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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1974

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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

NINETY-THIRD CONGRESS

FIRST SESSION

SUBCOMMITTEE ON DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

JULIA BUTLER HANSEN, Washington, *Chairman*

SIDNEY R. YATES, Illinois
K. GUNN McKAY, Utah
CLARENCE D. LONG, Maryland
FRANK E. EVANS, Colorado
JOSEPH M. McDADE, Pennsylvania
WENDELL WYATT, Oregon
VICTOR V. VEYSEY, California

J. DAVID WILLSON and BYRON S. NIELSON, *Staff Assistants*

PART 1

Bureau of Land Management
Department of the Interior—Natural Resources Budget Overview
Forest Service
Joint Federal-State Land Use Planning Commission for Alaska

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U.S. GOVERNMENT PRINTING OFFICE
92-148 O WASHINGTON : 1973

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1974

MONDAY, FEBRUARY 26, 1973.

DEPARTMENT OF THE INTERIOR—NATURAL RESOURCES BUDGET OVERVIEW

WITNESSES

DR. JOHN C. WHITAKER, UNDER SECRETARY
DR. KENNETH L. LAY, DEPUTY UNDER SECRETARY
JARED G. CARTER, DEPUTY UNDER SECRETARY
RICHARD R. HITE, DEPUTY ASSISTANT SECRETARY
FRANCIS M. WILES, DIRECTOR OF BUDGET
EARL L. BUTZ, COUNSELOR TO THE PRESIDENT FOR NATURAL RESOURCES

Mrs. HANSEN. The subcommittee will come to order.

This is our traditional overview hearing on Natural Resources. This year it is in a little different context because of the appearance of the Secretary of Agriculture, Mr. Butz in his role as Counselor to the President on Natural Resources.

I would like to place in the record at this time a copy of a letter I received from Secretary Morton.

(The letter follows:)

THE SECRETARY OF THE INTERIOR,
Washington, D.C., February 18, 1973.

Hon. JULIA BUTLER HANSEN,
U.S. House of Representatives,
Washington, D.C.

DEAR JULIA: Before departing for California, I wanted to apologize for not having had the opportunity to give you advance notice of the situation and to assure you that the attached statement is complete.

I do not anticipate any problems and, in fact, will open an office in Menlo Park from which I will continue to conduct Interior business.

One of my prime concerns is that I will be unable to personally appear before your committee during your upcoming hearings, but I have every confidence in John Whitaker and know he will be an excellent representative.

Again, let me reassure you that I intend to stay on top of all Interior matters and will keep in touch.

With warm regards.

Yours sincerely,

ROGERS C. B. MORTON,
Secretary.

INTRODUCTION OF SUBCOMMITTEE MEMBERS

I would like to introduce to you the members of the committee who are present this morning.

On my left is our ranking Democratic member, Congressman Sidney Yates of Illinois and a new member of the subcommittee K. Gunn

McKay of Utah. I will introduce the other gentlemen, when they arrive.

To my right is our ranking Republican, Congressman Joseph McDade and Congressman Wendell Wyatt. We are also very pleased to welcome Congressman Victor Veysey of Southern California. Congressman Veysey is a new Republican member and was, I believe, on the Education and Labor Committee prior to this assignment.

Mr. VEYSEY. I am very happy to be with this group.

Mrs. HANSEN. The committee would also like to welcome Secretary Butz, who is the Counselor on Natural Resources to President Nixon. We warmly welcome Under Secretary Whitaker. It is a pleasure to have you both here.

I would like to express the committee's regret about the illness of Secretary Morton. The committee wishes him a very speedy recovery and sends him our very best. We would like to be kept informed of how he fares, because most of the members of this committee have had the privilege and pleasure of being his colleagues in the House of Representatives and we have enjoyed working with him as Secretary of Interior.

BIOGRAPHIES OF WITNESSES

Dr. Whitaker, we will place your biography in the record at this point, along with those of Secretary Butz, Dr. Lay and Deputy Under Secretary Carter.

(Biographies follows:)

BIOGRAPHICAL SKETCH OF JOHN C. WHITAKER,
Under Secretary of the Interior

Born: December 29, 1926 at Victoria, British Columbia, Canada, of U.S. citizen parents

Education: Graduated Loyola High School, Baltimore, Maryland -- 1944
Bachelor of Social Science, Georgetown University, Washington, D. C. -- 1949
PhD, Geology, Johns Hopkins University, Baltimore, Maryland -- 1953
Special Courses: United States Navy Aerographers School (weather data compilation and forecasting); Lakehurst, New Jersey -- 1945
Massachusetts Institute of Technology, Cambridge, Massachusetts, summer course in photogrammetry and aerial photograph interpretation -- 1958

Family: Married to the former Elizabeth Bradley; five children: John Clifford - 13 years; Robert Carroll - 11 years; Stephen Bradley - 9 years; William Burns - 7 years; James Ford - 4 years.
Residence: 8013 Greentree Road, Bethesda, Maryland 20034

Positions:

1947 Summer employment while in college - with the United States Coast and Geodetic Survey performing topographic mapping in the City of Philadelphia

1948-49 Summer employment while in college - with the United States Geological Survey field party in Alaska investigating potential mineral deposits

1951-53 Instructor, college level geology at Johns Hopkins University, Baltimore, Maryland while attending graduate school

1953-55 Geologist for Standard Oil of California - performing exploration field petroleum geology - Utah, Nevada, California, Washington States

1955-57 Manager - Geophysical sales - Lundberg Exploration, Ltd. Toronto, Canada (airborne and ground geophysical contracting)

1957-59	Manager, Geophysical sales, Hycon Aerial Survey, Inc., Pasadena, California (aerial mapping, photo interpretation, air and ground geophysical contracting)
1959-66	Vice President, International Aero Service Corp. (Litton Industries), Philadelphia, Pa. - airborne and ground geophysics; aerial mapping; aerial photographic interpretation for soils and forestry inventories; land use mapping; reconnaissance preliminary design
1966-68	Private consultant, Washington, D. C. Natural resource sales and development of loan programs representing the Aero Service Corporation of Philadelphia and T. Ingledow & Associates, Ltd. of Vancouver, Canada
1968	January 20th until November - Cabinet Secretary. Preparation of agenda for Cabinet meetings; assisted in domestic policy coordination for the in-coming Nixon administration cabinet.
1969	November until present - Deputy Assistant to the President for Domestic Affairs. Assisted in inter-departmental coordination for the President in the areas of natural resources and the environment. Coordination of the preparation of the President's three environmental messages to Congress (February 1970, 1971 and 1972) and the President's energy message to Congress of June 1971

Professional Publications:

Geology of Catoctin Mountain - Maryland and Virginia (PhD Thesis) Bulletin of the Geological Society of America, 1955

Cross-bedding in some lower Cambrian clastics in Maryland Bulletin of the Geological Society of America, 1955

The Proton Nuclear Precession Magnetometer for Airborne Geophysical Exploration -- Oil and Gas Journal, 1957

(The below listed are private reports for commercial companies or clients)

Geological and Petroleum Exploration Analysis of the Filmore Range, Utah

Geological and Petroleum Exploration Analysis Clark County, Nevada

Geological and Petroleum Exploration Analysis of Mohave Desert, California

Geological and Petroleum Exploration Analysis of Olympic Range, Washington

Airborne Geophysical Survey and Mineral Exploration Loan Application for the Government of Ghana to the Agency for International Development

Aerial Photographic Airborne Geophysical Mapping Loan Application to the Agency for International Development for the Government of the United Arab Republic

Airborne Magnetic Survey for Mineral Exploration Loan Application for the Government of Turkey to the Agency for International Development

Air and Ground Mineral Exploration Program Loan Application for the Government of Surinan (Dutch Guiana) to the United Nations Special Fund

Air and Ground Mineral Exploration Program Loan Application to the United Nations Special Fund for the Government of British Guiana

Natural Resource Inventory and Preliminary Road Location and Engineering Resource Development Loan to the World Bank for the Government of Paraguay

Natural Resources Inventory Loan Application to the Inter-American Development Bank for the Government of Chile

Natural Resources Inventory Loan Application to the Organization of American States for the Government of Ecuador

Federal Working Committees: White House staff inter-departmental coordination for the President's three environmental and one energy message to Congress.

Other Professional Activity: Member - American Association of Petroleum Geologists, American Congress on Surveying and Mapping, Geological Society of America, Society of Exploration Geophysicists and the American Institute of Mining and Metallurgical and Petroleum Engineers.

# # #

SECRETARY OF AGRICULTURE EARL L. BUTZ

Biographical Summary - February 1973

Secretary of Agriculture Earl L. Butz, a native of Albion, Indiana, was born and brought up on a small general farm. Educated in the public schools of Wawaka, Indiana, he went to Purdue University on a 4-H scholarship and obtained a bachelor of science degree in agriculture, 1932. After working for a year on the family farm, he returned to Purdue as a graduate fellow and subsequently was affiliated with the Federal Land Bank of Louisville, Kentucky, as a research fellow. In 1937 he won his doctor of philosophy degree from Purdue. The same year he married Mary Emma Powell of North Carolina, whom he first met during a 4-H conference in Washington, D.C. several years before. They have two sons, William Powell and Thomas Earl.

Dr. Butz joined the Purdue faculty as an instructor in agricultural economics in 1937 and served successively as assistant professor, associate professor, and professor and head of the agricultural economics department. He became dean of Purdue's college of agriculture in 1957, discharging the responsibilities of that position until he was named Dean of Continuing Education and Vice President of the Purdue Research Foundation in 1968.

In frequent demand as a speaker and agricultural representative before farm, business, and civic groups, he was a research fellow with the Brookings Institution, Washington, D.C., 1944-45; served in 1948 as vice president of both the American Farm Economics Association and the Indiana Academy of Social Science; and was vice president in 1951 of the American Society of Farm Managers and Rural Appraisers.

President Eisenhower appointed Dr. Butz in 1954 to serve as an Assistant Secretary of Agriculture. In that post for three years, Dr. Butz also was a member of the board of directors of the Commodity Credit Corporation and was chairman of the U.S. delegation to the Food and Agriculture Organization of the U.N.

Dr. Butz is the author of The Production Credit System for Farmers, published by the Brookings Institution, and has written numerous articles for research bulletins, agricultural magazines, and scientific journals. He has traveled extensively among 30 countries studying food and agricultural conditions, and is a member of many agricultural organizations and scholarly societies. They include: Sigma Xi; Tau Kappa Alpha; Alpha Zeta; Alpha Gamma Rho; Sigma Delta Chi; Kiwanis; International Conference of Agricultural Economists; American Association of University Professors; Nutrition Foundation of New York; Farm Foundation, Chicago; and the Foundation for American Agriculture.

Nominated to the Cabinet by President Nixon, Dr. Butz took office as Secretary of Agriculture in December, 1971. In December of 1972 he received the American Farm Bureau Federation Award for Distinguished Service to Agriculture, the first Secretary of Agriculture since World War II to be thus honored. His duties were expanded in January 1973, when he was chosen to be Presidential Counselor for Natural Resources.

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Kenneth Lay

Kenneth Lay was appointed Deputy Under Secretary of Interior for Energy in October 1972. Prior to his appointment, Dr. Lay served as Assistant to Vice Chairman Pinkney Walker of the Federal Power Commission.

