that time the demand for the report has exceeded the original printing order and the Bureau can no longer fill this demand.

The Metro-Goldwyn-Mayer Movie Studio has agreed to make a documentary movie on the Lewis and Clark Trail provided the preliminary work required in preparation for the movie is carried out by the Bureau. This documentary movie will cost many thousands of dollars and the Bureau's contribution will be very small in comparison to the contribution to be made by Metro-Goldwyn-Mayer in producing this film.

LEWIS AND CLARK TRAIL COMMISSION

SALARIES AND EXPENSES

(House Hearings Pt. 2, pp. 718–723;
Senate hearings, p. [illegible])

Appropriation 1967	$25,000
Estimate	35,000
House Allowance	25,000
Restoration Requested	10,000

H.R. [illegible], Page [illegible]

AMENDMENT REQUESTED

Page [illegible], line [illegible] strike out "$25,000" and insert in lieu thereof "$35,000", an increase of $10,000 in the appropriation.

HOUSE ACTION

"The Committee recommends an appropriation of $25,000, a reduction of $10,000 below the budget estimate, for operating expenses of the Lewis and Clark Trail Commission authorized by Public Law [illegible], as amended. This legislation provides for the establishment of a [illegible] member commission for a five-year period to advise on and coordinate the activities of agencies and individuals interested in preserving and marking as much as possible of the route followed by Lewis and Clark in 1804–1806."

JUSTIFICATION

The amendment restores the reduction of $10,000 made by the House in the budget estimate. This amount is for the following activity:

Activity: Lewis and Clark Trail Commission:

Appropriation, 1967	$25,000
Budget estimate, 1968	35,000
House allowance, 1968	25,000
Restoration requested	10,000

The breakdown of the restoration requested by object of expenditure follows:

11.0 Personnel compensation	[illegible]
12.0 Personnel benefits	[illegible]
21.0 Travel and transportation of persons	[illegible]
24.0 Printing and reproduction	[illegible]
25.2 Services of other agencies	[illegible]
26.0 Supplies and materials	[illegible]
Total	10,000

Restoration of the full amount of the request is required in order to continue the reprinting and to provide for costs of the study report "The Lewis and Clark Trail—a Proposal for Development", and to provide funds to carry out the preliminary work required toward the making of a movie to be produced by Metro-Goldwyn-Mayer Studios.

A limited number of copies of the report was [illegible]. Since that time the demand for the report has exceeded the original [illegible] and the Bureau can no longer fill this demand.

The Metro-Goldwyn-Mayer Movie Studio has agreed to make a documentary movie on the Lewis and Clark Trail provided that the preliminary work required in preparation for the movie is carried out by the Bureau. This documentary movie will cost many thousands of dollars and the Bureau's contribution will be very small in comparison to the contribution to be made by Metro-Goldwyn-Mayer in producing this film.

INDIVIDUALS AND ORGANIZATIONS INDEX

A

Page

Adams, J. James 2077, 2089–2092
Agard, Aljoe, chairman, Standing Rock Sioux Tribe, Fort Yates, N. Dak. 711
Ahlquist, H. Maurice, director, Department of Conservation, Olympia, Wash 524
Aiken, Hon. George D., U.S. Senator from Vermont 1788
Allen, Harry C., Jr 849
American Forestry Association 1807
Anderson, B. F., president, Bay Creek Watershed Conservancy District 1820, 1821
Anderson, Hon. Clinton P., U.S. Senator from New Mexico 335, 393, 522, 785, 2421, 2473
Arriola, Mr. Speaker, Guam Legislature 195
Aspinall, Hon. Wayne N., U.S. Congressman from Colorado 135, 145–152
Atherton, Charles H 1823, 1825, 1826

B

Bacon, E. M 1734
Bagby, George T., director, Georgia Game and Fish Commission 1234
Bahn, Ralph 1957
Baker, Arthur A 397, 474, 2443
Baker, Howard W 527
Baker, John A 1623, 1624, 1628, 1735, 1821
Barden, Charles S., Jr 2275
Barry, Frank J 987, 990, 992, 994–996
Bartlett, Hon. E. L., U.S. Senator from Alaska 1, 75–77, 123–128, 131–134, 195, 206, 216–223, 337, 388, 389–393, 499, 500, 527, 627, 810, 811, 813–819, 1149, 1326, 1543, 1595–1601, 1603, 1610, 1611, 1615, 1617–1621, 1623, 1823, 1902–1904, 1919, 1923–1925, 1931, 1933, 1952–1955, 2000, 2064, 2066–2075, 2077, 2182, 2183, 2187–2198, 2207, 2209–2211, 2214, 2219–2228, 2250–2265, 2267–2270, 2272, 2273, 2275, 2279, 2281, 2285–2290, 2292, 2293, 2436, 2454, 2460, 2461, 2469–2471.
Bates, Thomas F 81, 118–120, 131, 132
Bay Creek Watershed Conservancy District 1820
Beirne, James P 339, 346, 360, 369–371, 373, 378, 382, 385, 386, 394
Beithon, Hon. Paul J., mayor of Wahpeton, N. Dak 779
Belindo, John, National Congress of American Indians 2394
Benjamin, Samuel 1155, 1226, 1227, 1273
Bennett, Robert L 677, 680, 681, 686, 699, 705, 733, 734, 736, 737, 740, 770–778, 783–786, 792, 798, 803–811, 813, 814, 816–823, 826–831.
Bennett, Hon. Wallace F., U.S. Senator from Utah 2436, 2439, 2473
Berkoma, Adah 1239
Bethel, James S 1808, 1810
Bible, Hon. Alan, U.S. Senator from Nevada 1, 65–69, 151, 152, 193–195, 207–216, 220, 223, 225, 249, 252, 254–256, 260–270, 293–298, 384–387, 393–396, 476–478, 480, 483, 485, 486, 488–492, 509, 527, 588, 589, 591, 605, 613, 614, 652–654, 660–676, 819–831, 833, 925–927, 931–934, 937, 938, 951, 974, 1155, 1295–1298, 1333, 1361, 1363, 1364, 1387, 1388, 1507, 1508, 1510, 1511, 1527, 1528, 1536, 1540–1542, 1739, 1766, 1768, 2293, 2331
Biddle, Livingston 1835, 1894, 1895
Bill, Harthon L 527, 1339, 1524
Bjerke, L. A., acting city health officer, Wahpeton, N. Dak 779

Page

Blackman, C. L., chairman, Saline County Board of Supervisors 1819
Bledsoe, Robert P., executive secretary, Wyoming Wool Growers Association, Casper, Wyo 2351, 2355
Blessing, James H 1835, 1905
Bloom, Miss Kathryn 1827, 1832–1834
Boggs, Hon. J. Caleb, U.S. Senator from Delaware 2442–2444, 2446
Bond, Mrs. Sally H 1827
Boyajian, Paul 81, 118, 127–129, 131
Bozarth, Donald F 2227, 2228, 2264
Bradley, James 2093, 2177, 2178, 2180, 2183, 2189–2191, 2194–2196, 2214, 2219, 2222
Brandborg, Stewart M., executive director, The Wilderness Society 2366
Breen, Joseph M 81, 271, 833, 1823
Buckley, John 119, 121, 132–134
Buckheister, Dr., president, National Audubon Society 1247
Buell, Noble E 1155, 1298
Burdick, Hon. Quentin M., U.S. Senator from North Dakota 2473
Byler, William, executive director, Association on American Indian Affairs, New York, N.Y 392
Byrd, Hon, Robert C., U.S. Senator from West Virginia 1, 36, 73–75, 335, 513, 635, 833, 847, 858, 860–862, 864–869, 1024, 1148, 1155, 1305–1307, 1542, 1543, 1549–1551, 1623, 1773.
Byrne, J. J 1623

C

Cain, Stanley A 1, 81
Callaham, R. Z 1623
Cannon, Hon. Howard W., U.S. Senator from Nevada 2473
Cannon, Maynard, clerk, Saline County, Ill 1819
Carlton, Charles F., representative, Southern Hardwood Forestry Research Group, Delta Council, and Louisiana Forestry Association 2307, 2309, 2310
Carmack, William R 677, 705–708, 710, 733, 734, 737, 738, 822
Case, Hon. Clifford P., U.S. Senator from New Jersey 1321
Chadwick, Henry V 1957, 2059, 2060, 2071, 2072
Church, Hon. Frank, U.S. Senator from Idaho 1265, 1787, 2458, 2460, 2461, 2473
Clague, G. R 1957
Clapper, Louis S., chief of Conservation Education, The National Wildlife Federation 2343
Clegg, Luke, city commissioner, Provo, Utah 2463
Cliff, E. P 1623, 1635, 1637, 1639, 1704, 1708, 1710, 1713, 1715–1721, 1727, 1728, 1733, 1735–1737, 1740, 1749, 1750, 1764–1766.
Cole, Bert L., Washington Commissioner of Public Lands 1813
Conrad, Charles H 2227, 2228, 2251–2268
Coombs, L. Madison 677
Corke, Charles P 677, 734–736, 739, 785–787
Costley, R. J 1623
Cotton, Hon. Norris, U.S. Senator from New Hampshire 1784
Cox, Robert W 1835
Crafts, Edward C 1333–1337, 1339, 1355, 1359–1364, 1382, 1387–1390, 1506–1511, 1525–1531, 1536, 1538–1542.
Crow, John C 339, 361, 362
Crowther, Harold E 1031, 1036–1040, 1045, 1097–1099, 1101, 1102, 1103–1106, 1108, 1115–1117, 1119, 1125, 1126, 1129–1131, 1134, 1135, 1139, 1140, 1142, 1144–1148.