Born in Tyrone, Missouri, Dr. Lay graduated from the University of Missouri with honors in economics. He also holds a Master's degree in economics from the same university and a Ph.D. in economics from the University of Houston. His academic distinctions include Phi Beta Kappa, Omicron Delta Kappa, Omicron Delta Epsilon and Who's Who in American Colleges and Universities.

Following completion of his masters program, Dr. Lay was employed as Staff Economist in the Corporate Planning Department of Humble Oil & Refining Company. His responsibilities in that position included short and long range economic and petroleum forecasting, special studies on the appropriate pricing and financial strategy for selected petroleum products and markets, and the formulation of long range corporate plans for the company.

Dr. Lay left his position with Humble to serve as an officer in the United States Navy under the Assistant Secretary of the Navy for Financial Management. His duties included the financial analysis and planning of Naval weapon systems. Dr. Lay also served as Deputy Director of Research on a major Department of Defense Study Group which had responsibility for developing and implementing a new accounting and financial management system on defense procurement contracts. His service in the Navy led to the award of the Navy Commendation Medal.

Upon leaving the Navy, Dr. Lay joined Commissioner Pinkney Walker's personal staff at the Federal Power Commission. He became Commissioner Walker's top assistant and represented him on many energy matters. He was heavily involved in the Commission's most recent area rate decisions, development of the new optional pricing procedure and the establishment of an overall policy for the new supplemental gas supplies.

Since 1970, Dr. Lay has also been an Associate Professor and Lecturer in economics at the George Washington University in Washington, D.C. He teaches graduate courses on micro- and macroeconomic theory, economic regulation and anti-trust policies. Dr. Lay is a member of the American Economic Association and Beta Theta Pi Fraternity.

Dr. Lay is married to the former Judith Ayers of Jefferson City, Missouri, and is the father of a son and a daughter. The Lay family currently live in Annandale, Virginia.

Jared G. Carter

Jared G. Carter, 37, of Arlington, Va., was appointed Deputy Under Secretary of the Interior in April 1972 by Interior Secretary Rogers C. B. Morton.

Carter comes to Interior from the Office of the Secretary of Defense where he served for the past year as Principal Deputy Director of the Office of Ocean Affairs. Previously he had been Assistant Legal Adviser in the Department of State.

Carter's work with the Department of Defense involved directing that Department's contribution to U.S. and international preparations for a United Nations conference on the law of the sea to be held in 1973. These preparations have involved the entire range of traditional law of the sea issues as well as new questions relating to preservation of the marine environment.

In 1967 Carter joined the Department of State. There he served as Assistant Legal Adviser, first for special political affairs, which included law of the sea and arms control matters, and subsequently for Economic Affairs, which included the entire range of international trade, investment and transportation issues considered by the Department of State.

While in the State Department, Carter, who is a graduate of Stanford Law School, headed several U.S. delegations to international conferences and meetings concerning international maritime and economic affairs. He was the U.S. representative to the 1971 Guatamala Conference which revised the Warsaw Convention concerning civil aviation.

At Stanford, which he attended on a three-year scholarship, Carter was elected to the Order of the Coif, a scholastic honorary society. He was also an editor of the Stanford Law Review. Upon completion of his law studies, he clerked for Mr. Justice Douglas of the Supreme Court of the United States for one year and then joined the Stanford faculty as Assistant Professor of Law (1963-65). During the two succeeding years he practiced general corporate law with the firm of Cooley, Crowley, Gaither, Godward, Castro and Huddleson of San Francisco.

Carter also served several years with the Marines as a First Lieutenant, and with the NROTC during his four undergraduate college years at the University of California (Los Angeles). He was born in Wingate, Texas.

He lives at 3539 Nottingham Street in Arlington, Va., with his wife Bonnie and 3 children, Troy, Brian and Cheryl, ages 14, 12 and 7, respectively.

INTRODUCTION OF WITNESSES

Mr. HANSEN. Mr. Secretary, will you introduce the members of your staff who are present today?

Dr. WHITAKER. Yes. I certainly will.

To my far left is Dr. Kenneth Lay, the Deputy Under Secretary, who takes care primarily of the area of energy. The Secretary and I felt that energy was so much a part of our Department that one of the Deputy Under Secretaries should handle that area.

Next to him is Mr. Jared Carter, who is the other Deputy Under Secretary. Of course, you know Secretary Butz.

Mrs. HANSEN. What is Mr. Carter's function?

Dr. WHITAKER. He functions generally as a utility infielder.

The Deputy Under Secretaries have to be my eyes and ears just because of the traffic that is involved, to keep me abreast of what is going on.

To my right, you know Frank Wiles, the Director of the Office of Budget, and Mr. Dick Hite, Deputy Assistant Secretary.

Mrs. HANSEN. We have met these gentlemen at length, many times and in many places.

Dr. WHITAKER. Whether they are on the right or left has nothing to do with their political persuasion.

Mrs. HANSEN. They do not have to have any; all they have to do is explain your impoundments.

Secretary Butz, will you introduce your staff.

Counselor BUTZ. I have with me Norman Ross, who is in the Office of the Counselor for Natural Resources.

FISCAL 1974 BUDGET ESTIMATE FOR DEPARTMENT OF INTERIOR

Mrs. HANSEN. This is the first meeting of the Subcommittee on Interior and Related Agencies to hear testimony on the budget estimates for fiscal year 1974. The budget estimates for the part of the Department of the Interior included in this bill for new obligational authority and appropriations to liquidate contract authority, total $1,608,099,000. This is a reduction of $186,914,600 from appropriations enacted to date for fiscal year 1973. The budget also contained supplemental estimates for 1973, for firefighting and certain pay costs, amounting to $28,940,000 for Interior agencies included in this bill. The subcommittee held hearings on these requests last week.

At this point in the record we will insert a comparative statement of all items included in this bill, along with miscellaneous tables concerning the Department of Interior's funding and personnel.

We will also insert the justifications for the many permanent appropriations for the Department of the Interior.

(The tables and justifications follow:)

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item	New budget (obligational) authority appropriated, 1973 (enacted to date)	Budget estimates of new (obligational) authority, 1974	Budget estimates, 1974, compared with 1973 appropriations
(1)	(2)	(3)	(4)
TITLE I—DEPARTMENT OF THE INTERIOR			
PUBLIC LAND MANAGEMENT			
BUREAU OF LAND MANAGEMENT			
Management of lands and resources	$78,065,000	$91,347,000	+$13,282,000
Construction and maintenance	7,965,000	6,300,000	−1,665,000
Public lands development roads and trails (appropriation to liquidate contract authority)	*(3,265,000)*	*(4,000,000)*	*(+735,000)*
Oregon and California grant lands (indefinite, appropriation of receipts)	17,500,000	17,500,000	
Range improvements (indefinite, appropriation of receipts)	2,714,000	3,376,000	+662,000
Recreation development and operation of recreation facilities (indefinite, special fund)		165,000	+165,000
Total, Bureau of Land Management	106,244,000	118,688,000	+12,444,000
BUREAU OF INDIAN AFFAIRS			
Education and welfare services	303,285,000	295,572,000	−7,713,000
Education and welfare services (appropriation to liquidate contract authority)	*(271,000)*	*(1,500,000)*	*(+1,229,000)*
Resources management	83,141,000	85,358,000	+2,217,000
Construction	56,078,000	44,000,000	−12,078,000
Road construction (appropriation to liquidate contract authority)	*(45,539,000)*	*(43,000,000)*	*(−2,539,000)*
Alaska native fund	50,000,000	70,000,000	+20,000,000
Payment to Ute Tribe of Uintah and Ouray Reservation	65,000		−65,000
General administrative expenses	6,200,000	5,319,000	−881,000
Tribal funds (definite)	3,000,000	3,000,000	
Tribal funds (indefinite)	13,530,000	13,505,000	−25,000
Total, Bureau of Indian Affairs	515,299,000	516,754,000	+1,455,000
BUREAU OF OUTDOOR RECREATION			
Salaries and expenses	4,150,000	4,436,000	+286,000
LAND AND WATER CONSERVATION FUND			
Appropriation of receipts (indefinite)	300,000,000	55,223,000	−244,777,000
TERRITORIAL AFFAIRS			
Administration of territories	22,375,000	15,000,000	−7,375,000
Permanent appropriation (special fund)	*(469,000)*	*(480,000)*	*(−49,000)*
Transferred from other accounts (special fund)	*(470,000)*	*(645,000)*	*(+175,000)*
Trust Territory of the Pacific Islands	60,000,000	56,000,000	−4,000,000
Total, Territorial Affairs	82,375,000	71,000,000	−11,375,000
Total, Public Land Management	1,008,068,000	766,101,000	−241,967,000

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item	New budget (obligational) authority appropriated, 1973 (enacted to date)	Budget estimates of new (obligational) authority, 1974	Budget estimates, 1974, compared with 1973 appropriations
(1)	(2)	(3)	(4)
TITLE I—DEPARTMENT OF THE INTERIOR—Continued			
MINERAL RESOURCES			
GEOLOGICAL SURVEY			
Surveys, investigations, and research	$150, 450, 000	$156, 000, 000	+$5, 550, 000
BUREAU OF MINES			
Mines and minerals	157, 465, 000	136, 824, 000	−20, 641, 000
OFFICE OF COAL RESEARCH			
Salaries and expenses	43, 490, 000	52, 500, 000	+9, 010, 000
OFFICE OF OIL AND GAS			
Salaries and expenses	1, 558, 000	1, 485, 000	−73, 000
Total, Mineral Resources	352, 963, 000	346, 809, 000	−6, 154, 000
FISH AND WILDLIFE AND PARKS			
BUREAU OF SPORT FISHERIES AND WILDLIFE			
Resource management	75, 739, 500	79, 004, 000	+3, 264, 500
Construction and anadromous fish	2, 333, 000	9, 233, 000	+6, 900, 000
Migratory bird conservation account (definite, repayable advance)	7, 100, 000		−7, 100, 000
Total, Bureau of Sport Fisheries and Wildlife	85, 172, 500	88, 237, 000	+3, 064, 500
NATIONAL PARK SERVICE			
Operation of the National Park System	158, 878, 000	176, 780, 000	+17, 902, 000
Planning and construction	51, 046, 000	20, 000, 000	−31, 046, 000
Road construction (appropriation to liquidate contract authority)	*(5, 416, 000)*	*(35, 000, 000)*	*(+29, 584, 000)*
Preservation of historic properties	11, 559, 000	19, 559, 000	+8, 000, 000
Planning, development and operation of recreation facilities (indefinite, special fund)		32, 925, 000	+32, 925, 000
John F. Kennedy Center for the Performing Arts	2, 000, 000	2, 400, 000	+400, 000
Total, National Park Service	223, 483, 000	251, 664, 000	+28, 181, 000
Total, Fish and Wildlife and Parks	308, 655, 500	339, 901, 000	+31, 245, 500
OFFICE OF WATER RESOURCES RESEARCH			
Salaries and expenses	16, 344, 000	13, 149, 000	−3, 195, 000
OFFICE OF THE SOLICITOR			
Salaries and expenses	7, 360, 000	7, 850, 000	+490, 000

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item	New budget (obligational) authority appropriated, 1973 (enacted to date)	Budget estimates of new (obligational) authority, 1974	Budget estimates, 1974, compared with 1973 appropriations
(1)	(2)	(3)	(4)
TITLE I—DEPARTMENT OF THE INTERIOR—Continued			
OFFICE OF THE SECRETARY			
Salaries and expenses	$15, 295, 100	$15, 895, 000	+$599, 900
Departmental operations	4, 466, 000	5, 737, 000	+1, 271, 000
Saline water research	[1] 26, 871, 000	2, 527, 000	−24, 344, 000
Central energy research and development fund		25, 000, 000	+25, 000, 000
Salaries and expenses (special foreign currency program)	500, 000	1, 630, 000	+1, 130, 000
Total, Office of the Secretary	47, 132, 100	50, 789, 000	+3, 656, 900
Total, new budget (obligational) authority, Department of the Interior	1, 740, 522, 600	1, 524, 599, 000	−215, 923, 600
Consisting of—			
Appropriations	1, 740, 522, 600	1, 524, 599, 000	−215, 923, 600
Definite appropriations	(1, 406, 778, 600)	(1, 401, 905, 000)	(−4, 873, 600)
Indefinite appropriations	(333, 744, 000)	(122, 694, 000)	(−211, 050, 000)
Memoranda—			
Appropriations to liquidate contract authority	(54, 491, 000)	(83, 500, 000)	(+29, 009, 000)
Total, new budget (obligational) authority and appropriations to liquidate contract authority	(1, 795, 013, 600)	(1, 608, 099, 000)	(−186, 914, 600)
TITLE II—RELATED AGENCIES			
DEPARTMENT OF AGRICULTURE			
FOREST SERVICE			
Forest protection and utilization:			
Forest land management	255, 604, 000	246, 324, 000	−9, 280, 000
Forest research	61, 143, 000	57, 275, 000	−3, 868, 000
State and private forestry cooperation	32, 760, 000	23, 760, 000	−9, 000, 000
Total, forest protection and utilization	349, 507, 000	327, 359, 000	−22, 148, 000
Construction and land acquisition	48, 581, 900	25, 498, 000	−23, 083, 900
Youth conservation corps	3, 500, 000	10, 000, 000	+6, 500, 000
Forest roads and trails (appropriation to liquidate contract authority)	*(168, 840, 000)*	*(87, 700, 000)*	*(−71, 140, 000)*
Acquisition of lands for national forests:			
Special acts (special fund, indefinite)	80, 000	94, 000	+14, 000
Acquisition of lands to complete land exchanges		55, 300	+55, 300
Cooperative range improvements (special fund, indefinite)	700, 000	700, 000	
Assistance to States for tree planting	1, 020, 000	1, 020, 000	

See footnotes at end of table, p. VIII.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item (1)	New budget (obligational) authority appropriated, 1973 (enacted to date) (2)	Budget estimates of new (obligational) authority, 1974 (3)	Budget estimates, 1974, compared with 1973 appropriations (4)
TITLE II—RELATED AGENCIES—Continued			
DEPARTMENT OF AGRICULTURE—Continued			
FOREST SERVICE—continued			
Construction and operation of recreation facilities (indefinite, special fund)		$3,546,000	+$3,546,000
Scientific activities overseas (special foreign currency program)		1,000,000	+1,000,000
Total, new budget (obligational) authority, Forest Service	$403,388,900	369,272,300	−34,116,600
COMMISSION OF FINE ARTS			
Salaries and expenses	135,000	144,000	+9,000
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE			
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION			
Indian health services	[1] 172,748,000	176,968,000	+4,220,000
Indian health facilities	44,549,000	41,717,000	−2,832,000
Total, Health Services and Mental Health Administration	217,297,000	218,685,000	+1,388,000
OFFICE OF EDUCATION			
Indian education	[1] 18,000,000		−18,000,000
INDIAN CLAIMS COMMISSION			
Salaries and expenses	1,075,000	1,086,000	+11,000
NATIONAL CAPITAL PLANNING COMMISSION			
Salaries and expenses	1,425,000	1,462,000	+37,000
NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES			
SALARIES AND EXPENSES			
Endowment for the arts	34,700,000	65,000,000	+30,300,000
Endowment for the humanities	34,500,000	65,000,000	+30,500,000
Administrative expenses	5,314,000	8,000,000	+2,686,000
Subtotal, salaries and expenses	74,514,000	138,000,000	+63,486,000
MATCHING GRANTS			
Endowment for the arts (indefinite)	3,500,000	7,500,000	+4,000,000
Endowment for the humanities (indefinite)	3,500,000	7,500,000	+4,000,000
Subtotal, matching grants	7,000,000	15,000,000	+8,000,000
Total, National Foundation on the Arts and the Humanities	81,514,000	153,000,000	+71,486,000

See footnotes at end of table, p. VIII.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item	New budget (obligational) authority appropriated, 1973 (enacted to date)	Budget estimates of new (obligational) authority, 1974	Budget estimates, 1974, compared with 1973 appropriations
(1)	(2)	(3)	(4)
TITLE II—RELATED AGENCIES—Continued			
SMITHSONIAN INSTITUTION			
Salaries and expenses	$51, 633, 000	$56, 438, 000	+$4, 805, 000
Museum programs and related research (special foreign currency program)	3, 500, 000	9, 000, 000	+5, 500, 000
Science information exchange	1, 600, 000	1, 665, 000	+65, 000
Construction and improvements, National Zoological Park	675, 000	3, 850, 000	+3, 175, 000
Restoration and renovation of buildings	5, 014, 000	1, 220, 000	−3, 794, 000
Construction	13, 000, 000		−13, 000, 000
Construction (contract authority)	27, 000, 000		−27, 000, 000
Construction (appropriation to liquidate contract authority)		*(27, 000, 000)*	*(+27, 000, 000)*
Salaries and expenses, National Gallery of Art	5, 420, 000	5, 832, 000	+412, 000
Salaries and expenses, Woodrow Wilson International Center for Scholars	800, 000	800, 000	
Operation and maintenance, John F. Kennedy Center for the Performing Arts	* 1, 500, 000		−1, 500, 000
Total, Smithsonian Institution	110, 142, 000	78, 805, 000	−31, 337, 000
HISTORICAL AND MEMORIAL COMMISSIONS			
Franklin Delano Roosevelt Memorial Commission	38, 000		−38, 000
AMERICAN REVOLUTION BICENTENNIAL COMMISSION			
Salaries and expenses	3, 356, 000	7, 100, 000	+3, 744, 000
NATIONAL COUNCIL ON INDIAN OPPORTUNITY			
Salaries and expenses	290, 000	300, 000	+10, 000
FEDERAL METAL AND NONMETALLIC MINE SAFETY BOARD OF REVIEW			
Salaries and expenses	160, 000	160, 000	
JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA			
Salaries and expenses	708, 800	750, 000	+41, 200

See footnotes at end of table, p. VIII.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

[NOTE.—All amounts are in the form of "appropriations" unless otherwise indicated.]

Agency and item (1)	New budget (obligational) authority appropriated, 1973 (enacted to date) (2)	Budget estimates of new (obligational) authority, 1974 (3)	Budget estimates, 1974, compared with 1973 appropriations (4)
TITLE II—RELATED AGENCIES—Continued			
PENNSYLVANIA AVENUE DEVELOPMENT CORPORATION			
Salaries and expenses		$200,000	+$200,000
Total, new budget (obligational) authority, Related Agencies	$837,529,700	830,964,300	−6,565,400
Consisting of—			
Appropriations	810,529,700	830,964,300	+20,434,600
Definite appropriations	(802,749,700)	(811,624,300)	(+8,874,600)
Indefinite appropriations	(7,780,000)	(19,340,000)	(+11,560,000)
Contract authority	27,000,000		−27,000,000
Memoranda—			
Appropriations to liquidate contract authority	(158,840,000)	(114,700,000)	(−44,140,000)
Total, new budget (obligational) authority *and* appropriations to liquidate contract authority	(996,369,700)	(945,664,300)	(−50,705,400)
RECAPITULATION			
Grand total, new budget (obligational) authority, all titles	2,578,052,300	2,355,563,300	−222,489,000
Consisting of—			
Appropriations	2,551,052,300	2,355,563,300	−195,489,000
Definite appropriations	(2,209,528,300)	(2,213,529,300)	(+4,001,000)
Indefinite appropriations	(341,524,000)	(142,034,000)	(−199,490,000)
Contract authority	27,000,000		−27,000,000
Memoranda—			
Appropriations to liquidate contract authority	(213,331,000)	(198,200,000)	(−15,131,000)
Grand total, new budget (obligational) authority *and* appropriations to liquidate contract authority	(2,791,383,300)	(2,553,763,300)	(−237,620,000)

[1] Appropriated under the head "Saline Water Conversion, Office of Saline Water". In fiscal year 1974 it is proposed to restructure the program in the Office of the Secretary.
[2] $4,706,000 proposed for rescission.
[3] Program proposed for rescission.
[4] Appropriated in fiscal year 1973 for obligations incurred in fiscal year 1972. Fiscal year 1973 funding is included in the National Park Service Appropriation.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1973

PERMANENT NEW BUDGET (OBLIGATIONAL) AUTHORITY—FEDERAL FUNDS

[Becomes available automatically under earlier, or "permanent" law without further, or annual action by the Congress. Thus, these amounts are not included in the accompanying bill]

Budget Appendix Page No.	Agency and item (1)	New budget (obligational) authority, 1973 (2)	Budget estimate of new (obligational) authority, 1974 (3)	Increase (+) or decrease (−) (4)
	Department of the Interior—Indefinite: [2]			
	Payments to State and local governments:			
531	Payments to States (proceeds of sales)	$320,000	$303,000	−$17,000
531	Payment of royalties to Oklahoma	1,000	1,000	
531	Payments to States from grazing receipts, public lands	1,054,000	1,216,000	+162,000
531	Coos Bay Wagon Road grant lands, payments to Coos Bay and Douglas Counties, Oreg., in lieu of taxes	525,000	525,000	
531	Oregon and California grant lands, payment to counties	37,667,000	35,000,000	−2,667,000
531	Mineral leasing, payment to States	54,029,000	57,609,000	+3,580,000
531	Payment to counties, national grasslands, Bureau of Land Management	163,000	242,000	+79,000
541	Claim and treaty obligations, Bureau of Indian Affairs	161,000	161,000	
542	Acquisition of lands and loans to Indians in Oklahoma, Act of June 26, 1936	10,000	10,000	
576	Educational expenses, children of employees, Yellowstone National Park	305,000	294,000	−11,000
576	Payments to State of Wyoming, in lieu of taxes on lands in Grand Teton National Park, National Park Service	21,000	23,000	+2,000
551	Internal Revenue collections for Virgin Islands, Territorial Affairs	18,600,000	17,644,000	−956,000
567	Payment to counties under Migratory Bird Conservation Act	2,833,163	2,850,000	+16,837
551	Office of Comptroller for Guam	469,000	420,000	−49,000
	Subtotal	116,158,163	116,298,000	+139,837
	Receipts applied to operations:			
531	Expenses, Public Land Administration Act	1,122,000	1,200,000	+78,000
606	Litter prevention and clean-up, Office of the Secretary	100,000	100,000	
542	Operation and maintenance revenue, Indian irrigation systems	4,010,000	4,169,000	+159,000
542	Power revenues, Indian irrigation projects	3,400,000	3,400,000	
566	Migratory bird conservation fund	7,000,000	7,000,000	

See footnotes at end of table, p. XI.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

PERMANENT NEW BUDGET (OBLIGATIONAL) AUTHORITY—FEDERAL FUNDS—Continued

[Becomes available automatically under earlier, or "permanent" law without further, or annual action by the Congress. Thus, these amounts are not included in the accompanying bill]