D

Damou, Nelson, vice chariman, Navajo Tribal Council 2394
David, Ross 1603, 1608–1611, 1617
Denit, W. Darlington 124
Dent, William C 1339
deYoung, John E 153, 265, 266
Dickerman, M. B 1623
Dillon, Enoch L 2275

Page
DiLuzio, Frank C. 1, 25, 34, 81, 1554, 1555, 1598
Director, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service 2501
Dirksen, Hon. Everett McKinley, U.S. Senator from Illinois 2310, 2315
Dixon, Verl G., mayor of Provo, Utah 2463
Douglas, Hon. Paul, U.S. Senator from Illinois 2310
Dressler, John, chairman, Inter-Tribal Council of the State of Nevada, Inc 825, 1296
Droege, R. F. 1339, 1623, 1710, 1711

E

Eaton, E. D. 271, 285, 288, 289, 297, 333, 334, 337, 671
Eaton, Paul, clerk to subcommittee 1329
Eckles, Howard 119
Edgerton, Wallace B. 1835
Efferson, J. Norman, dean, College of Agriculture, Louisiana State University, Baton Rouge, La. 1240
Ellender, Hon. Allen J., U.S. Senator from Louisiana 1240
Engelhardt, Melvin E. 1827, 1834
Ervin, Hon. Sam J., U.S. Senator from North Carolina 1248
Everitt, Robert S. 1324
Everitt Lumber Co., Inc., Fort Collins, Colo 1324

F

Fallon, Hon. George H., U.S. Representative from Maryland 523
Fannin, Hon. Paul J., U.S. Senator from Arizona 2474
Feidler, Ernest R. 2077
Ferguson, Dr. H. G. 489
Fermanich, Carl V. 1339
Finale, William E. 677
Fish Cultural Center, Bozeman, Mont 1324
Fitzgerald, Joseph H. 1603, 1611, 1614, 1615, 1617–1620
Foote, Leonard E., southeastern field representative and member, Southeastern Association, Lesser Migratory Birds Committee 1231
Fox, G. D. 1623
Freehling, Robert J. 1543, 1549–1551
Fulbright, Hon. J. W., U.S. Senator from Arkansas 1798
Fumich, George, Jr. 73, 74, 997, 1002, 1008, 1021–1023, 1030

G

Galler, Sidney R. 2093, 2184, 2188, 2210, 2220, 2222
Gamble, James F., executive director, Meramec Basin Association 1797
Gard, L. E., chairman, executive committee, Shawnee resource conservation and development project 1820
Gatewood, Howard, executive vice president of the Fine Hardwoods Association 2310, 2313, 2316
Gehrig, Leo J. 1957
Goldman, Edward L. 2227, 2228, 2269, 2270, 2273
Goodwin, Harry A. 1339
Gossman, Harold, president, Lake Monroe Association, Bloomington, Ind 1796, 1797
Gott, Don, executive director of the American Walnut Manufacturers Association 2310, 2316, 2318
Gottschalk, John S. 1115, 1159, 1161, 1163, 1226–1228, 1230, 1235–1238, 1241, 1242, 1245–1250, 1261–1263, 1273, 1280, 1281, 1285, 1291–1294, 1297–1302, 1304–1316, 1319, 1320, 1339, 1511–1513, 1515, 1525, 2501, 2502
Gowans, George A. 527
Grant, Charles L. 1623
Gray, Gordon, chairman, The National trust for Historic Preservation 2334, 2339, 2340
Greeley, A. W., associate chief, Department of Agriculture 1623, 1769, 1795
Gresh Walter A. 1261
Grotecloss, Edward 2259
Guerrero, Hon. Manuel F. L., Governor of Guam 188–191, 192–195

H

Page

Hanna, Jean R ---------- 977, 983
Hansen, Hon. Clifford P., U.S. Senator from Wyoming ---------- 2446, 2448
Hansen, Hon. Julia Butler, U.S. Representative from Washington ---------- 1239
Hardy, Mrs. Gladys K ---------- 1835, 1925
Harris, Hon. Fred R., U.S. Senator from Oklahoma ---------- 2454
Harris, Richard L ---------- 1339
Hartzog, George B., Jr ---------- 527, 529, 539–543, 544, 549, 550–553, 583, 584, 587–589, 591–593, 595–608, 612–616, 625, 626, 634, 635, 644, 651–656, 659–676.
Hatfield, Hon. Mark O., U.S. Senator from Oregon ---------- 2448, 2453, 2454, 2474
Haverland, F. M ---------- 677, 773, 774, 776, 783, 784, 793, 794, 809, 816
Hayden, Hon. Carl, chairman, U.S. Senator from Arizona ---------- 1, 10, 13, 24, 56, 65, 69, 71, 73, 79, 81, 116–123, 135, 145, 149, 150, 152, 153, 186, 188, 192, 193, 196, 200, 202–206, 271, 286–293, 297, 298, 335, 337, 339, 340, 342, 346, 360–364, 369–371, 373, 378, 380, 397, 408, 473–475, 481–485, 487, 488, 492, 495–502, 506–517, 522, 525, 527, 584, 587, 588, 591–593, 595, 596, 603, 605–608, 610–614, 616, 625–627, 635, 636, 644, 645, 651, 652, 654–656, 659, 660, 677, 680, 681, 686, 698, 699, 702, 703, 705–714, 733–741, 770–778, 783–787, 792–794, 796, 798, 803, 833, 842, 844, 846, 847, 849, 858–860, 866, 869, 870, 918–925, 928–931, 935–938, 994–997, 1002, 1008, 1020–1024, 1030, 1031, 1036, 1040, 1045, 1046, 1097–1099, 1101–1106, 1108, 1109, 1114–1117, 1119, 1120, 1125–1127, 1129–1131, 1134, 1135, 1138–1140, 1142, 1143, 1147, 1148, 1153, 1155, 1161, 1163, 1226–1228, 1230, 1234, 1235–1238, 1240–1243, 1245–1250, 1260–1267, 1273, 1274, 1280–1282, 1285, 1287, 1291–1295, 1298, 1303–1305, 1307, 1320, 1324, 1333, 1334, 1336, 1339, 1355, 1359–1365, 1382, 1387–1390, 1506, 1508–1510, 1513–1515, 1525, 1526, 1528, 1530, 1531, 1536, 1538–1543, 1546, 1548, 1549, 1553, 1554, 1570, 1571, 1587–1592, 1595, 1597, 1598, 1601, 1603, 1769, 1770, 1785, 1798, 1801, 1817, 1821, 1823, 1825–1827, 1832–1835, 1889, 1894, 1895, 1897–1902, 1904, 1911–1919, 1921–1923, 1925, 1933, 1941, 1945–1952, 1955, 1957, 1990, 2001–2011, 2012, 2058–2060, 2062, 2064–2066, 2077, 2086, 2088–2093, 2100, 2105, 2177–2187, 2293, 2297, 2301–2303, 2305, 2310, 2312, 2316, 2319, 2322, 2329–2331, 2334, 2339, 2340, 2342, 2343, 2346, 2350, 2355–2357, 2363, 2366, 2376, 2379, 2384, 2394, 2395, 2401, 2404, 2435, 2436, 2439, 2442–2444, 2446, 2448, 2454, 2458, 2460, 2461, 2464, 2465, 2470, 2471, 2492, 2525, 2530.
Hayes, Lloyd D ---------- 2077, 2091
Heller, Samuel ---------- 153
Hendee, C. W., deputy chief, U.S. Department of Agriculture ---------- 1623, 1713, 1735, 1796
Hendricks, Ernest L ---------- 397, 474, 494, 501, 508
Herman, William I ---------- 1933
Hibbard, Walter R., Jr ---------- 73, 849, 854, 858, 860–862, 864–870, 920–938, 948, 950–952, 956, 957, 964–966, 969–971, 974.
Hickok, David ---------- 1603
Hodges, Ralph D., Jr., vice president, National Forest Products Association ---------- 1805
Hoehn, Elmer L ---------- 833, 846
Hoffa, Harlan ---------- 1827
Holland, Hon. Spessard L., U.S. Senator from Florida ---------- 1785, 1786, 1793
Howe, Harold II, U.S. Commissioner of Education, Washington, D.C ---------- 1832, 1917
Hruska, Hon. Roman L., U.S. Senator from Nebraska ---------- 1769
Humphrey, Hon. Hubert H., the Vice President of the United States ---------- 2177, 2289
Hummel, Edward A ---------- 527
Hunter, Jack ---------- 1553, 1554, 1557, 1565, 1570, 1587–1592, 1595–1601
Hunter, Robert L., executive director, Inter-Tribal Council of Nevada ---------- 831

I

Ingling, George W ---------- 192
Irby, W. M ---------- 1623

J

Page

Jackson, Hon. Henry M., U.S. Senator from Washington 522, 523, 1023, 1817, 2473
James, Harold L 397, 474, 496
Jemison, G. M 1623, 1712, 1715, 1719–1723, 1726–1729, 1731–1733, 1764, 1765, 1794
Jensen, Elmer R., chief, Wahpeton Fire Department, Wahpeton, N. Dak 780
Jensen J. E. N 527
Jett, T. Sutton 527, 551, 653
Johanson, Joel M 397, 494
Johnson, Charles C 1957, 2005, 2069, 2070
Johnson, Frank E 397
Johnson, Raymond E 1155, 1228, 1299, 1303
Johnson, Lyndon B., President of the United States 25, 26, 2290
Jones, Douglas 1603
Jordan, Hon. Len B., U.S. Senator from Idaho 382, 1243

K

Kasuga, Kazumi 1957
Keeney, Barnaby C 1835, 1904, 1905, 1909, 1911–1919, 1921–1925
Kinkaid-Reeds Creek Conservancy District 1819
Kirst, Harry G 1603
Kirwan, John J 153
Kohn, Edward H 2093
Koop, F. William 271, 285, 295
Kuchel, Hon. Thomas H., U.S. Senator from California 1794

L

Lake Monroe Association, Bloomington, Ind 1796
Larson, Sidney D 1, 81, 125, 126, 153, 271, 833, 842, 849, 1031, 1339, 1823
Lasker, Mrs. Albert D 2331
Lattu, Onnie P 833, 842, 844, 847
Layton, Cleo F 1031, 1155
Lee, Hon. H. Rex, Governor of American Samoa 196–200, 202–223
Lewis, C. H., Timber Company 1799
Long, Hon. Edward V., U.S. Senator from Missouri 1801, 1802
Louisiana Forestry Association 1800
Longmire, Richard C., chairman, legislative committee, National Association of Soil and Water Conservation Districts 2401
Luce, Charles F 25, 56, 57
Lyddan, Robert H 397
Lyon, Howard W 1933

Mc

McBroom, James T 1155, 1285, 1287, 1294
McCarter, Walter J 1933, 1941, 1944–1955
McCarthy, Hon. Eugene J., U.S. Senator from Minnesota 1789, 1795
McCornack, Willard F 397, 474
McGee, Hon. Gale W., U.S. Senator from Wyoming 1, 395, 517, 521, 527, 596–605, 615, 616, 634, 635, 713, 975, 1028, 1322, 1780, 2293, 2350, 2473
McGovern, Hon. George S., U.S. Senator from South Dakota 2473
McGruder, Mack, president, Texas Goat and Sheep Raising Association 1247
McGuire, J. R 1623
McHugh, J. L 1031
McNamara, Thomas 1827
McRorey, Russell P 1339