Budget Appendix Page No.	Agency and Item	New budget (obligational) authority, 1973	Budget estimate of new (obligational) authority, 1974	Increase (+) or decrease (−)
	(1)	(2)	(3)	(4)
	Department of the Interior—Indefinite [2]—Continued			
	Receipts applied to operations—Continued			
567	Management of national wildlife refuges and enforcement activities	$1, 166, 837	$1, 150, 000	−$16, 837
567	Expenses, incident to sale of refuge products	500, 000	500, 000	
576	Operation, management, maintenance, and demolition of acquired properties, Independence National Historical Park	10, 000	19, 000	+9, 000
567	Proceeds from sales, water resources development projects	15, 000	15, 000	
	Subtotal	17, 323, 837	17, 553, 000	+229, 163
	Mixed receipts:			
	Federal aid in fish restoration and management:			
567	Payments to States	12, 072, 667	13, 350, 000	+1, 277, 333
567	Applied to operations	950, 000	950, 000	
	Federal aid in wildlife restoration:			
567	Payments to States	40, 733, 533	42, 285, 000	+1, 551, 467
567	Applied to operations	2, 600, 000	2, 700, 000	+100, 000
	Subtotal	56, 356, 200	59, 285, 000	+2, 928, 800
	Contract authority:			
534	Education and welfare services, Bureau of Indian Affairs (Indefinite)	1, 500, 000	1, 500, 000	
539	Road construction, Bureau of Indian Affairs	60, 000, 000	75, 000, 000	+15, 000, 000
547	Land and water conservation, Bureau of Outdoor Recreation	30, 000, 000	30, 000, 000	
573	Road construction, National Park Service		9, 000, 000	+9, 000, 000
	Subtotal	91, 500, 000	115, 500, 000	+24, 000, 000
	Total, Department of the Interior	281, 338, 200	308, 636, 000	+27, 297, 800
	American Revolution Bicentennial Commission:			
900	Commemorative activities fund (indefinite)	5, 229, 000	7, 975, 000	+2, 746, 000

See footnotes at end of table, p. XI.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974—Continued

PERMANENT NEW BUDGET (OBLIGATIONAL) AUTHORITY—FEDERAL FUNDS—Continued

[Becomes available automatically under earlier, or "permanent" law without further, or annual action by the Congress. Thus, these amounts are not included in the accompanying bill]

Budget Appendix Page No.	Agency and item	New budget (obligational) [1] authority, 1973	Budget estimate of new (obligational) authority, 1974	Increase (+) or decrease (−)
	(1)	(2)	(3)	(4)
	Department of Agriculture—Forest Service			
	Payments to States and local governments (indefinite):			
217	Payments to States, national forests fund (25 percent fund)	$84,676,129	$102,012,000	+$17,335,871
217	Payments to Minnesota (Cook, Lake, and St. Louis Counties)	259,038	259,038	
217	Payments to counties, national grasslands	523,750	548,750	+25,000
217	Payments to school funds, Arizona and New Mexico	114,043	115,000	+957
	Subtotal	85,572,960	102,934,788	+17,361,828
	Receipts applied to operations:			
217	Expenses, brush disposal (indefinite)	18,000,000	18,000,000	
217	Roads and trails for States (10 percent fund) (indefinite)	33,871,106	40,900,000	+7,028,894
217	Forest fire prevention (Smokey Bear) (indefinite)	215,000	250,000	+35,000
217	Restoration of forest lands and improvements (indefinite)	50,000	50,000	
	Subtotal	52,136,106	59,200,000	+7,063,894
	Total, Department of Agriculture—Forest Service	137,709,066	162,134,788	+24,425,722
	Total, permanent new budget (obligational) authority, Federal funds	424,276,266	478,745,788	+54,469,522

[1] Some amounts are estimated and therefore subject to change.
[2] Exclusive of Bonneville Power Administration, Bureau of Reclamation, Southeastern Power Administration, Southwestern Power Administration, Alaska Power Administration, and Underground Electric Power Transmission Research (which will be considered in connection with the Public Works for Water and Power Development and Atomic Energy Commission appropriation bill).

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 1973 AND THE BUDGET ESTIMATES FOR 1974

PERMANENT NEW BUDGET (OBLIGATIONAL) AUTHORITY—TRUST FUNDS

[Becomes available automatically under earlier, or "permanent" law without further, or annual action by the Congress. Thus, these amounts are not included in the accompanying bill]

Budget Appendix Page No.	Agency and item (1)	New budget (obligational) authority, 1973 (2)	Budget estimate of new (obligational) authority, 1974 (3)	Increase (+) or decrease (−) (4)
	Department of the Interior—Indefinite: [1]			
533	Deposits by individuals for surveying public lands	$60,000	$60,000	
533	Administration and protection of grazing districts	600,000	600,000	
533	Trustee funds, Alaska townsites, Bureau of Land Management	5,000	5,000	
545	Indian moneys, proceeds of labor, agencies, schools, etc.	4,369,000	4,369,000	
545	Funds contributed for Indian projects	129,000	129,000	
545	Bequest of George C. Edgeter, relief of indigent Indians	2,000	2,000	
544	Miscellaneous trust funds of Indian tribes [2]	102,178,000	59,005,000	−$43,173,000
577	Donations, National Park Service	2,997,460	2,997,460	
577	Birthplace of Abraham Lincoln, preservation of, National Park Service	2,540	2,540	
560	Contributed funds, Bureau of Mines	1,300,000	1,300,000	
568	Contributed funds, Bureau of Sport Fisheries and Wildlife	1,663,000	1,663,000	
607	Cooperation with foreign agencies, Office of Saline Water	54,000		−54,000
607	*Office of Saline Water (appropriation to liquidate contract authority)*	*(92,000)*		*(−92,000)*
561	Co-sponsor fund, Office of Coal Research	17,916,000	10,000,000	−7,916,000
	Total, Department of the Interior	131,276,000	80,133,000	−51,143,000
221	Department of Agriculture—Forest Service, cooperative work (indefinite)	54,000,000	55,000,000	+1,000,000
	Other agencies—Indefinite:			
900	American Revolution Bicentennial Commission: Gifts and donations	50,000	125,000	+75,000
902	National Park Centennial Commission	50,000		−50,000
912	National Capital Planning Commission: Advances from the District of Columbia	140,000	140,000	
917	National Foundation on the Arts and the Humanities: Gifts and donations	8,385,000	15,000,000	+6,615,000
	Smithsonian Institution:			
951	Canal Zone biological area fund	35,000	37,000	+2,000
954	Joint Federal-State Land Use Planning Commission for Alaska: Cooperative funds	576,000	570,000	−6,000
397	Contributions, Indian sanitation facilities	2,000,000	3,000,000	+1,000,000
	Total, other agencies	11,236,000	18,872,000	+7,636,000
	Grand total, permanent new budget (obligational) authority, trust funds	196,512,000	154,005,000	−42,507,000

[1] Exclusive of Bonneville Power Administration, Bureau of Reclamation, Southeastern Power Administration, Southwestern Power Administration, Alaska Power Administration and Underground Electric Power Transmission Research (which will be considered in connection with the Public Works for Water and Power Development and Atomic Energy Commission appropriation bill).

[2] Annual appropriation required.

DEPARTMENT OF THE INTERIOR

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Transfers 1/	Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
PUBLIC LAND MANAGEMENT					
Bureau of Land Management					
Management of Lands and Resources:					
Resource management, conservation and protection	$ 61,679,000	$ -272,000	$ 61,407,000	$ 74,662,000	$ +13,255,000
Cadastral surveys	8,002,000	-26,000	7,976,000	8,201,000	+225,000
Firefighting and rehabilitation	5,400,000	--	5,400,000	5,400,000	--
General administration	2,984,000	--	2,984,000	3,084,000	+100,000
Total, Management of Lands and Resources	78,065,000	-298,000	77,767,000	91,347,000	+13,580,000
Construction and Maintenance:					
Construction	4,580,000	--	4,580,000	2,735,000	-1,845,000
Maintenance	3,385,000	-200,000 2/	3,185,000	3,565,000	+380,000
Total, Construction and Maintenance	7,965,000	-200,000	7,765,000	6,300,000	-1,465,000
Public Lands Development Roads and Trails: (Appropriation to liquidate contract authority)	(3,265,000)	--	(3,265,000)	(4,000,000)	(+735,000)
Oregon and California Grant Lands (Indefinite, Appropriation of Receipts)					
Construction and acquisition	7,561,275	--	7,561,275	6,028,000	-1,533,275
Forest development, protection, & management	7,513,116	--	7,513,116	8,090,000	+576,884
Operation and maintenance	2,425,609	--	2,425,609	3,382,000	+956,391
Total, Oregon and California Grant Lands	17,500,000	--	17,500,000	17,500,000	--
Range Improvements (Indefinite, Appropriation of Receipts)					
Improvements to public lands	2,537,456	--	2,537,456	3,272,000	+734,544
Farm Tenant Act lands	176,203	--	176,203	104,000	-72,203
Total, Range Improvements	2,713,659	--	2,713,659	3,376,000	+662,341
Recreation Development and Operation of Recreation Facilities (Indefinite appropriation of receipts)					
Development and operation of recreation facilities	--	--	--	165,000	+165,000
Total, Bureau of Land Management	106,243,659	-498,000	105,745,659	118,688,000	+12,942,341

Bureau of Indian Affairs					
Education and Welfare Service:					
Educational assistance, facilities, and services	187,055,000	--	187,055,000	182,687,000	-4,368,000
Welfare and guidance services	65,537,000	--	65,537,000	69,312,000	+3,775,000
Employment assistance	42,427,000	--	42,427,000	35,307,000	-7,120,000
Maintaining law and order	8,266,000	--	8,266,000	8,266,000	--
Total, Education and Welfare Service	303,285,000	--	303,285,000	295,572,000	-7,713,000
Education and Welfare Services (Appropriation to Liquidate Contract Authority)	(271,000)	--	(271,000)	(1,508,000)	(+1,229,000)
Resources Management:					
Forest and range lands	8,146,000	--	8,146,000	10,159,000	+2,013,000
Outdoor recreation	353,000	--	353,000	353,000	--
Fire suppression and emergency rehabilitation	800,000	--	800,000	800,000	--
Agricultural and industrial assistance	17,362,000	--	17,362,000	17,362,000	--
Soil and moisture conservation	9,785,000	--	9,785,000	10,089,000	+304,000
Maintenance of roads	6,592,000	--	6,592,000	6,592,000	--
Development of Indian arts and crafts	688,000	--	688,000	688,000	--
Management of Indian trust property	12,414,000	--	12,414,000	12,314,000	-100,000
Repair and maintenance of buildings & utilities	24,867,000	--	24,867,000	24,867,000	--
Operation, repair, and maintenance of Indian irrigation systems	1,611,000	--	1,611,000	1,611,000	--
Environmental quality services	523,000	--	523,000	523,000	--
Total, Resources Management	83,141,000	--	83,141,000	85,358,000	+2,217,000
Construction:					
Buildings and utilities	39,278,000	-58,622	39,219,378	27,200,000	-12,019,378
Irrigation systems	16,800,000	--	16,800,000	16,800,000	--
Total, Construction	56,078,000	-58,622	56,019,378	44,000,000	-12,019,378
Road Construction (Appropriation to Liquidate Contract Authority)	(45,539,000)	--	(45,539,000)	(43,000,000)	(-2,539,000)
General Administrative Expenses:					
Departmental Offices	6,200,000	--	6,200,000	5,319,000	-881,000
Payment to the Ute Tribe of Uintah and Ouray Reservation, Act of September 18, 1970 (Sec. 2)	65,000	--	65,000	--	-65,000
Alaska Native Claims	50,000,000	--	50,000,000	70,000,000	+20,000,000
Tribal Funds:					
Definite:					
Education and welfare services	104,599	--	104,599	104,599	--
Resources management	593,535	--	593,535	593,535	--
Construction and land acquisition	317,000	--	317,000	317,000	--
General tribal affairs	1,984,866	--	1,984,866	1,984,866	--
Total, Definite	3,000,000	--	3,000,000	3,000,000	--
Indefinite:					
Advances to Indian tribes	13,530,000	--	13,530,000	13,505,000	-25,000
Total, Bureau of Indian Affairs	515,299,000	-58,622	515,240,378	516,734,000	+1,513,622