M

Ma'o, Chief, Samoa 210, 214
Magnuson, Hon. Warren G., U.S. Senator from Washington 1023, 1239, 1798, 1807, 1808, 1813, 2474
Mahon, Edith 987, 994, 995
Maine, Forest Commissioner 1802

Page
Malone, Owen J ... 1933
Mansfield, Hon. Mike, U.S. Senator from Montana ... 777, 787, 1324, 1325, 2466, 2473, 2525
Marburger, Carl L ... 677, 684, 699, 700, 702–704, 713, 733, 771, 774, 776, 815, 816, 831
Mark, Charles ... 1835, 1896, 1901, 1902
Mata'ofa, Prime Minister, Western Samoa ... 212
Mays, Hon. Jack R., mayor of Folkston, Georgia ... 1261
Mellon, Paul ... 2088
Memmott, Frank C ... 849
Meramec Basin Association ... 1797
Metcalf, Hon. Lee, U.S. Senator from Montana ... 777, 1324, 1325, 1329, 2465, 2469–2471, 2525
Migratory Bird Conservation Commission, Washington, D.C ... 1329
Miller, Roland E ... 677
Milner, George R., Jr ... 153
Mishoe, Dr., president of Delaware State College ... 2446
Moffett, Harry L ... 135
Mondale, Hon. Walter F., U.S. Senator from Minnesota ... 1789, 1795, 1796
Montoya, Hon. Joseph M., U.S. Senator from New Mexico ... 2474
Montgomery, Clarence P ... 527, 662
Moravetz, Robert L ... 397
Morris, Dr. Selyte W., president of Southern Illinois University ... 2311
Morse, Hon. Wayne, U.S. Senator from Oregon ... 2473
Moss, Hon. Frank E., U.S. Senator from Utah ... 1785, 2461, 2464–2466, 2473
Mundt, Hon. Karl E., U.S. Senator from South Dakota ... 1, 29, 34, 36, 38, 69–73, 77–79, 127–133, 319, 332–334, 370, 378, 380–382, 386, 393, 517, 527, 529, 543, 549–553, 555, 583, 596, 704, 711, 713, 736, 740, 776, 786, 793, 794, 803, 805–810, 974, 1031, 1129, 1135, 1139, 1140, 1143–1148, 1155, 1307, 1308, 1310–1316, 1319, 1320, 1511–1513, 1528–1530, 1623, 1720–1722, 1726–1728, 1730, 1731, 1735–1738, 1745, 1764–1766, 1769, 1770, 2011, 2065
Murdock, Ray, city commissioner, Provo, Utah ... 2463
Muschenheim, Dr. Carl, chairman, National Committee on Indian Health of the Association on American Indian Affairs, Inc ... 2379
Myer, Donald B ... 1823
Myers, J. Walter, Jr., executive director, Forest Farmers Association ... 2324, 2329

N

National Forest Products Association ... 1805
Negron-Rodriguez, Rito ... 1339
Neifert, James D ... 1957
Neil, Henry A ... 1957, 2065
Nelson, Gaylord, U.S. Senator from Wisconsin ... 1789
Nelson, M. M ... 1339, 1517, 1623, 1704–1713, 1716–1718, 1744, 1745
Ness, Clifford, deputy state fire marshal, Bismarck, N. Dak ... 780
Nevada Wildlife Federation ... 384
Norem, Nelson J ... 1031
Norris, Russell T ... 1031, 1144, 1145
Norwood, J. Leonard ... 677, 712, 796, 819
Norwood, W. R ... 225, 249, 252–253, 254–256, 260–269
Nygaard, K. O., commissioner of insurance, State of N. Dak., Bismarck, N. Dak ... 780

O

O'Brien, Hugh ... 2312
Oberlander, George H. F ... 2227, 2228
Officer, James E ... 677, 814
Ogden, Daniel M., Jr ... 1339
Ohio Forestry Association, Inc., Board of Trustees ... 1790
Orden, Sol ... 1957

P

Pariser, Dr. Ernst ... 77
Pastore, Hon. John O., U.S. Senator from Rhode Island ... 1153
Patton, John M., Jr ... 1031, 1134, 1135

Page
Pauley, Harry R 1543, 1546, 1548–1551
Payne, B. H 1623, 1707
Pearl, Milton A 135, 150, 151
Peck, William 1031
Pecora, William T 397, 473, 476–478, 480–502, 507, 509–513, 515, 521, 925
Pelto, Roy E 1155
Pennsylvania Department of Forests and Waters 1786
Percy, Hon. Charles H., U.S. Senator from Illinois 2312, 2322
Perry, Dell V 833
Pettijohn, James H., attorney for the district, Oregon, Mo 1331
Pfanstiehl, Cody 1933
Pfluger, Frederick 1827
Phelps, John E., director of the Utah State Department of Fish and Game 2463
Plummer, Edward O., Resources Division, Navajo Tribe of Indians 2384
Pollard, Joseph M., Los Angeles County Watershed Commission 2340
Pomeroy, Kenneth B., chief forester, American Forestry Association 1807
Pratt, Prof., Fargo, North Dakota 290
Preston, Scott, vice chairman, Navajo Tribal Council 2388
Pritchard, John R 2227, 2228, 2253, 2257, 2259
Proxmire, Hon. William, U.S. Senator from Wisconsin 509, 1150, 1328, 1623, 1781

Q

Quenstedt, Warren D 1933

R

Rabeau, Erwin S 1957, 1990, 1991, 1998, 2000–2011, 2058–2060, 2062–2074
Radlinski, William A 397
Rampacek, Carl 849
Rapp, Dennis A 135
Rasmussen, Boyd L 339, 342, 344, 360–364, 370, 378, 380, 386, 388, 389, 393–395, 1734
Red River Valley Clinic 779
Redding, J. Saunders 1835
Remington, Charles E 339, 391
Renne, Roland R 271, 285–287, 289–298, 319, 332–334, 337
Reynolds, S. E., State engineer, New Mexico 2390
Ricca, John 833
Rice, Harry W 1339, 1363, 1526, 1538, 1539
Richey, Chuck 673
Ripley, S. Dillon 2093, 2100, 2101, 2104, 2177–2188, 2192–2198, 2207, 2209–2211, 2214, 2219–2226
Robbins, Jerome 1856
Roberts, W. P., Jr 2354
Robinson, George E 81, 114–118, 120, 121, 123–125, 127, 132
Rogers, Hon. Paul G., U.S. Representative from Florida 1793
Rosoff, Saul R 1957
Rothrock, Dale L 81, 271, 833
Routt, H. Roy, Jr 1339
Rowe, Mrs. James H., Jr 2227, 2228, 2249–2255, 2258–2263, 2266
Rowin, Charles B 826
Rubin, Henry C 833, 846
Rupert, Syble, secretary, Inter-Tribal Council of Nevada 825
Russell, Hon. Richard B., U.S. Senator from Georgia 1, 24, 33–36, 38, 610, 611, 1231, 1261, 1771, 2293, 2297, 2301, 2309, 2310, 2315, 2316, 2322, 2324.
Ruttenberg, Charles B 1835

S

Salanoa, Chief, assistant defender, American Samoa 214, 215, 216, 217
Saline County Board of Supervisors 1819
Saline Valley Conservancy District 1817
Sam Boddy 1810
Scherrer, George M. manager, Saline Valley (Illinois) Conservancy District 1817
Schwan, Charles F., Jr 525

Page

Scott, Hon. Hugh, U.S. Senator from Pennsylvania ... 1244
Screen, Joseph F ... 225, 252, 260–262, 267–269
Seaton, Fred E ... 2389
Senzel, Irving ... 339, 363, 389–392, 394
Shanklin, John F ... 1339
Shear, Daniel H ... 2227, 2228, 2272, 2273
Sherman, Allan ... 849
Shirley, A. R., president of the National Association of State Foresters ... 2297
Shooshan, Harry ... 81, 129, 130, 131
Sihvonen, S. V., manager, Georgia-Pacific Corporation ... 1799
Sims, Hon. John F., Governor of New Mexico ... 2390
Sims, P. K ... 524
Sippel, Kenneth F ... 1155, 1339
Smith, Harold G ... 527
Smith, Hon. Margaret Chase, U.S. Senator from Maine ... 1152, 1328
Smith, Norman F., chief of the Recreation Resource Planning Division, Michigan Department of Conservation ... 2357, 2363
Smith, Dr. Spencer M., Jr., secretary, Citizens Committee on Natural Resources ... 2376
Smith, Vernon J., California Wildlife Federation, San Francisco, Calif ... 2356
Smithee, Kenneth J., public affairs officer, National Recreation and Park Association ... 2363, 2366
Snedeker, Thomas C ... 833
Snyder, Dr. Donald ... 77
Spillane, James M ... 1827, 1833
Spillers, A. R ... 1623, 1728, 1734, 1737, 1738, 1740, 1741, 1749, 1750
Spoden, George F., Jr ... 1339
Spreiregen, Paul ... 1835, 1899
Squaw Creek National Wildlife Refuge, Missouri ... 1330
Squires, John W., representative, Southern Hardwood Forest Research Group, Jackson, Miss ... 2303, 2304
Stearns, Frederick E ... 397
Stennis, Hon. John, U.S. Senator from Mississippi ... 1783, 2297, 2302–2305, 2307, 2309, 2310
Stevens, Lawrence N ... 1339
Stevens, Roger L ... 1835, 1889, 1893–1904, 1918, 1920–1923
Stewart, David ... 1835, 1918
Stewart, Philip O ... 1339
Stratton, Julius A ... 2275, 2279
Stratton, A. Clark ... 527, 591, 614
Swank, Wendell G., director, Arizona Game and Fish Department, Phoenix, Ariz ... 1241
Symington, Hon. Stuart, U.S. Senator from Missouri ... 1330

T

Talmadge, Hon. Herman E., U.S. Senator from Georgia ... 1234, 1738
Tanner, Dr. Vasco M., commissioner of the Utah State Park and Recreation Commission ... 2463
Taylor, Theodore W ... 677
Terry, William M ... 1031
Thompson, Claude, president, Kinkaid-Reeds Creek Conservancy District ... 1819, 1820
Thomson, Elwood ... 849, 864, 957, 959
Toledo Metropolitan Park District ... 1791
Tomey, J. Neal ... 1933, 1946, 1947, 1949–1952
Trevorrow, George C ... 1543
Tudor, Dr. William J., assistant to the vice president of Southern Illinois University ... 2310, 2312, 2321, 2322
Tunison, Abram V ... 1115, 1228, 1230, 1260, 1264, 1266, 1297, 1301–1303, 1311, 2445

U

Udall, Hon. Stewart L ... 1, 24–65, 66–79
Underhill, A. Heaton ... 1339, 1508, 1529
Usher, Fenton G ... 397

V

Page

Van Cleve, Mrs. Ruth 153, 186–188, 195, 217, 255, 269, 270
Vidi, Mrs. Juanita M 153
Vickers, Leonard A 833
Vienna (Illinois) Kiwanis Club 1821
Vogely, William A 849

W

Wagner, Carruth J 1957
Walker, Carl O 527
Walker, John W 1603, 2077, 2086–2090, 2092
Walker, Dr. Laurence C., dean, School of Forestry, Stephen F. Austin State College, Nacogdoches, Tex 2329
Walker, Robert H 1835
Wallen, Dr., Office of Oceanography, Smithsonian Institution 2188
Walton, William 1825
Warner, William W 2093, 2193, 2209–2211
Washington commissioner of public lands 1813
Watkins, Arthur V 977, 979, 982–984
Watson, Charles E 527, 1339
Wayland, Russell G 397, 474
Wellington, J. W., superintendent, Bureau of Indian Affairs, Wahpeton Indian Schools, Wahpeton, N. Dak 780
Wenk, Edward, Jr 2275, 2279, 2281, 2284–2290, 2292
Western Forestry and Conservation Association 1803
Westfield, James 849, 948
Wheeler, Henry P., Jr 849
Wight, Edgar L 677
Wiles, Francis M 397, 1155
Winn, P. E 153
Wisby, Warren J 1155
Wohletz, E. A., dean, College of Forestry, University of Idaho, Moscow, Idaho 1244
Wolff, Richard C., vice president of the Garcia Corp., Teaneck, N.J 2346, 2350
Wood, Wilburn, president, Vienna Kiwanis Club 1821
Woodworth, John R., director, Idaho Fish and Game Department, Boise, Idaho 1243
Wright, Bruce 958, 959

Y

Yarborough, Hon. Ralph W., U.S. Senator from Texas 1786, 1787
Young, Hon. Milton R., U.S. Senator from North Dakota 287, 288, 290, 298, 394, 395, 483, 484, 492–495, 711, 778, 833, 847, 859, 860, 983, 984, 1031, 1155, 1298–1302, 1333, 1335, 1337, 1390, 1623, 1772, 2065, 2066, 2077, 2092, 2104, 2436, 2460, 2461, 2464, 2465, 2469.
Youngs, R. L 1623

Z

Zappettini, George, State forester of Nevada 1739
Zinner, Paul 849
Zumwalt, Eugene V 339, 363, 369, 370, 381, 382, 387, 2476

SUBJECT INDEX

Page
Department of the Interior and related agencies (beginning of hearings) 1
  Statement of the chairman, Hon. Carl Hayden 1
  Statement of Hon. Stewart L. Udall, Secretary of the Department of the Interior 24
  Analysis of permanent positions, fiscal years 1966, 1967, and 1968 11
  Appropriations compared with receipts (exclusive of trust funds), Department of the Interior exclusive of the Bureau of Reclamation, power marketing agencies, and Federal Water Pollution Control Administration 10
  Comparative statement of the appropriations for fiscal year 1968 3
    Title I—Department of the Interior 3
    Title II—Related agencies 6
  Justification of permanent appropriations, fiscal year 1967 13
    Bureau of Commercial Fisheries 17
    Bureau of Indian Affairs 15
    Bureau of Land Management 13
    Bureau of Sport Fisheries and Wildlife 18
    Geological Survey 17
    National Park Service 23
    Office of Territories 17
  Summary of additional programs 43
    Bureau of Commercial Fisheries 50
    Bureau of Indian Affairs 43
    Bureau of Land Management 43
    Bureau of Mines 49
    Bureau of Outdoor Recreation 46
    Bureau of Sport Fisheries and Wildlife 52
    Geological Survey 47
    National Park Service 52
    Office of Coal Research 50
    Office of Saline Water 54
    Office of Territories 47
    Office of Water Resources Research 55
  Fiscal year 1967 deferrals—summary 58
Coal Research, Office of (beginning of hearings) 997
  Director's statement 1002
  Budget estimate and justification 997, 1105
  Amendment requested 2619
  Itemization of estimate 1002
  Analysis by activities 998
  Coal as an industry 1003
  Contract research program 1009
  Conversion to gaseous fuels 1004
  Conversion to liquid fuels 1004
  Energy research 1003
  Overall program benefits 1005
  Program 1004
  Program administration 1005
  Projects completed—1966 1021
  Questions submitted by Senator Byrd (West Virginia) 1024
  Questions submitted by Senator McGee 1028
  Questions submitted by Senators Magnuson and Jackson 1023

Page

- Commercial Fisheries, Bureau of (beginning of hearings) 1031
  - Acting Director's statement 1036
  - Appropriations summary of, for fiscal years 1967 and 1968 1035
  - Administration of Pribilof Islands 1135
    - Analysis by activities 1135
      - Administration of the islands 1136
      - Fur seal research 1137
    - Budget estimate and justifications 1135
    - Itemization of estimate 1138
  - Obligations programs, 1967 and 1968 1036
  - Anadromous and Great Lakes fisheries conservation 1127
    - Budget estimate and justification 1127
    - Itemization of estimate 1128
    - Summary of increases and decreases, 1968 1127
    - States participating in program 1129
    - Analysis by activities 1127
      - Payment to cooperators 1127
      - Program administration 1128
    - Anadromous fish program funds 1130
  - Construction 1109
    - Budget estimate and justification 1109
    - Itemization of estimate 1114
    - Analysis by activities 1109
      - Fish protein concentrate plant 1114
      - Fishery facilities 1109
  - Construction of fishing vessels 1117
    - Budget estimate and justification 1117
    - Amendment requested 2626
    - Itemization of estimate 1119
    - Analysis by activities 1118
      - Program administration 1118
      - Subsidy payments 1118
  - Federal aid for commercial fisheries research and development 1120
    - Budget estimate and justification 1120
    - Itemization of estimate 1125
    - Analysis by activities 1120
      - Aid to States 1120
        - Apportionment of funds under the Commercial Fisheries Research and Development Act of 1964 1123
      - Program administration 1124
      - Resource disaster aid 1124
  - Fisheries loan fund administrative expenses 1140
    - Budget estimate and justification 1140
    - Itemization of estimate 1142
    - Analysis by activities 1140
    - Fishery loan fund cases as of Dec. 31, 1966 1141
  - General administration expenses 1131
    - Budget estimate and justification 1131
    - Amendment requested 2626
    - Itemization of estimate 1134
    - Analysis by activities 1132
    - Funding 1132
  - Management and investigation of resources 1046
    - Budget estimate and justification 1046
    - Amendment requested 2623
      - Itemization of estimate 1097
      - Summary of increases and decreases, 1968 1047
      - Analysis by activities 1047
    - Columbia River fishery development 1091
    - Fish migration over dams 1086
    - Fishing vessel mortgage insurance 1089
    - Management 1048

- Commercial Fisheries—Continued
  - Management and investigation of resources—Continued — Page
    - Marketing and technology, 1050
      - Analysis by subactivities, 1050
      - Economics, 1050
      - Exploratory fishing and gear development, 1054
      - Fishery education and market development, 1065
      - Foreign fisheries and trade, 1063
      - Market news, 1058
      - Statistics, 1059
      - Technology, 1060
    - Research, 1067
      - Analysis by subactivities, 1067
      - Coastal and offshore research, 1067
      - Designing fish protective devices, 1085
      - Employees' compensation fund payments, 1086
      - Inland fisheries, 1081
      - Shellfish, 1082
  - Special foreign currency program, 1106
    - Budget estimate and justification, 1106
    - Itemization of estimate, 1108
      - Analysis by activities, 1107
      - Marketing and technology, 1107
      - Research, 1107
  - Questions submitted by Senator Byrd (West Virginia), 1148
  - Questions submitted by Senator Bartlett, 1149
  - Questions submitted by Senator Proxmire, 1150
  - Questions submitted by Senator Smith, 1152
  - Questions submitted by Senator Pastore, 1153
- Federal Coal Mine Safety Board of Review (beginning of hearings), 1543
  - Budget estimate and justification, 1543
  - Itemization of estimate, 1545
  - Statement of the Board of Review, 1546
  - Adjudication duties of Board, 1546
  - Recent amendments of act, 1546, 1548
  - Workload, 1547
  - Personnel complement, 1547
  - Impact of program, 1547
  - Board membership, 1548
  - Bureau of Mines orders outstanding, 1548
- Federal Development Planning Committees for Alaska (beginning of hearings), 1603
  - Statement of the Chairman of the President's Review Committee, 1609
  - Statement of the Chairman, Federal Field Committee, 1611
  - Federal Field Committee, 1603, 1605, 1617
  - Budget request and justification, 1603
  - Amendment requested, 2691
    - Program by activity, 1605
    - Program by object of expenditure, 1605
    - Requirements by object classification, 1606
  - President's Review Committee, 1604, 1606
  - Fiscal year 1967 activities, 1604
- Forest Service (beginning of hearings), 1623
  - Statement of the Assistant Secretary of Agriculture, 1624
  - Purpose statement, 1628
  - Budget estimate and justification, 1631
  - Summary of estimated appropriations and receipts, 1632
  - Status of financing development program for the national forests, cumulative fiscal years 1963–67, 1632
  - Job Corps transfers to Forest Service, 1633
  - Appalachia program, 1634
  - Chief's statement, 1635
  - Forest Service funds, transferred to intergovernmental commissions, committees, and other agencies, 1639

Forest Service (beginning of hearings)—Continued Page

- Forest protection and utilization 1639
  - Budget estimate and justification 1639
  - Amendment requested 2662
  - Summary of increases and decreases 1640
  - Project statement 1641
  - Forest land management 1642
  - Forest research 1677
  - State and private forestry cooperation 1698
    - Insect and disease control 1714
    - Wilderness recreation research program 1722
  - Construction funds provided in 1967, status of 1733
  - Cooperative forest management progress and expenditures, fiscal year 1966 1737
- Forest roads and trails 1742
  - Amendment requested 2582
- Land acquisition, special acts 1745
- Miscellaneous land acquisitions 1746
- Timber development organizations 1748
- Administrative provisions and miscellaneous funds 1750
- Questions submitted by Senator Bible 1766
- Questions submitted by Senator Hruska 1769
- Questions submitted by Senator Russell 1771
- Questions submitted by Senator Young 1772
- Questions submitted by Senator Byrd of West Virginia 1773
- Questions submitted by Senator McGee 1780
- Questions submitted by Senator Proxmire 1781
- Questions submitted by Senator Stennis 1783
- Questions submitted by Senator Cotton 1784
- Questions submitted by Senator Moss 1785