Office of Budget
February 13, 1973

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Transfers 1/	Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
Bureau of Outdoor Recreation					
Salaries and Expenses:					
Planning and research	$ 1,946,000	$ --	$ 1,946,000	$ 2,111,000	$ +165,000
Federal coordination	1,125,000	--	1,125,000	1,186,000	+61,000
Technical assistance	1,079,000	--	1,079,000	1,139,000	+60,000
Total, Salaries and Expenses	4,150,000	--	4,150,000	4,436,000	+286,000
Land and Water Conservation:					
Assistance to States	181,800,000	--	181,800,000	50,000,000	-131,800,000
Federal programs	112,957,000	--	112,957,000	--	-112,957,000
Administrative expenses	5,243,000	-20,000	5,223,000	5,223,000	--
Total, Appropriation of Receipts (Indefinite)	300,000,000	-20,000	299,980,000	55,223,000	-244,757,000
Total, Bureau of Outdoor Recreation	304,150,000	-20,000	304,130,000	59,659,000	-244,471,000
Territorial Affairs					
Administration of Territories:					
Guam:					
Loans	3,937,260	--	3,937,260	--	-3,937,260
Grants	2,407,740	--	2,407,740	--	-2,407,740
Economic development fund	1,000,000	--	1,000,000	1,000,000	--
American Samoa:					
Governor's office	272,000	--	272,000	284,000	+12,000
Chief Justice and High Court	248,000	--	248,000	272,000	+24,000
Grants	14,510,000	--	14,510,000	13,444,000	-1,066,000
Total, Administration of Territories	22,375,000	--	22,375,000	15,000,000	-7,375,000
Trust Territory of the Pacific Islands:					
High Commissioner's office	313,000	--	313,000	411,000	+98,000
Judiciary	325,000	--	325,000	400,000	+75,000
Grants	59,362,000	--	59,362,000	54,189,000	-5,173,000
Economic development loan fund	--	--	--	1,000,000	+1,000,000
Total, Trust Territory of the Pacific Islands	60,000,000	--	60,000,000	56,000,000	-4,000,000
Total, Territorial Affairs	82,375,000	--	82,375,000	71,000,000	-11,375,000
TOTAL, PUBLIC LAND MANAGEMENT	1,008,067,659	-576,622	1,007,491,037	766,101,000	-241,390,037

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Transfers 1/	Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
MINERAL RESOURCES					
Geological Survey					
Surveys, Investigations, and Research:					
Special resource and environmental projects	$ 3,753,000	$ --	$ 3,753,000	$ 3,753,000	$ --
Alaska Pipeline related investigations	1,339,000	--	1,339,000	850,000	-489,000
Topographic surveys and mapping	34,559,000	--	34,559,000	34,259,000	-300,000
Geologic and mineral resource surveys and mapping	42,965,000	--	42,965,000	42,795,000	-170,000
Minerals discovery loan program	272,000	--	272,000	272,000	--
Water resources investigations	40,129,000	--	40,129,000	39,854,000	-275,000
Conservation of lands and minerals	14,259,000	--	14,259,000	16,029,000	+1,770,000
General administration	2,831,000	-	2,831,000	2,831,000	--
Facilities	--	--	--	5,914,000	+5,914,000
Earth resources observation satellite	10,343,000	--	10,343,000	8,443,000	-1,900,000
Resource and land information program	--	--	--	1,000,000	+1,000,000
Total, Geological Survey	150,450,000	--	150,450,000	156,000,000	+5,550,000
Bureau of Mines					
Mines and minerals					
Mineral resources development:					
Energy	19,821,000	--	19,821,000	18,096,000	-1,725,000
Metallurgy	15,393,000	--	15,393,000	14,393,000	-1,000,000
Mining	5,733,000	--	5,733,000	5,033,000	-700,000
Data collection and analysis	9,571,000	-8,000	9,563,000	9,263,000	-300,000
Engineering evaluation and demonstration	9,925,000	-29,000	9,896,000	7,296,000	-2,600,000
Mine health and safety:					
Coal mine inspections	32,166,000	-432,000	31,734,000	31,734,000	--
Metal and nonmetal mine inspections	6,120,000	-46,000	6,074,000	7,574,000	+1,500,000
Education and training	18,213,000	-92,000	18,121,000	5,321,000	-12,800,000
Technical support	6,894,000	--	6,894,000	7,194,000	+300,000
Research	31,202,000	-17,000	31,185,000	28,317,000	-2,868,000
Program administration	2,427,000	--	2,427,000	2,603,000	+176,000
Total, Bureau of Mines	157,465,000	-624,000	156,841,000	136,824,000	-20,017,000
Office of Coal Research					
Salaries and Expenses:					
Administration and contract supervision	885,000	--	885,000	1,200,000	+315,000
Contract research	42,605,000	--	42,605,000	51,300,000	+8,695,000
Total, Office of Coal Research	43,490,000	--	43,490,000	52,500,000	+9,010,000
Office of Oil and Gas					
Salaries and Expenses:					
Coordination of oil and gas activities	1,485,000	--	1,485,000	1,485,000	--
Oil Import Appeals Board	73,000	-73,000 3/	--	--	--
Total, Office of Oil and Gas	1,558,000	-73,000	1,485,000	1,485,000	--
TOTAL, MINERAL RESOURCES	352,963,000	-697,000	352,266,000	346,809,000	-5,457,000

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Transfers 1/	Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
FISH AND WILDLIFE AND PARKS					
Bureau of Sport Fisheries and Wildlife					
Resources Management					
Habitat preservation	$ 11,473,000	$ --	$ 11,473,000	$ 11,949,000	$ +476,000
Wildlife resources	31,726,500	-176,739	31,549,761	35,433,000	+3,883,239
Fishery resources	19,136,000	--	19,136,000	19,109,000	-27,000
Endangered species	4,172,000	--	4,172,000	4,372,000	+200,000
Interpretation and recreation	6,004,000	--	6,004,000	4,913,000	-1,091,000
Administration	3,228,000	--	3,228,000	3,228,000	--
Total, Resources management	75,739,500	-176,739	75,562,761	79,004,000	+3,441,239
Construction and anadromous fish					
Construction and rehabilitation					
New facilities	--	--	--	300,000	+300,000
Pollution abatement	--	--	--	7,100,000	+7,100,000
Anadromous fish	2,333,000	--	2,333,000	1,833,000	-500,000
Total, Construction and anadromous fish	2,333,000	--	2,333,000	9,233,000	+6,900,000
Migratory Bird Conservation Account					
Acquisition of refuges and other areas	7,100,000	--	7,100,000	--	-7,100,000
Total, Bureau of Sport Fisheries and Wildlife	85,172,500	-176,739	84,995,761	88,237,000	+3,241,239
National Park Service					
Operation of the National Park System					
Park management	154,038,000	-252,000	153,786,000	171,940,000	+18,154,000
Forest fire suppression and rehabilitation of burned areas	700,000	--	700,000	700,000	--
Executive direction	4,140,000	--	4,140,000	4,140,000	--
Total, Operation of the National Park System	158,878,000	-252,000	158,626,000	176,780,000	+18,154,000

Planning and Construction					
Buildings, utilities and other facilities	42,353,000	--	42,353,000	11,200,000	-31,153,000
Park, recreation, and wilderness planning	4,493,000	--	4,493,000	4,400,000	-93,000
Cooperative programs	3,797,000	--	3,797,000	3,927,500	+130,500
Statutory or contractual aid for other activities	403,000	--	403,000	472,500	+69,500
Total, Planning and construction	51,046,000	--	51,046,000	20,000,000	-31,046,000
Road Construction (Liquidation of Contract Authority)					
Roads, trails and parkways	(5,416,000)	--	(5,416,000)	(35,000,000)	(+29,584,000)
Preservation of Historic Properties					
Historic preservation and special studies	11,559,000	--	11,559,000	19,559,000	+8,000,000
John F. Kennedy Center for the Performing Arts	2,000,000	--	2,000,000	2,400,000	+400,000
Planning, Developing and Operation of Recreation Facilities (Indefinite)					
Recreation facilities	--	--	--	32,925,000	+32,925,000
Total, National Park Service	223,483,000	-252,000	223,231,000	251,664,000	+28,433,000
TOTAL, FISH AND WILDLIFE AND PARKS	308,655,500	-428,739	308,226,761	339,901,000	+31,674,239

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Transfers 1/	Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
Office of Water Resources Research					
Salaries and Expenses:					
Assistance to States for institutes	$ 7,140,000	$ --	$ 7,140,000	$ 5,100,000	$ -2,040,000
Matching grants to institutes	3,000,000	--	3,000,000	3,000,000	--
Additional water research	4,300,000	--	4,300,000	3,170,000	-1,130,000
Scientific information center	934,000	--	934,000	934,000	--
Administration	970,000	--	970,000	945,000	-25,000
Total, Office of Water Resources Research	16,344,000	--	16,344,000	13,149,000	-3,195,000
SECRETARIAL OFFICES					
Office of the Solicitor					
Salaries and Expenses:					
Legal services	7,360,000	-9,002	7,350,998	7,850,000	+499,002
Office of the Secretary					
Salaries and Expenses:					
Departmental direction	6,059,300	-172,135 4/	5,887,165	6,051,300	+164,135
Program direction and coordination	2,146,900	--	2,146,900	2,198,900	+52,000
Administrative management	6,821,100	+152,214 5/	6,973,314	7,327,100	+353,786
General Services	267,800	-21,781	246,019	317,700	+71,681
Total, Salaries and Expenses	15,295,100	-41,702	15,253,398	15,895,000	+641,602
Departmental operations:					
Office of Hearings and Appeals	3,257,000	+70,112 6/	3,327,112	3,628,000	+300,888
Natural Resources Library	1,209,000	--	1,209,000	1,189,000	-20,000
Johnny Horizon program office	--	+200,000 7/	200,000	220,000	+20,000
World Energy Conference	--	--	--	700,000	+700,000
Total, Departmental operations	4,466,000	+270,112	4,736,112	5,737,000	+1,000,888
Salaries and Expenses (Special Foreign Currency Program)					
Research	500,000	--	500,000	1,630,000	+1,130,000