Geological Survey (beginning of hearings) 397

- Director's statement 474
- Budget estimate and justifications 398
- Amendment requested 2607
  - Analysis by activities 398, 410
  - Funding of Geological Survey programs 406
  - Itemization of estimate 473
  - Justification 408
  - Summary of increases and decreases 409
- Appalachia programs 481, 513
- General administration 405, 470
- Geologic and mineral resource surveys and mapping 399, 416
  - Analysis by subactivity 417
  - Analysis of program components 419
  - Budget estimate and justification 416
  - Earthquake research 400, 426, 495
  - Heavy metals program 399, 421, 484
  - Wilderness area mineral surveys 400, 429
- Lead and zinc stabilization program 514
- Marine geology and hydrology 401, 432
  - Budget estimate and justification 432
- Minerals discovery loan program 401, 431, 492
  - Analysis of program 431
  - Budget estimate and justification 431
- Miscellaneous services to other agencies 471
  - Central services and consolidated accounts 471
  - Map distribution and charges 472
- National Atlas 482
- Overseas personnel 484
- Relationship to Office of Water Resources Research 494
- Soil and moisture conservation 405, 460
  - Analysis by program components 461
  - Analysis of subactivities 460
  - Budget estimate and justification 460
  - Conservation of land and minerals 405, 460
    - Classification of public lands 467
    - Coal 462
    - Indian lands, oil and gas 468

- Geological Survey (beginning of hearing—Continued
  - Soil and moisture conservation—Continued
    - Conservation of land and minerals—Continued — Page
      - Minerals, non-energy — 466
      - Oil, gas, and sulfur, outer continental shelf — 405, 464
      - Oil and gas (land operations) — 466
  - Topographic surveys and mapping — 398, 410
    - Analysis of subactivities — 410
      - Map revision and maintenance — 414
      - Small-scale and special mapping — 415
      - Standard quadrangle mapping — 413
    - Budget estimate — 410
  - Water resources investigations — 401, 433
    - Advance studies for water conservation and management — 403, 441
    - Analysis by subactivities — 435
    - Analysis of program components—Federal program — 436
    - Budget estimate and justification — 433
    - Exploration of regional resources and analysis of problems — 403, 441
    - Federal-State program — 404, 457
    - International Hydrologic Decade — 404, 452, 502
    - National water data program — 403, 437
    - Publications and technical support — 452
    - Research in support of water conservation, planning and management — 404, 445
    - Water resources investigations—Estimate of State and municipal offerings for fiscal year 1968 — 458
  - Questions submitted by Senator Mundt — 517
  - Questions submitted by Senator McGee — 521
- Indian Affairs, Bureau of (beginning of hearings) — 677
  - Budget estimate and justification — 677
  - Biography of Commissioner Bennett — 680
  - Commissioner's statement — 681
  - Statement of Assistant Commissioner for Community Services — 683
  - Statement of Assistant Commissioner for education — 684
  - Construction — 741
    - Budget estimate and justification — 741
    - Amendment requested — 2592
    - Itemization of estimate — 770
    - Analysis by activities — 741
      - Buildings and utilities — 741
        - New construction — 742
      - Irrigation systems — 755
        - Summary of development — 756
        - Summary of projects — 756
        - Summarized financial data — 756
        - Work proposed for fiscal year 1968 — 757
    - Deferred projects — 773
    - Questions submitted by Senator Young — 778
  - Education and welfare services — 686
    - Budget estimate and justification — 686
    - Amendment requested — 2588
    - Itemization of estimate — 733
    - Analysis by activities — 689
      - Educational assistance, facilities, and services — 688
        - Analysis by subactivities — 688
        - Adult education — 693
        - Assistance to pupils in non-Federal schools — 688
        - Federal facilities — 690
      - Maintaining law and order — 697
      - Relocation and adult vocational training — 696
      - Welfare and guidance services — 694
        - Analysis by activites — 694
        - General assistance — 695
        - Housing improvement — 695
        - Other welfare assistance — 695
        - Social services — 696
  - Questions submitted by Senatory Young — 711
  - Questions submitted by Senator McGee — 713

Indian Affairs, Bureau of (beginning of hearings)—Continued — Page
- General administrative expenses — 794
  - Analysis by activities — 795
  - Budget estimate and justification — 794
  - Itemization of estimate — 796
- Indian tribal funds — 798
  - Analysis of activites — 800
  - Comparative statement of annual authorization by tribe — 802
- Participation of Indians in public life — 812
- Revolving fund for loans — 797
  - Budget estimate and justification — 797
- Resources management services — 714
  - Budget estimate and justification — 714
  - Amendment requested — 2591
  - Analysis by activities — 715
    - Development of Indian arts and crafts — 726
    - Fire suppression — 718
    - Forest and range lands, analysis by subactivities — 715
    - Management of Indian trust property — 727
    - Operation, repair, and maintenance of Indian irrigation systems — 731
      - Summary by subactivity — 732
      - Funds required by categories, fiscal year 1968 — 732
    - Repair and maintenance of buildings and utilities — 730
- Roads construction — 787
  - Budget estimate and justification — 788
  - Federal-aid highway roads, area budget classification-breakdown, 1968 — 790
  - Itemization of estimate — 792

Indian Claims Commission (beginning of hearings) — 977
- Commissioner's statement — 979
- Budget estimate and justification — 977
- Analysis by activities — 978
- Claims completed in 1966 — 982
- Final judgments — 985

Indian health activities and construction of facilities (beginning of hearings) — 1957
- Director's statement — 1990
- Indian health activities — 1957
  - Budget estimate and justification — 1957
  - Amendment requested — 2582
  - Itemization of estimate — 1990
  - Analysis by activities — 1964
    - Administration — 1988
      - Itemization of estimate — 1989
    - Contract medical care — 1974
    - Field health services — 1975
      - Itemization of estimate — 1987
    - Hospital health services — 1964
      - Workload data — 1973
      - Itemization of estimate — 1974
    - Special assistance to the Menominee Indian people — 1987
      - Itemization of estimate — 1988
    - Summary of positions and average employment — 1990
- Questions submitted by Senator Mundt — 2011
- Construction of Indian health facilities — 2012
  - Budget estimate and justification — 2012
  - Amendment requested — 2667
  - Itemization of estimate — 2013
  - Analysis by activities — 2013
  - Analysis of continuing projects and 1968 request — 2014
  - Alphabetical index of projects — 2015
    - Alterations — 2041
    - Community hospitals serving Indians and non-Indians — 2053
    - Construction of Indian sanitation facilities — 2053
      - Projects, fiscal year 1968 — 2056
    - Hospitals and clinics — 2016
    - Personnel quarters — 2040
  - Status of projects not under construction and reasons why — 2061

Page

- Indian health activities and construction of facilities—Continued
  - Questions submitted by Senator Mundt, 2065
  - Questions submitted by Senator Young (N. Dak.), 2066
- Fine Arts, Commission of (beginning of hearings), 1823
  - Chairman's statement, 1825
  - Budget estimate and justification, 1823
  - Itemization of estimate, 1825
- Arts and Humanities Educational Activities (beginning of hearings), 1827
  - Director's statement, 1832
  - Budget estimate and justification, 1827
- Land Management, Bureau of (beginning of hearings), 339
  - Director's statement, 342
  - Allocation of Bureau of Land Management receipts to States, 1966, 340
  - Receipts by sources, 339
  - Construction and maintenance, 364
    - Budget estimate and justification, 364
    - Amendment requested, 2585
    - Itemization of estimate, 369
    - Analysis by activities, 364
  - Management of land and resources, 346
    - Budget estimate and justification, 347
    - Amendment requested, 2585
    - Itemization of estimate, 360
    - Analysis by activities, 360
    - Cadastral survey, 357
    - Firefighting and rehabilitation, 358
    - General administration, 359
    - Realty and mineral leasing services, 360
    - Resource management, conservation, and protection, 350
  - Oregon and California grant lands, 373
    - Budget estimate and justification, 373
    - Itemization of estimate, 378
    - Analysis by activities, 374
    - Details of road construction, Bureau of Land Management lands, 374
  - Personnel increases, 346
  - Public lands development roads and trails, 371
    - Analysis by activities, 371
    - Budget estimate and justification, 371
    - Amendment requested, 2587
    - Itemization of estimate, 373
  - Range improvements, 378
    - Budget estimate and justification, 378
    - Itemization of estimate, 379
  - Questions submitted by Senator Jordan, 382
- Lewis and Clark Trail Commission (beginning of hearings), 1333
  - Executive Officer's statement, 1334
  - Budget estimate and justification, 1333
  - Amendment requested, 2695
  - Itemization of estimate, 1334
- Mines, Bureau of (beginning of hearings), 849
  - Director's statement, 849
  - Questions submitted by Senator Byrd, 869
    - Recapitulation of funds appropriated for Appalachian programs, 870
  - Appalachian region mining area restoration, 952
    - Budget estimate and justification, 952
    - Analysis by activities, 953
  - Conservation and development of mineral resources, 870
    - Budget estimate and justification, 871
    - Amendment requested, 2610
    - Analysis by activities, 872
    - Research, 872
      - Coal, 873
      - Explosives, 903
      - Marine mineral mining, 900
      - Metallurgy, 887
        - Metallurgy research—Budget reductions, 928
      - Mining, 893
      - Oil shale, 884
      - Petroleum, 881