Saline Water Research					
Research and developmental expenses:					
Research expense	5,850,000	--	5,850,000	--	-5,850,000
Development expense	11,981,000	-60,000 8/	11,921,000	--	-11,921,000
Construction, operation and maintenance					
Test beds and facilities	5,085,000	--	5,085,000	250,000	-4,835,000
Modules	1,075,000	--	1,075,000	677,000	-398,000
Administration and coordination	2,880,000	+60,000 8/	2,940,000	1,600,000	-1,340,000
Total, Saline Water Research	26,871,000	--	26,871,000	2,527,000	-24,344,000
Central Energy Research and Development Fund -					
Research and development	--	--	--	25,000,000	+25,000,000
TOTAL, SECRETARIAL OFFICES	54,492,100	+219,408	54,711,508	58,639,000	+3,927,492
TOTAL, NEW BUDGET (OBLIGATIONAL) AUTHORITY, DEPARTMENT OF THE INTERIOR	1,740,522,259	-1,482,953	1,739,039,306	1,524,599,000	-214,440,306
Consisting of:					
Appropriations	(1,740,522,259)	(-1,482,953)	(1,739,039,306)	(1,524,599,000)	(-214,440,306)
Definite Appropriations	(1,406,778,600)	(-1,462,953)	(1,405,315,647)	(1,401,905,000)	(-3,410,647)
Indefinite Appropriations	(333,743,659)	(-20,000)	(333,723,659)	(122,694,000)	(-211,029,659)
Memoranda					
Appropriations to Liquidate Contract Authority	(54,491,000)	--	(54,491,000)	(83,500,000)	(+29,009,000)
TOTAL, NEW BUDGET (OBLIGATIONAL) AUTHORITY AND APPROPRIATIONS TO LIQUIDATE CONTRACT AUTHORITY	(1,795,013,259)	(-1,482,953)	(1,793,530,306)	(1,608,099,000)	(-185,431,306)

1/ Represents transfers to General Services Administration for space costs unless otherwise footnoted.
2/ Transferred to "Departmental Operations, Office of the Secretary" for the Johnny Horizon Program Office.
3/ Transferred to "Office of Hearings and Appeals, Departmental Operations, Office of the Secretary."
4/ Excludes $155,800 transferred to "Administrative Management" for International activities and $16,335 transferred to General Services Administration for space rental.
5/ Includes $155,800 transferred from "Departmental Direction" for International activities and excludes $3,586 transferred to General Services Administration for space rental.
6/ Includes $73,000 transferred from "Salaries and Expenses" Office of Oil and Gas and $2,888 for General Services Administration rental costs.
7/ Transferred from "Construction and Maintenance," Bureau of Land Management.
8/ Interactivity adjustment to provide for pay costs.

Comparison of Fiscal Year 1973 New Budget (Obligational) Authority with Fiscal Year 1974 Estimates

Reconciliation of Committee Print to Printed Budget

Bureau or Office and Appropriation Title	Fiscal Year 1973 Appropriation	Fiscal Year 1973 Transfers 1/	Fiscal Year 1973 Amount Available	Fiscal Year 1974 Estimate	Increase or Decrease 1974 Compared with 1973
Total, New Budget (Obligational) Authority, Department of the Interior	$1,740,522,259	$-1,482,953	$1,739,039,306	$1,524,599,000	$-214,440,306
PERMANENT APPROPRIATIONS					
Payments to States and local governments					
Bureau of Land Management	93,759,000	--	93,759,000	94,896,000	+1,137,000
Bureau of Indian Affairs	171,000	--	171,000	171,000	--
Territorial Affairs	19,069,000	--	19,069,000	18,064,000	-1,005,000
Bureau of Sport Fisheries and Wildlife	2,833,163	--	2,833,163	2,850,000	+16,837
National Park Service	326,000	--	326,000	317,000	-9,000
Subtotal	116,158,163	--	116,158,163	116,298,000	+139,837
Receipts applied to operations					
Bureau of Land Management	1,122,000	--	1,122,000	1,200,000	+78,000
Bureau of Indian Affairs	7,410,000	--	7,410,000	7,569,000	+159,000
Bureau of Sport Fisheries and Wildlife	8,681,837	--	8,681,837	8,665,000	-16,837
National Park Service	10,000	--	10,000	19,000	+9,000
Office of the Secretary	100,000	--	100,000	100,000	--
Subtotal	17,323,837	--	17,323,837	17,553,000	+229,163
Mixed receipts					
Bureau of Sport Fisheries and Wildlife	56,356,200	--	56,356,200	59,285,000	+2,928,800
Total, Permanent Appropriations	189,838,200	--	189,838,200	193,136,000	+3,297,800
CONTRACT AUTHORITY					
Bureau of Indian Affairs	61,500,000	--	61,500,000	76,500,000	+15,000,000
Bureau of Outdoor Recreation	30,000,000	--	30,000,000	30,000,000	--
National Park Service	--	--	--	9,000,000	+9,000,000
Total, Contract Authority	91,500,000	--	91,500,000	115,500,000	+24,000,000

TRUST FUNDS					
Bureau of Land Management	665,000	--	665,000	665,000	--
Bureau of Indian Affairs	106,678,000	--	106,678,000	63,505,000	-43,173,000
Bureau of Mines	1,300,000	--	1,300,000	1,300,000	--
Office of Coal Research	17,916,000	--	17,916,000	10,000,000	-7,916,000
Bureau of Sport Fisheries and Wildlife	1,663,000	--	1,663,000	1,663,000	--
National Park Service	3,000,000	--	3,000,000	3,000,000	--
Office of Saline Water	54,000	--	54,000	--	-54,000
Office of Saline Water (Appropriation to liquidate contract authority)	(92,000)	--	(92,000)	--	(-92,000)
Total, Trust Funds	131,276,000	--	131,276,000	80,133,000	-51,143,000
PROPOSED FOR SEPARATE TRANSMITTAL					
Existing legislation					
Bureau of Land Management:					
Management of lands and resources	19,000,000	--	19,000,000	--	-19,000,000
Bureau of Indian Affairs					
Resources management	5,000,000	--	5,000,000	--	-5,000,000
Bureau of Mines					
Helium Fund (Authority to spend public debt receipts)	34,000,000	--	34,000,000	--	-34,000,000
Bureau of Sport Fisheries and Wildlife					
Management and investigations of resources	900,000	--	900,000	--	-900,000
National Park Service					
Management and protection	1,442,000	--	1,442,000	--	-1,442,000
Maintenance and rehabilitation	2,598,000	--	2,598,000	--	-2,598,000
Total, Proposed for Separate Transmittal Under Existing Legislation	62,940,000	--	62,940,000	--	-62,940,000
Proposed legislation					
Bureau of Indian Affairs					
Resources management	--	--	--	29,000,000	+29,000,000
Revolving fund for loans	5,000,000	--	5,000,000	5,000,000	--
Geological Survey					
Surveys, investigations and research	--	--	--	5,000,000	+5,000,000
Bureau of Mines					
Mines and minerals	--	--	--	7,000,000	+7,000,000
Office of the Secretary					
Land Use Planning	--	--	--	20,000,000	+20,000,000
Total, Proposed for Separate Transmittal Under Proposed Legislation	5,000,000	--	5,000,000	66,000,000	+61,000,000
GRAND TOTAL, NEW BUDGET (OBLIGATIONAL) AUTHORITY, DEPARTMENT OF THE INTERIOR	2,221,076,459	-1,482,953	2,219,593,506	1,979,368,000	-240,225,506

DEPARTMENT OF THE INTERIOR

Statement of Appropriations, Fiscal Years 1964-1974

	Actual									Estimate	Estimate
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Bureau of Land Management											
Appropriations - Direct	$ 47,712,500	$ 53,922,000	$ 55,725,000	$ 62,113,000	$ 65,486,000	$ 69,545,000	$ 88,090,000	$ 90,870,000	$ 96,681,000	$ 89,295,000	$ 101,647,000
Permanent .	63,695,860	70,566,180	69,030,313	71,391,201	72,312,092	79,645,433	87,142,277	86,051,346	90,907,302	94,881,000	98,096,000
Indefinite.	10,895,430	20,344,245	17,260,233	12,969,324	12,822,882	20,177,644	16,662,499	17,311,111	21,469,257	20,213,659	21,041,000
Total	122,303,790	144,832,425	142,015,546	146,473,525	150,620,974	169,368,077	191,894,776	194,232,457	209,057,559	204,389,659	218,784,000
Bureau of Indian Affairs											
Appropriations - Direct	208,123,550	228,942,417	207,862,400	241,595,300	245,333,000	249,643,000	303,747,000	364,916,700	445,527,500	544,579,000	544,749,000
Permanent .	6,889,857	7,080,657	7,002,798	7,331,479	7,294,942	8,013,058	8,505,028	9,034,516	9,950,370	7,581,000	7,740,000
Total	215,013,407	236,023,074	214,863,198	248,926,779	252,627,942	257,656,058	312,252,028	373,951,216	455,477,870	552,160,000	552,489,000
Bureau of Outdoor Recreation											
Appropriations - Direct	1,900,000	18,780,000	125,580,649	98,996,391	123,476,000	168,815,000	135,148,000	361,570,000	365,449,000	304,150,000	59,659,000
Office of Territories											
Appropriations - Direct	28,000,000	43,795,000	34,525,600	29,707,000	45,813,000	44,697,000	63,319,916	77,278,000	86,679,000	82,375,000	71,000,000
Permanent .	7,042,107	8,313,413	10,405,984	11,073,732	12,367,772	12,867,871	14,443,128	13,575,853	39,216,404	19,069,000	18,064,000
Total	35,042,107	52,108,413	44,931,584	40,780,732	58,180,772	57,564,871	77,763,044	90,853,853	125,895,404	101,444,000	89,064,000
The Alaska Railroad											
Appropriations - Direct	20,000,000	1,300,000	4,100,000	--	--	--	--	--	--	--	--
Geological Survey											
Appropriations - Direct	63,700,000	70,384,000	73,190,870	81,609,000	86,919,000	90,917,000	102,887,000	114,603,000	131,050,000	150,450,000	156,000,000
Permanent .	1,270	771	764	726	628	665	1,529	1,886	1,626	--	--
Total	63,701,270	70,384,771	73,191,634	81,609,726	86,919,628	90,917,665	102,888,529	114,604,886	131,051,626	150,450,000	156,000,000
Bureau of Mines											
Appropriations - Direct	43,328,000	72,204,000	60,961,000	83,686,000	68,388,000	79,249,000	95,877,000	174,308,000	179,022,000	157,465,000	136,824,000
Office of Coal Research											
Appropriations - Direct	5,075,000	6,826,000	7,220,000	8,220,000	10,880,000	13,700,000	13,300,000	17,160,000	30,630,000	43,490,000	52,300,000
Office of Minerals Exploration											
Appropriations - Direct	850,000	850,000	--	--	--	--	--	--	--	--	--
Office of Oil and Gas											
Appropriations - Direct	615,500	704,000	720,300	747,800	763,000	755,900	1,085,000	1,223,000	1,570,000	1,558,000	1,485,000