- Mines, Bureau of (beginning of hearings)—Continued
  - Conservation and development of mineral resources—Continued — Page
    - Resource development — 905
      - Anthracite — 910
      - Bituminous coal — 909
      - Conservation and development of mineral resources — 918
      - Economic analysis — 907
      - International activities — 916
      - Minerals — 914
      - Petroleum — 912
      - Statistics — 905
    - Analysis of authorized permanent positions — 919
    - Summary of amounts requested for air and water pollution — 919
    - Summary of amounts available in 1967 and 1968 request for the heavy metals program — 923
  - General administrative expenses — 948
    - Budget estimate and justification — 948
    - Amendment requested — 2617
    - Summary of increases and decreases, 1968 — 949
    - Analysis by activities — 949
    - Itemization of estimate — 950
  - Health and safety activities — 938
    - Estimated budget and justification — 938
    - Amendment requested — 2616
    - Itemization of estimate — 947
    - Analysis by activities — 939
    - Control of fires in coal deposits — 944
    - Health and safety research — 945
    - Inspections, investigations, and rescue work — 939
      - Exhibits, demonstrations, safety meetings, contests, and lectures — 943
      - Mine inspections — 943
      - Safety education — 943
  - Helium fund — 967
    - Financial summary — 967
    - Budget estimate and justification — 967
    - Amendment requested — 2618
    - Objectives — 968
    - Guiding considerations — 968
    - Program of work — 968
    - Summary of purchases of helium for conservation under contracts — 970
  - Obligations incurred by the Bureau of Mines by activity and source of funds — 971
  - Project Badger — 929
  - Solid waste disposal — 959
    - Budget estimate and justification — 960
    - Itemization of estimate — 964
    - Analysis by activities — 960
    - Demonstration grants — 960
    - Grants awarded under Solid Waste Disposal Act — 966
    - Research, training and technical services — 962
  - Subsidence, caving, and mine fire control — 953
    - Strip and surface mine area restoration — 954
    - Itemization of estimate — 955
  - Question submitted by Senator Mundt — 974
  - Question submitted by Senator McGee — 975
- National Capital Planning Commission (beginning of hearings) — 2227
  - Chairman's statement — 2249
  - Budget estimate and justification — 2228
    - Analysis by object classification, salaries and expenses appropriation (obligational basis) — 2230
  - Program and organization of the Planning Commission — 2234
    - Planning divisions — 2235
    - Publications program — 2246
    - Special projects — 2247
  - Temporary Commission on Pennsylvania Avenue — 2247
    - Budget estimate and justification — 2268
  - Unexpended land acquisition funds, December 31, 1966 — 2271

Page

- National Capital Transportation Agency (beginning of hearings) 1933
  - Administrator's statement 1941
  - Budget estimate and justification 1933
  - Amendment requested 2673
    - Summary of estimates by budget activities 1934
    - Summary of estimates by object of expense 1940
- National Council on Marine Resources and Engineering Development and Commission on Marine Science, Engineering and Resources (beginning of hearings) 2275
  - Statement of the Chairman of the Commission 2279
  - Statement of the Chairman of the Council 2281
  - Budget estimate and justification 2275
  - Council 2276
  - Commission 2277
  - Program plan of Federal agencies for marine sciences and technology 2287
  - President's special message to Congress, March 9, 1967 2290
- National Foundation of Arts and Humanities (beginning of hearings) 1835
  - Budget estimate and justification 1835
  - Amendment requested 2677
  - Itemization of estimate 1889
  - National Endowment for the Arts 1889
    - Chairman's statement 1889
    - Budget estimate and justification 1838
  - National Endowment for the Humanities 1905
    - Chairman's statement 1905
    - Budget estimate and justification 1859
  - Questions submitted by Senator Hayden 1925
- National Gallery of Art 2077
  - Director's statement 2086
  - Budget estimate and request 2077
  - Amendment requested 2691
    - Status of program 2083
    - Obligations by object classification 2086
- National Park Service (beginning of hearings) 527
  - Director's statement 529
  - Summary of appropriations, revenues, and visitors 1958–68 528
  - General fund receipts deposited to the credit of the U.S. Treasury during the fiscal years 1967 and 1968 528
  - Recreation fee revenues deposited to the credit of the land and water conservation fund estimated for the fiscal years 1967 and 1968 529
  - Comparative summary of the amount available for 1967 with the 1968 estimates 529
  - Deferred projects, fiscal year 1967 544
  - Administrative provisions 659
  - Archeological investigation and salvage 608
    - Archeological salvage and investigations projects, 1968 fiscal year 608
    - Statement of needs for emergency salvage archeology at Carter's Dam (Bell Field site) and West Point Dam and Reservoir, for fiscal years 1966–67 610
    - Questions submitted by Senator Russell 611
  - Budget estimates for 10 new areas 585, 586
    - Experience data concerning acquisition by condemnation other than to clear title, calendar years 1959–66 590
    - Recreation fee areas administered by the National Capital Region, Washington, D.C., Maryland, and Virginia 592
    - Areas not designated for recreation fee collections in the National Capital Region 592
    - Proposed park areas approved by the Bureau of the Budget, 89th Congress—Legislation required on all 607
  - Construction program 627
    - Budget and analysis 628
    - Amendment requested 2643
    - Itemization of estimate 633
    - Analysis by activities 628

- National Park Service—Continued
  - Construction program—Continued — Page
    - Acquisition of lands and water rights, 631
      - Analysis by subactivities, 631
    - Buildings, utilities, and other facilities, 628
    - 1967 Appropriations for construction, 633
    - Planned construction, National Capital Region, 634
  - Questions submitted by Senator Byrd, 635
  - General administrative expenses, 656
    - Budget estimate and justification, 656
    - Itemization of estimates, 658
    - Analysis by activities, 657
  - Maintenance and rehabilitation of physical facilities, 616
    - Budget estimate and justification, 616
    - Amendment requested, 2639
    - Itemization of estimate, 625
    - Analysis by activities, 619
    - Buildings, utilities, and other facilities, 622
    - Roads and trails, 622
    - Beautification of Nation's Capital, 626
  - Management and protection, 555
    - Budget justification, 555
    - Amendment requested, 2636
    - Itemization of estimate, 583
    - Analysis by activities, 557
    - Concessions management, 582
      - Analysis by subactivities, 582
    - Forestry and fire control, 569
      - Analyses by subactivities, 569
      - Fire protection service, 570
      - Forest fire suppression, 571
      - Forest management, 569
      - Tree preservation, 570
    - Management of park and other areas, 558
      - Analysis by subactivities, 558
      - Informational publications, 567
      - Employees' compensation fund payments, 568
      - National Capital Parks, 565
      - National parks, monuments, etc, 558
        - New park areas, 558
    - Park and recreation programs, 572
      - Analysis by subactivities, 572
      - Archeological investigations and salvage, 580
      - Cooperative activities, 572
        - Federal agency and State assistance, 575
        - National Park System Plan, 572
        - New area studies and master planning, 573
      - Registry of National Landmarks, 581
        - Wilderness Act implementation, 574
      - Land and water resource studies, 579
      - Visitor services, 577
    - Soil and moisture conservation, 571
  - Park Police, 593
  - Parkway and road construction, 636
    - Budget and justification, 637
    - Itemization of estimate, 644
    - Analysis by activities, 637
    - Contract authorization and liquidation program, 638
    - Status of cash appropriation for liquidation of contract authorization, 639
    - Parkways, 639
      - Status of construction mileages as of January 15, 1967, 641
    - Roads and trails, 641
      - Program, 1968, 643
    - Preservation of historic properties, 645
      - National Advisory Council on Historic Preservation, 645, 654
      - Budget estimate and justification, 645
      - Amendment requested, 2647

- National Park Service—Continued
  - Parkway and road construction—Continued (Page)
    - Itemization of estimate 651
    - Analysis by activities 646
    - Administrative and technical support 646
      - Additional staffing and general expense funds 646
    - Matching grants-in-aid 646, 651
      - National Advisory Council 645, 647, 654
      - Existing National Park Service programs 647
        - Measured drawings of historic architecture 648
        - Photographs and historical data 648
        - Publications 649
  - Registry of natural landmarks 612
  - Breakdown of estimated land acquisition cost for Redwood National Park, Calif 665
  - Summary of total estimated future needs 666
  - Everglades National Park 668
  - Lake Mead National Recreation Area 673
- Oil and Gas, Office of (beginning of hearings) 833
  - Budget estimate and justification 833
    - Analysis by activities 835
    - Itemization of estimate 842
      - Salaries and expenses 842
      - Amendment requested 2621
  - Office of Oil and Gas 842
    - Director's statement 842
    - Combined agency budgets 844
  - Oil Import Administration 845
    - Administrator's statement 845
    - Budget estimate and justification 845
  - Oil Imports Appeal Board 846
    - Chairman's statement 846
    - Budget estimate and justification 846
- Outdoor Recreation, Bureau of (beginning of hearings) 1339
  - Director's statement 1355, 1382
  - Budget estimate and justification 1339
  - Itemization of estimate 1355
  - Estimated appropriation distribution 1358
  - Administrative expenses 1538
    - Budget estimate and justification 1538
    - Amendment requested 2593
    - Positions by grade and assignment, fiscal years 1967 and 1968 1539
  - Planning and research 1342
    - Analysis by activities 1342
    - Analysis by subactivities 1342
    - Federal coordination 1350
    - Technical assistance 1353
  - Land and Water Conservation Fund 1365
    - Budget estimate and justification 1365
    - Amendment requested 2595
    - Itemization of estimate 1381
    - Analysis by activities 1368
    - Administrative expenses 1377
    - Assistance to States 1369
    - Federal program 1373
      - Forest Service 1374
      - National Park Service 1374
      - Bureau of Outdoor Recreation 1376
    - Bureau of Sport Fisheries and Wildlife 1375
    - Projects qualified and obligated, by State, county, city, and other agencies as of Dec. 30, 1966 1383
    - Estimated Federal and State outdoor recreation needs, revenues to the land and water conservation fund from presently authorized sources, and amounts from proposed new sources, by years, during period, fiscal years 1968–77 1386
  - Recreation permit sales 1387

Outdoor Recreation, Bureau of (beginning of hearings)—Continued Page
  State grants, purpose and location 1390
    Alabama 1392
    Alaska 1393
    American Samoa 1395
    Arizona 1396
    Arkansas 1399
    California 1400
    Colorado 1404
    Connecticut 1407
    Delaware 1409
    District of Columbia 1410
    Florida 1411
    Georgia 1412
    Guam 1414
    Hawaii 1415
    Idaho 1417
    Illinois 1420
    Indiana 1421
    Iowa 1422
    Kansas 1423
    Kentucky 1430
    Louisiana 1431
    Maine 1433
    Maryland 1436
    Massachusetts 1438
    Michigan 1440
    Minnesota 1442
    Missouri 1444
    Montana 1448
    Nebraska 1452
    Nevada 1456
    New Hampshire 1457
    New Jersey 1458
    New Mexico 1459
    New York 1463
    North Carolina 1466
    North Dakota 1468
    Ohio 1473
    Oklahoma 1474
    Oregon 1475
    Pennsylvania 1480
    Puerto Rico 1481
    Rhode Island 1482
    South Carolina 1483
    South Dakota 1484
    Tennessee 1486
    Texas 1487
    Utah 1489
    Vermont 1490
    Virgin Islands 1493
    Virginia 1494
    Washington 1495
    West Virginia 1498
    Wisconsin 1499
    Wyoming 1503
    Policy on use of land and water conservation funds 1509
    Prepared statements 1515
      J. S. Gottschalk, Director, Bureau of Sport Fisheries and Wildlife 1515
      M. M. Nelson, Deputy Chief, Forest Service 1517
      H. L. Bill, Assistant Director, National Park Service 1524
  Land condemnations by the agency 1531
  Summary of condemnation cases pending in courts 1533
  Cases on which final court awards or Commission's recommendations have been made 1534
  Cases for which court awards may be finalized and funds needed to meet deficiencies during fiscal year 1968 1535