Statement of Appropriations, Fiscal Years 1964-1974

	Actual									Estimate	Estimate
	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Office of the Commissioner, Fish and Wildlife Service											
Appropriations - Direct	$ 386,000	$ 444,000	$ 452,500	$ --	$ --	$ --	$ --	$ --	$ --	$ --	$ --
Bureau of Commercial Fisheries											
Appropriations - Direct	24,635,900	30,649,900	37,343,329	34,893,300	39,414,650	38,699,000	1/	1/			
Permanent .	5,962,396	6,261,585	6,610,569	7,078,524	7,775,848	7,722,283	1/	1/			
Indefinite.	2,468,000	2,454,000	2,464,000	2,495,700	2,496,000	2,653,400	1/	1/			
Total	33,066,296	39,365,485	46,417,898	44,467,524	49,686,498	49,074,683	1/	1/			
Bureau of Sport Fisheries and Wildlife											
Appropriations - Direct	47,182,400	53,380,800	64,083,800	59,325,927	60,890,400	60,630,000	67,742,768	76,891,000	86,181,000	85,172,500	88,237,000
Permanent .	29,663,199	33,666,670	37,143,385	41,230,109	47,671,537	50,387,360	55,468,594	57,975,450	63,161,598	67,871,200	70,800,000
Total	76,845,599	89,047,470	101,227,185	100,556,036	108,561,937	111,017,360	123,211,362	134,866,450	149,342,598	153,043,700	159,037,000
National Park Service											
Appropriations - Direct	113,149,500	128,185,600	127,791,000	123,177,000	128,235,800	104,860,000	129,422,000	184,427,000	241,674,000	228,899,000	253,739,000
Permanent .	150,132	180,112	26,493	106,898	116,095	114,892	143,421	156,774	265,195	336,000	336,000
Indefinite	--	--	--	--	--	--	--	--	--	--	32,925,000
Total	113,299,632	128,365,712	127,817,493	123,283,898	128,351,895	104,974,892	129,565,421	184,583,774	241,939,195	229,235,000	287,000,000
Office of Saline Water											
Appropriations - Direct	11,830,000	16,150,000	23,151,000	29,831,000	20,800,000	25,842,835	25,000,000	28,573,000	27,025,000	26,871,000	2,527,000
Office of the Solicitor											
Appropriations - Direct	4,000,000	4,393,000	4,596,800	4,821,000	5,244,000	5,683,000	5,984,000	7,626,000	6,967,000	7,360,000	7,850,000
Office of the Secretary											
Appropriations - Direct	3,858,400	4,365,000	4,557,200	5,165,900	7,114,500	8,755,000	10,814,700	12,472,000	15,195,000	20,261,100	48,262,000
Permanent .	--	--	--	--	--	--	--	--	--	100,000	100,000
Total	3,858,400	4,365,000	4,557,200	5,165,900	7,114,500	8,755,000	10,814,700	12,472,000	15,195,000	20,361,100	48,362,000
Office of Water Resources Research											
Appropriations - Direct	--	3,450,000	6,396,000	8,910,000	11,130,000	11,181,000	11,281,000	13,262,000	14,290,000	16,344,000	12,169,000
TOTAL, DEPARTMENT OF THE INTERIOR (EXCLUSIVE OF RECLAMATION, POWER MARKETING AGENCIES AND FEDERAL WATER QUALITY ADMIN.											
Direct	826,566,750	740,735,717	838,237,448	870,818,818	919,987,350	972,883,735	1,055,698,384	1,505,209,700	1,727,960,500	1,758,269,600	1,537,628,000
Permanent .	113,404,821	126,069,388	130,220,306	138,212,669	147,538,914	158,751,542	165,903,977	166,795,828	203,502,495	189,838,200	193,136,000
Indefinite	13,363,430	22,798,245	19,724,233	15,465,024	15,316,882	22,831,044	16,662,499	17,311,111	21,469,257	20,213,659	53,966,000
Total	753,335,001	889,603,350	988,181,987	1,024,496,511	1,082,845,166	1,154,466,321	1,238,264,860	1,689,316,636	1,952,932,252	1,968,321,459	1,784,730,000

1/ Transferred in accordance with Reorganization Plan No. 4 of 1970.

DEPARTMENT OF THE INTERIOR

Permanent Appropriations, Fiscal Years 1972, 1973, and 1974

Bureau or Office and Appropriation Title	1972 Actual	1973 Estimate	1974 Estimat
PUBLIC LAND MANAGEMENT			
Bureau of Land Management			
Leasing of grazing lands	523	---	---
Payment to:			
Oklahoma (royalties)	391	1,000	1,000
Coos and Douglas Counties, Oregon from receipts Coos Bay Wagon grant lands	407,186	525,000	525,000
Counties, Oregon and Calif. grant lands	31,867,200	37,667,000	35,000,000
States (proceeds of sales)	333,676	320,000	303,000
States from grazing receipts, etc., public lands outside grazing districts	500,494	517,000	559,000
States from grazing receipts, etc., public lands within grazing districts	533,114	534,000	649,000
States from grazing receipts, etc., public lands within grazing districts, mis.	3,319	3,000	8,000
States from receipts under Mineral Leasing Act	55,868,391	54,029,000	57,609,000
Counties, national grasslands	143,289	163,000	242,000
Expenses, Public Land Administration Act	1,172,776	1,122,000	1,200,000
Litter prevention and clean-up	76,943	--- 1/	--- 1/
Total, Bureau of Land Management	90,907,302	94,881,000	96,096,000
1/ Transferred to Office of Secretary			
Bureau of Indian Affairs			
Claims and treaty obligations	238,117	161,000	161,000
Acquisition of lands and loans to Indians in Oklahoma Act of June 26, 1936	11,318	10,000	10,000
Operation and maintenance, Indian irrigation systems	5,473,546	4,010,000	4,169,000
Power systems, Indian irrigation projects	4,227,379	3,400,000	3,400,000
Indian arts and crafts fund	10	---	---
Total, Bureau of Indian Affairs	9,950,370	7,581,000	7,740,000
Territorial Affairs			
Internal Revenue collections for Virgin Islands	38,849,404	18,600,000	17,644,000
Office of Comptroller for Guam	367,000	469,000	420,000
Total Territorial Affairs	39,216,404	19,069,000	18,064,000
TOTAL PUBLIC LAND MANAGEMENT	140,074,076	121,531,000	121,900,000

Permanent Appropriations, Fiscal Years 1972, 1973, and 1974

Bureau or Office and Appropriation Title	1972 Actual	1973 Estimate	1974 Estimate
MINERAL RESOURCES			
Geological Survey			
Payment from proceeds, sale of water	1,626	---	---
FISH AND WILDLIFE AND PARKS			
Bureau of Sport Fisheries and Wildlife			
Migratory Bird Conservation account	7,351,425	7,000,000	7,000,000
Federal aid in fish restoration and management	14,303,045	13,022,667	14,300,000
Federal aid in wildlife restoration	36,704,089	43,333,533	44,985,000
National wildlife refuge fund	4,787,565	4,500,000	4,500,000
Proceeds from sales, water resources development projects	15,474	15,000	15,000
Total, Bureau of Sport Fisheries and Wildlife	63,161,598	67,871,200	70,800,000
National Park Service			
Educational expenses, children of employees Yellowstone National Park	234,565	305,000	294,000
Payment for tax losses on land acquired for Grand Teton National Park	21,282	21,000	23,000
Operation, Management, Maintenance, and Demolition of Federal acquired properties, Independence National Historical Park	9,348	10,000	19,000
Total, National Park Service	265,195	336,000	336,000
TOTAL, FISH AND WILDLIFE AND PARKS	63,426,793	68,207,200	71,136,000
Office of the Secretary			
Litter prevention and cleanup	---	100,000	100,000
TOTAL, DEPARTMENT OF THE INTERIOR, OTHER THAN RECLAMATION AND POWER AGENCIES	203,502,495	189,838,200	193,136,000

Annual Indefinite Appropriations, Fiscal Years, 1972, 1973, and 1974

Bureau or Office and Appropriation Title	1972 Actual	1973 Estimate	1974 Estimate
PUBLIC LAND MANAGEMENT			
Bureau of Land Management			
Oregon and California grant lands	18,946,135	17,500,000	17,500,000
Range improvements	2,523,122	2,713,659	3,376,000
Recreation development and operation of recreation facilities	---	---	165,000
Total, Bureau of Land Management	21,469,257	20,213,659	21,041,000
FISH AND WILDLIFE AND PARKS			
National Park Service			
Planning, development and operation facilities			32,925,000
TOTAL, FISH AND WILDLIFE AND PARKS			32,925,000
TOTAL, DEPARTMENT OF THE INTERIOR OTHER THAN RECLAMATION AND POWER AGENCIES	21,469,257	20,213,659	53,966,000

Trust Funds, Fiscal Years 1972, 1973, and 1974

Bureau or Office and Appropriation Title	1972 Actual	1973 Estimate	1974 Estimate
PUBLIC LAND MANAGEMENT			
Bureau of Land Management			
Contributed funds	379,617	600,000	600,000
Expenses, public survey work	78,776	60,000	60,000
Trustee funds, Alaska Townsites	22,133	5,000	5,000
Total, Total, Bureau of Land Management	480,526	665,000	665,000
Bureau of Indian Affairs			
Tribal funds:			
Appropriations:			
Definite	2,903,684	3,000,000	3,000,000
Indefinite	13,555,459	13,530,000	13,505,000
Permanent	94,218,492	102,178,000	59,005,000
Total Tribal Funds	110,677,635	118,708,000	75,510,000
Indian moneys proceeds of labor, agencies, schools, etc.	3,794,246	4,369,000	4,369,000
Funds contributed for advancement of Indian Race	129,460	129,000	129,000
Bequest of George C. Edgeter, for relief of indigent Indians	2,139	2,000	2,000
Total, Bureau of Indian Affairs	114,603,480	123,208,000	80,010,000
Bureau of Outdoor Recreation			
Contributed funds	1	---	---
TOTAL, PUBLIC LAND MANAGEMENT	115,084,007	123,873,000	80,675,000
MINERAL RESOURCES			
Bureau of Mines			
Contributed funds	1,376,951	1,300,000	1,300,000
Office of Coal Research			
Cosponsor Funds	2,084,288	17,916,000	10,000,000
TOTAL, MINERAL RESOURCES	3,461,239	19,216,000	11,300,000

Trust Funds, Fiscal Years 1972, 1973, and 1974

Bureau or Office and Appropriation Title	1972 Actual	1973 Estimate	1974 Estimate
FISH AND WILDLIFE AND PARKS			
Bureau of Sport Fisheries and Wildlife			
Contributed funds	1,671,835	1,663,000	1,663,000
National Park Service			
Donations	2,135,291	2,997,460	2,997,460
Preservation, birthplace of Abraham Lincoln	2,540	2,540	2,540
Total, National Park Service	2,137,831	3,000,000	3,000,000
TOTAL, FISH AND WILDLIFE AND PARKS	3,809,666	4,663,000	4,663,000
Office of Saline Water			
Cooperation with foreign agencies	1,464,287	54,000	---
Liquidation of contract authority	(2,468,713)	(92,000)	---
TOTAL, DEPARTMENT OF THE INTERIOR OTHER THAN RECLAMATION AND BONNEVILLE POWER ADMINISTRATION	123,819,199	147,806,000	96,638,000