Page

- Outdoor Recreation, Bureau of (beginning of hearings)—Continued
  - Cases for which court awards may be finalized after June 30, 1968 — 1535
  - Tracts purchased by Forest Service from States and other public bodies with land and water conservation funds since inception to Dec. 31, 1966 — 1537
- Public Land Law Review Commission (beginning of hearings) — 135
  - Commission chairman's statement — 145
  - Budget estimate and justification — 135
  - Public meetings and hearings — 137
  - Salaries and expenses — 144, 145
- Saline Water, Office of (beginning of hearings) — 1553
  - Director's statement — 1557
  - Statement of F. C. Di Luzio, Assistant Secretary for Water Pollution Control — 1555
  - Budget estimate and justification — 1571
  - Itemization of estimate — 1587
  - Amendment requested — 2649
  - Analysis by activity — 1572
  - Administration and coordination — 1586
  - Engineering and development — 1576
  - Research program — 1573
  - Program analysis and engineering feasibility and economic studies — 1575
  - Operation and maintenance — 1592
    - Budget estimate and justification — 1592
    - Itemization of estimate — 1595
    - Analysis by activities — 1592
      - Administration — 1594
    - Employment difficulties — 1595
      - Operation and maintenance — 1593
      - Plant modifications — 1594
  - Research by other nations — 1599
- Secretary, Office of the (beginning of hearings) — 81
  - Budget estimate and justification — 81
    - Analysis of increases — 86
    - Consultants — 126
    - Itemization of estimate — 109
    - Salaries and expenses — 84
      - Amendment requested — 2653
    - New positions requested — 88
    - Obligations by activities and objects, fiscal years 1967 and 1968 — 110
    - Participation in special projects under direction of other agencies — 117
  - Analysis by activities — 85
    - Analysis by subactivities — 89
      - Board of Contract Appeals — 93
      - Office of Ecology — 95, 121
      - Office for Equal Opportunity — 91
      - Office of Information — 92
      - Interior Coordination—Water Resources Council — 94
      - Office of Minerals and Solid Fuels — 100
      - Office of Program Analysis — 90
      - Office of the Science Adviser — 93
      - Office of the Secretary — 89
      - Office of the Under Secretary — 90
  - Administrative management — 103
    - Analysis by subactivities — 103
      - Administration — 104
      - Office of Budget — 106
      - Correspondence management — 107
      - Office of Management Operations — 105
      - Office of Management Research — 106
      - Office of Personnel Management — 107
      - Office of Survey and Review — 104
  - Commissioner of Fish and Wildlife — 107
    - Analysis by subactivities — 107
  - General services — 108
    - Analysis by subactivities — 108

Page

- Secretary, Office of the (beginning of hearings)—Continued
  - Program direction and coordination 98
    - Analysis by subactivities 98
      - Defense Electric Power Administration 102
      - Fish and Wildlife and Parks 99
      - Mineral resources 98
      - Program support staff 99
      - Public land management 98
      - Water and power 98
      - Water pollution 99
- Smithsonian Institution (beginning of hearings) 2093
  - Secretary's statement 2100
  - Report of obligations by objects 2096
  - Grants to the Smithsonian Institution, fiscal year 1966 2097
  - Research by the Smithsonian Institution on contracts, fiscal years 1966, 1967 2098
  - Schedule of building projects 2099
  - Summary of construction appropriations and increases in gross floor areas 2190
  - Joseph H. Hirshhorn Museum and Sculpture Garden 2220
    - Budget estimate and justification 2220
  - Museum programs and related research 2198
    - Budget estimate and justification 2198
    - Archeological excavation and research 2199
    - Astrophysics 2201
    - International Exchange of Scientific Publications 2202
    - Museum programs 2201
    - Special foreign currency program 2202
      - Archeological excavation and research 2202
        - Amendment requested 2689
      - Astrophysics 2207
      - Estimated distribution of excess foreign currency fund, by country 2208
      - International exchange of scientific publications 2207
      - Museum programs 2206
      - Program development and administration 2207
      - Systematic and environmental biology 2204
    - Systematic and environmental biology 2199
  - National Zoological Park 2211
    - Budget estimate and justification 2211
  - Restoration and renovation of buildings 2214
    - Budget estimate and justification 2214
    - Amendment requested 2690
  - Salaries and expenses 2105
    - Budget estimate and justification 2095
    - Amendment requested 2687
    - Number of permanent positions by organization unit 2095
    - Administrative and technical support 2154
    - Buildings Management Department 2146
    - Freer Gallery of Art 2125
    - International Activities 2151
    - Joseph H. Hirshhorn Museum and Sculpture Garden 2131
    - Museum of History and Technology 2116
    - Museum of Natural History 2118
    - National Air and Space Museum 2121
    - National Armed Forces Museum Advisory Board 2123
    - National Collection of Fine Arts 2127
    - National Portrait Gallery 2129
    - Office of Ecology 2141
    - Office of Education and Training 2149
    - Office of Oceanography and Limnology 2144
    - Radiation Biology Laboratory 2139
    - Smithsonian Astrophysical Observatory 2133
    - Smithsonian Tropical Research Institute 2137
    - United States National Museum 2108
      - Summary 2116

Page

- Solicitor, Office of the (beginning of hearings) 987
  - Solicitor's statement 990
  - Analysis by activities 988
  - Budget estimate and justification 987
  - Itemization of estimate 990
- Sport Fisheries and Wildlife, Bureau of (beginning of hearings) 1155
  - Director's statement 1155
  - Administrative provisions 1294
  - Anadromous and Great Lakes Fisheries Conservation 1287
    - Budget estimate and justification 1287
    - Analysis by activities 1288
    - Itemization of estimate 1291
    - Allocation of anadromous fish funds, fiscal year 1967 and proposed for fiscal year 1968 1290
    - Projects approved and costs 1292
    - Projects proposed for fiscal year 1968 1293
  - Appalachian Region Fish and Wildlife Restoration Projects 1282
    - Budget estimate and justification 1282
    - Amendment requested 2633
    - Itemization of estimate 1285
    - Analysis by activities 1283
    - Projects 1286
  - Construction 1250
    - Budget estimate and justification 1250
    - Amendment requested 2630
    - Itemization of estimate 1260
    - Analysis by activities 1251
    - Sportfish facilities 1252
    - Wildlife facilities 1253
    - Summary of construction program 1258
  - Fish ecosystem research 1230
  - General administrative expenses 1267
    - Budget estimate and justification 1267
    - Amendment requested 2635
    - Itemization of estimate 1273
    - Analysis by activities 1268
    - Financing from permanent indefinite funds, transfer appropriations and advances and reimbursements, 1968 1271
  - Management and investigations of resources 1163
    - Budget estimate and justification 1163
    - Amendment requested 2627
    - Itemization of estimate 1226
    - Analysis by activities (direct appropriation) 1167
    - Fish hatcheries 1168
    - Itemization of estimate 1175
    - Operation of new hatcheries and new facilities constructed at existing hatcheries 1170
    - Fishery research 1192
    - Itemization of estimate 1194
    - Fishery services 1206
    - Itemization of estimate 1208
    - Fishery management services provided to Federal areas and Indian reservations 1210
    - Management and enforcement 1187
      - Itemization of estimate 1189
      - Cases involving violations of wildlife conservation laws enforced, fiscal year 1966 1191
    - Pesticides review 1223
    - River basin studies 1218
    - Soil and moisture conservation 1185
      - Itemization of estimate 1185
    - Soil conservation service 1221
    - Wildlife refuges 1178
      - Itemization of estimate 1180
    - Wildlife research 1196
      - Itemization of estimate 1196
      - Cooperative wildlife research programs 1199, 1238

Sport Fisheries and Wildlife, Bureau of (beginning of hearings)—Continued
  Management and investigations of resources—Continued — Page
    Wildlife services — 1212
      Itemization of estimate — 1216
  Migratory bird conservation account — 1274
    Budget estimate and justification — 1274
    Amendment requested — 2632
    Itemization of estimate — 1280
    Analysis by activities (direct appropriation) — 1275
    Estimates of accomplishments, loan fund period 1962-68 — 1278
  Student research under study at cooperative fishery units — 1316
  Questions submitted by Senator McGee — 1322
  Questions submitted by Senator Bartlett — 1326
  Questions submitted by Senator Proxmire — 1328
  Questions submitted by Senator Smith — 1328
Territories, Office of (beginning of hearings) — 153
  Director's statement — 186
  Budget estimate and justification — 153
  Itemization of estimate — 186
  Summary of increases and decreases, 1968 — 154
  Analysis of activities — 155
  General administration — 185
  Alaska public works loans — 185
  American Samoa — 163
  Statement of Governor Lee, American Samoa — 196
    Summary of appropriation and grants — 162, 182
      Construction — 172
      Economic and industrial development — 168
      General administration — 171
      Health, education, and welfare — 165
      Operations, maintenance, and transportation services — 169
    Statement of revenue by sources — 176
  Guam — 157
  Statement of Governor Guerrero of Guam — 188
    Guam rehabilitation projects, fiscal year 1968 — 157
  Virgin Islands — 156
  Trust Territory of the Pacific Islands — 225
    Statement of High Commissioner Norwood — 249
    Budget estimate and justification — 225
    Amendment requested — 2575
    Itemization of estimate — 249
    Summary of increases and decreases, 1968 — 226
    Analysis by activities — 226
    Summary of appropriations and grants — 227
    Summary of activity, fiscal year 1968 — 227
    Programs administration and operations — 229
      Administration — 237
      Community services — 229
      Operations, maintenance, transportation, and communications — 240
      Protection to persons and property — 235
      Public affairs — 232
      Resources and development — 234
    Statement of reimbursements and other operating income — 242
    Air transportation—Estimated revenues and obligations, fiscal year 1968 — 242
    Sea transportation—Estimated revenues and obligations, fiscal year 1968 — 242
    Literature production—Estimated revenues and obligations, fiscal year 1968 — 243
    Saipan Utilities Agency—Operating statement, June 30, 1966 — 243
    Copra Stabilization Fund—Balance sheet, June 30, 1966 — 243
    Saipan trust fund—Balance sheet, June 30, 1966 — 244
    Land use and occupancy funds, June 30, 1966 — 244
    Supply stock fund—Balance sheet, June 30, 1966 — 245
    Hotel operations income statement, fiscal year ending June 30, 1966 — 245

Territories, Office of (beginning of hearings)—Continued
  Trust Territory of the Pacific Islands—Continued
    Page
    Economic development loan fund—Balance sheet, June 30, 1966 245
    Typhoon emergency rehabilitation fund—Operating statement June 30, 1966 246
    Congress of Micronesia—Summary of appropriations 246
  Virgin Islands Corporation 249
Water Resources Research, Office of (beginning of hearings) 271
  Director's statement 279
  Budget estimate and justification 271
  Itemization of estimate 279
  Salaries and expenses 273
    Amendment requested 2650
  Analysis by activities 273
    Additional water research 276
    Administration 279
    Assistance to States for institutes 276
    Matching grants to State institutes 276
    Scientific information center 277
  Summary of program, by States 298
  Title II participation procedure 319
  Title II policies 330
  Questions submitted by Senator Byrd of West Virginia 335

LIST OF WITNESSES

	Page
Advisory Committee of the Navajo Tribal Council	2387
Aldrich, Donald, president, Montana Wildlife Federation	2481
Allott, Hon. Gordon, U.S. Senator from Colorado	2417
American Forestry Association	2420, 2434, 2435
Anderson, Hon. Clinton P., U.S. Senator from New Mexico	2421, 2492
Beale, John A., chief State forester, Wisconsin Conservation Department, Madison, Wis	2294
Belindo, John, National Congress of American Indians	2394, 2395, 2400
Bennett, Hon. Wallace F., U.S. Senator from Utah	2436
Bethea, W. C., First National Bank in Orangeburg, S. C	2428
Bird, Edison Real, chairman, Crow Tribal Council, Hardin, Mont	2488
Bledsoe, Robert P., executive secretary, Wyoming Wool Growers Association, Casper, Wyo	2350
Boggs, Hon. J. Caleb, U.S. Senator from Delaware	2442
Bolle, Dr. Arnold W., dean, School of Forestry, University of Montana	2479
Brandborg, Stewart M., executive director, The Wilderness Society	2366, 2373
Bureau Manager at Vale, Oreg	2504
Bureau of Sport Fisheries and Wildlife	2424
Capps, Osal B., State forester, Missouri Conservation Commission, Jefferson City, Mo	2294
Carlton, Charles F., representative, Southern Hardwood Forestry Research Group, Delta Council, and Louisiana Forestry Association	2305
Chapman, Samuel J., director, Montana State Planning Board	2480
Church, Hon. Frank, U.S. Senator from Idaho	2458
Clapper, Louis S., chief of Conservation Education, The National Wildlife Federation	2343
Cobb, Samuel S., director, Bureau of Forestry, Department of Forests and Water, Harrisburg, Pa	2294
Cohodas, S. M., president, Cohodas-Paoli Co., Inc., Houghton, Mich	2498
Cohodas-Paoli Co., Inc	2498
College of Forestry, State University of New York	2410
Colorado Department of Game, Fish, and Parks	2417
Cooper, Hon. John Sherman, U.S. Senator from Kentucky	2499, 2502
Dean, George W., State forester, Division of Forestry, Charlottesville, Va	2294
Defenders of Wildlife, Inc	2431
Dietrich, John M., Jr., Crowley, Kilbourne, Haughey, Hanson & Gallagher, Billings, Mont	2482
Federal Aviation Agency	2527
Fish and Wildlife Service	2424
Flener, William M., for the director, Airports Service	2528
Florida Outdoor Recreational Planning Committee	2420
Forest Service Laboratory, Delaware, Ohio	2528
Forest Service, Pacific Northwest Region, Portland, Oreg	2514
Gamble, James F	2407
Gatewood, Howard, executive vice president of the Fine Hardwood Association	2312
Gott, Don, executive director of the American Walnut Manufacturers Association	2312, 2316
Gottschalk, John S	2500
Gray, Gordon, chairman, The National Trust for Historic Preservation	2334
Green, Burdett	2433
Hagan, Wallace W., director and State geologist, Kentucky Geological Survey	2422
Hansen, Hon. Clifford P., U.S. Senator from Wyoming	2446
Harris, Hon. Fred R., U.S. Senator from Oklahoma	2454

Page
Hart, Hon. Philip A., U.S. Senator from Michigan 2494
Hartley, Earl, executive secretary, Western Council, Lumber & Sawmill Workers 2417
Harvill, Richard A 2429
Hatatli, Ned A., director of the Resources Division, of the Navajo Tribe of Indians 2384
Hatfield, Hon. Mark O., U.S. Senator from Oregon 2448, 2451
Hough, Leo W., State geologist, Louisiana Geological Survey 2422
Houghton National Bank, Houghton, Mich 2498
Howard, John J., Houghton National Bank 2498
Huffman, Roy E., vice president for research, Montana State University 2484
Hummel, J. George, acting president, Western Montana Fish and Game Association 2480
Jackson, Hon. Henry M., U.S. Senator from Washington 2404
Jemison, George M., deputy chief, Department of Agriculture 2479
Jones, Paul, chairman, Navajo Tribal Council 2392
Kauffman, David T., acting chairman, Washington Forest Practice Committee 2405
Kirch, Wayne E., chairman, State of Nevada, Fish and Game Department 2424, 2426
Koch, Dr. Edwin G., president, Montana College of Mineral Science and Technology 2484, 2485
Landrum, Ney C., director, Florida Outdoor Recreational Planning Committee 2420
Langdale, H 2433
Lasker, Mrs. Albert D 2331
Lausche, Hon. Frank J., U.S. Senator from Ohio 2528
Lieurance, Maxwell T., district manager, Bureau of Land Management, Vale, Oreg 2510
Longmire, Richard C., chairman, Legislative Committee, National Association of Soil and Water Conservation Districts 2401
Louisiana Geological Survey 2422
McClung, Lester D., State forester, Division of Forestry, Department of Natural Resources, Charleston, W. Va 2293
Mansfield, Hon. Mike, U.S. Senator from Montana 2525
Marine Game Fish Research Laboratory, Port Aransas, Tex 2529
Metcalf, Hon. Lee, U.S. Senator from Montana 2465, 2471, 2525
Michigan Bell Telephone Co., Houghton, Mich 2497
Milner, Doris, Hamilton, Montana 2481
Missouri Department of Conservation 2433
Montana College of Mineral Science and Technology 2485
Montana State Planning Board 2480
Montana Wildlife Federation 2481
Montoya, Hon. Joseph M., U.S. Senator from New Mexico 2421, 2492
Morris, Dr. Selyte W., president of Southern Illinois University, Edwardsville and Carbondale, Ill 2322
Morse, Hon. Wayne, U.S. Senator from Oregon 2502
Morton, Hon. Thruston B., U.S. Senator from Kentucky 2500
Moss, Hon. Frank E., U.S. Senator from Utah 2461
Muschenheim, Dr. Carl, chairman, National Committee on Indian Health of the Association on American Indian Affairs, Inc 2379
Muskie, Hon. Edmund S., U.S. Senator from Maine 2428, 2489
Myers, J. Walter, Jr., executive director, Forest Farmers Association 2324
Navajo Tribal Council resolution 2390, 2392
Noren, Carl R., director, Missouri Department of Conservation 2434
O'Malley, George T., Jr., assistant director, Colorado Department of Game, Fish, and Parks 2418
Orangeburg Fish Hatchery, South Carolina 2427
Percy, Hon. Charles H., U.S. Senator from Illinois 2310
Plummer, Edward O., resources division, Navajo Tribe of Indiana 2384
Pollard, Joseph M., Los Angeles County Watershed Commission 2340
Pacific Marine Fisheries Commission 2430
Pahranagat Wildlife Refuge letters to Senator Bible 2423
Pomeroy, Kenneth B., chief forester of the American Forestry Association 2420, 2435

Page
Portage Lake Lumber Co., Houghton, Mich ... 2497
Riippa, John R., Portage Lake Lumber Co ... 2497
Ruark, H. E., director of the Georgia Forest Council, Macon, Ga ... 2297, 2300
Russell, Hon. Richard B., U.S. Senator from Georgia ... 2296, 2433
Ryan, William S., Michigan Bell Telephone Co ... 2497
Shirley, A. R., president of the National Association of State Foresters ... 2293, 2297
Smith, Dr. Spencer M., Jr., secretary, Citizens Committee on Natural Resources, D.C ... 2376
Smith, Norman F., chief of the Recreation Resource Planning Division, Michigan Department of Conservation ... 2361
Smith, Vernon J., California Wildlife Federation, San Francisco, Calif ... 2356
Smithee, Kenneth J., public affairs officer, National Recreation and Park Association ... 2363
Smitherman, R. Oneal ... 2430
Squires, John W., representative, Southern Hardwood Forest Research Group, Jackson, Miss ... 2302–2304
Stennis, Hon. John, U.S. Senator from Mississippi ... 2293, 2301
Stone, J. Herbert, regional forester, Pacific Northwest Region, Portland, Oreg ... 2514, 2520
Stratton, A. Clark, acting director, National Park Service ... 2526
Thomas, Donald, chairman, Fish and Game Committee, Lewiston Chamber of Commerce, Idaho ... 2459
Thomspon, J. Nevin, D.D.S., Wolf Point, Mont ... 2481
Thurmond, Hon. Strom, U.S. Senator from South Carolina ... 2405, 2427, 2428
Towell, William E., executive vice president of the American Forestry Association ... 2434
Tudor, Dr. William J., assistant to the vice president of Southern Illinois University ... 2319
Tunison, A. V., Deputy Director, Bureau of Sport Fisheries and Wildlife ... 2425, 2427, 2445
Tydings, Hon. Joseph D., U.S. Senator from Maryland ... 2421
Voigt, L. P., conservation director, Wisconsin Conservation Department ... 2419
Walker, Dr. Laurence C., dean, School of Forestry, Stephen F. Austin State College, Nacogdoches, Tex ... 2329
Western Council, Lumber and Sawmill Workers ... 2415
Western Montana Fish and Game Association ... 2480
Willow Beach Fish Hatchery, Las Vegas, Nev ... 2425
Wisconsin Conservation Department ... 2418
Wolff, Richard C., vice president of the Garcia Corp., Teaneck, N.J ... 2346
Woodward, Harry R., director, Colorado Department of Game, Fish, and Parks ... 2418
Yarborough, Hon. Ralph W., U.S. Senator from Texas ... 2529

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