DEPARTMENT OF THE INTERIOR

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
PUBLIC LAND MANAGEMENT					
Bureau of Land Management					
Management of Lands and Resources	$80,349,000	$79,197,000	$89,802,975	$74,517,000	$88,497,000
Construction and Maintenance	3,390,000	3,197,000	3,659,145	5,193,000	8,000,000
Public Land Development Roads and Trails	3,876,000	3,248,000	3,671,480	3,500,000	4,000,000
Oregon and California Grant Lands	19,931,000	13,501,000	20,521,041	18,700,000	20,000,000
Range Improvements	1,551,000	1,936,000	2,377,051	2,716,000	3,200,000
Recreation Development and Operation of Recreation Facilities	--	--	--	--	155,000
Subtotal, Items in Appropriation Bill	109,097,000	101,079,000	120,031,692	104,631,000	123,852,000
Miscellaneous Permanent Appropriations	87,761,000	85,923,000	90,328,856	96,000,000	96,133,000
Trust Funds	470,000	510,000	539,193	665,000	665,000
Supplementals					
Management of Lands and Resources: Firefighting	--	--	--	18,200,000	800,000
Advances and Reimbursements	-206,000	--	--	--	--
TOTAL, Bureau of Land Management	197,122,000	187,512,000	210,899,741	219,496,000	221,450,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
Bureau of Indian Affairs					
Education and Welfare Services	$183,939,622	$228,892,519	$267,435,058	$296,499,000	$285,000,000
Resources Management	57,404,828	69,858,828	78,905,000	78,914,000	79,000,000
Construction	31,381,070	32,357,740	37,917,421	42,551,000	48,000,000
Roads Construction	17,829,191	17,675,640	27,260,786	45,062,000	57,000,000
General Administrative Expenses	5,603,352	6,148,677	6,147,510	6,200,000	5,319,000
Revolving Fund for Loans	- 133,186	1,108,573	- 415,060	500,000	500,000
Subtotal, Items in Appropriation Bill	296,024,877	356,041,977	417,250,715	469,726,000	474,819,000
Claims and Treaty Obligations	213,709	3,651,985	12,849,285	50,226,000	70,161,000
Miscellaneous Permanent Appropriations	8,127,004	8,121,734	9,145,922	7,630,000	7,600,000
Tribal Funds (Trust)	50,733,707	89,089,239	144,149,443	129,000,000	256,700,000
Miscellaneous Trust Funds	4,027,270	3,329,689	3,223,127	3,000,000	4,000,000
Subtotal, Trust Funds	54,760,977	92,418,928	147,372,570	132,000,000	260,700,000
Supplementals					
Resources Management-Fire Suppression	--	--	--	4,800,000	200,000
Revolving Fund for loans	--	--	--	1,000,000	1,000,000
Resources Management	--	--	--	--	29,000,000
Subtotal, Proposed Legislation	--	--	--	1,000,000	30,000,000

Outlays by Appropriation for Fiscal Years1970 through 1974

Appropriation	1970	1971	1972	1973	1974
Bureau of Indian Affairs (Cont'd)					
Consolidated Working Fund	$ --	$ --	$ 437,557	$ --	$ --
Advances and Reimbursements	-1,132,238	-1,391,430	--	--	--
Liquidation of Hoonah Housing Project Revolving Fund	19,504	2,007	1,399	13,000	13,000
TOTAL, Bureau of Indian Affairs	358,013,833	458,845,201	587,057,448	665,395,000	843,493,000
Bureau of Outdoor Recreation					
Salaries and Expenses	4,119,330	4,106,939	3,910,699	4,137,000	4,436,000
Land and Water Conservation	112,488,989	196,682,402	189,581,133	235,223,000	245,223,000
Subtotal, Items in Appropriation Bill	116,608,319	200,789,341	193,491,832	239,360,000	249,659,000
Advances and Reimbursements	-58,632	-65,635	--	--	--
Consolidated Working Fund	--	--	20,113	56,000	50,000
Trust Funds, Contributed Funds	--	--	448	2,844	--
TOTAL, Bureau of Outdoor Recreation .	116,549,687	200,723,706	193,512,393	239,418,844	249,709,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation		1970	1971	1972	1973	1974
Office of Territories						
Administration of Territories	Exp.	10,973,037	13,086,891	17,976,998	25,030,000	18,645,000
	NL.	2,185,667	2,534,893	--	--	--
Trust Territory of the Pacific Islands		39,926,504	48,587,328	50,563,809	70,000,000	61,000,000
Micronesian War Claims		--	--	--	700,000	800,000
Subtotal, Items in Appropriation Bill		53,085,208	64,209,112	68,540,807	95,730,000	80,445,000
Internal Revenue collections for the Virgin Islands (Permanent)		14,164,437	13,208,853	19,415,523	18,506,000	17,955,000
Office of Comptroller for Guam (permanent, special fund)		--	-118,000	--	--	--
Repayments deposited in miscellaneous receipt accounts:						
Guam		-303,490	-375,981	--	--	--
Alaska Public Works		- 25,000	--	--	--	--
Subtotal		-328,490	-375,981	--	--	--
TOTAL, Office of Territories		66,921,155	76,923,984	87,956,330	114,236,000	98,400,000
TOTAL, PUBLIC LAND MANAGEMENT		738,606,675	924,004,891	1,079,425,912	1,238,545,844	1,413,052,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
MINERAL RESOURCES					
Geological Survey					
Surveys, Investigations, and Research in Appropriation Bill	$102,136,693	$114,398,572	$127,479,603	$142,585,000	$152,000,000
Miscellaneous Permanent Appropriations	25,410	-	-	-	-
Surveys, Investigations, and Research (Forecasted Supplemental)	-	-	-	-	4,000,000
Consolidated Working Fund	530,151	-783,021	-304,170	-	-
TOTAL, Geological Survey	102,692,254	113,615,551	127,175,433	142,585,000	156,000,000

Outlays by Appropriation for Fiscal Years 1970 Through 1974

Appropriation	1970	1971	1972	1973	1974
Bureau of Mines					
Conservation and Development of Mineral Resources	$40,893,000	$ 44,753,000	$ - -	$ - -	$ - -
Health and Safety	17,069,000	41,147,000	- -	- -	- -
General Administrative Expenses	1,691,000	2,068,000	- -	- -	- -
Mines and Minerals	- -	- -	123,359,000	156,347,000	136,000,000
Miscellaneous Appropriations (Solid Waste Disposal and Drainage of Anthracite Mines)	1,463,000	478,000	316,000	312,000	200,000
Public Enterprise Funds: Helium Fund (Borrowing Authority)	30,229,000	65,704,000	42,296,000	481,000	-1,492,000
Subtotal, Items in Appropriation Bill	91,345,000	154,150,000	165,971,000	157,140,000	134,708,000
Trust Funds	1,425,000	1,487,000	1,430,000	1,300,000	1,300,000
Advances and Reimbursements	-560,000	-2,709,000	- -	- -	- -
Consolidated Working Fund	- -	- -	158,000	200,000	200,000
Mines and Minerals	- -	- -	- -	- -	5,000,000
Helium Fund (Borrowing Authority)	- -	- -	- -	28,000,000	6,000,000
Subtotal, Forecasted Supplementals	- -	- -	- -	28,000,000	11,000,000
Total, Bureau of Mines	92,210,000	152,928,000	167,559,000	186,640,000	147,208,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
Office of Coal Research					
Salaries and Expenses, in Appropriation Bill	$17,240,000	$17,555,000	$15,761,392	$39,800,000	$54,500,000
Trust Funds	52,000	--	2,118,972	17,916,000	10,000,000
TOTAL, Office of Coal Research	17,292,000	17,555,000	17,880,364	57,716,000	64,500,000
Office of Oil and Gas					
Salaries and Expenses, in Appropriation Bill -- Total	1,042,000	1,157,000	1,451,788	1,565,000	1,485,000
TOTAL, MINERAL RESOURCES	213,236,254	285,255,551	314,066,585	388,506,000	369,193,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
FISH AND WILDLIFE AND PARKS					
Bureau of Sport Fisheries and Wildlife					
Management and investigations of resources	$ 52,232,860	$58,919,890	$ --	$ --	$ --
Construction	3,173,950	3,921,190	--	--	--
General Administrative Expenses	1,928,923	2,013,002	--	--	--
Anadromous and Great Lakes fisheries conservation	2,040,611	1,784,585	--	--	--
Resources management	--	--	68,010,120	76,985,000	80,485,000
Construction and anadromous fish	--	--	7,211,675	11,000,000	8,203,000
Subtotal, Items in Appropriation bill	59,376,344	66,638,667	75,221,795	87,985,000	88,688,000
Migratory bird conservation account	10,551,000	16,095,241	14,018,700	12,000,000	8,000,000
Miscellaneous appropriations	44,435,434	45,584,958	53,281,584	61,097,000	64,012,000
Subtotal, permanents	54,986,434	61,680,199	67,300,284	73,097,000	72,012,000
Trust funds (contributed funds)	255,353	824,209	1,454,551	1,520,000	1,800,000
Intragovernmental funds:					
Consolidated working fund	--	--	209,762	398,000	200,000
Advances and reimbursements	--	-924,802	--	--	--
TOTAL, Bureau of Sport Fisheries and Wildlife	114,618,131	128,218,273	144,186,392	163,000,000	162,700,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
National Park Service					
Management and Protection	53,198,434	63,189,210	--	--	--
Maintenance and Rehabilitation of Physical Facilities	40,482,803	48,771,248	--	--	--
General Administrative Expenses	3,481,215	3,860,360	--	--	--
Operation of the National Park System			122,781,646	154,112,000	171,579,000
Pending Supplemental for Pay Costs	--	--	--	3,839,000	201,000
Total - Operation of National Park System			122,781,646	157,951,000	171,780,000
J. F. Kennedy Center for the Performing Arts	--	--	--	--	2,320,000
Supplemental	--	--	--	1,930,000	--
Total - John F. Kennedy Center	--	--	--	1,930,000	2,320,000
Preservation of Historic Properties	1,147,185	2,518,403	6,788,883	10,000,000	15,000,000
Construction	12,769,767	13,717,916	--	--	--
Planning and Construction	--	--	29,080,359	45,211,000	46,056,000
Supplemental	--	--	--	350,000	--
Total - Planing and Construction			29,080,359	45,561,000	46,056,000
Parkway and Road Construction (Liquidation of Contract Authority)	19,546,307	14,494,107	25,096,690	19,372,000	29,508,000
Planning, Development, and Operation of Recreation Facilities	--	--	--	--	20,000,000
Subtotal, Items in Appropriation Bill	130,625,711	146,551,244	183,747,578	234,814,000	284,664,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
National Park Service (Cont.)					
Education expenses, children to employees, Yellowstone National Park .	121,655	135,535	169,626	315,000	313,000
Payment of tax losses on land acquired for Grand Teton National Park	22,552	21,902	21,091	21,000	23,000
Subtotal, Miscellaneous Permanent Appropriation	144,207	157,437	190,717	336,000	336,000
National Park Service, Donations	1,013,073	1,797,393	1,862,051	2,997,000	2,997,000
Advances from District of Columbia	6,885,205	1,293,382	330,378	--	--
Preservation, birthplace of A. Lincoln..	494	278	9,467	3,000	3,000
Jefferson National Expansion Memorial ..	35,218	417,547	552,412	--	--
Subtotal, Trust Funds	7,933,990	3,508,600	2,754,308	3,000,000	3,000,000
Advances and Reimbursements	113,599	-3,498	--	--	--
Consolidated Working Funds	--	--	16,390	--	--
TOTAL, National Park Service	138,817,507	150,213,783	186,708,993	238,150,000	288,000,000
TOTAL, FISH AND WILDLIFE AND PARKS	253,435,638	278,432,056	330,895,385	401,150,000	450,700,000

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
WATER AND POWER RESOURCES					
Office of Saline Water					
Saline Water Conversion	24,929,335	28,048,959	28,808,530	25,656,000	a/
Salaries and Expenses					
Operation and Maintenance					
Construction, Operation and Maintenance	20,273	--	--	--	--
Prototype Desalting Plant	--	--	102,094	--	--
Advances and Reimbursements	-150,096	58,559	--	--	--
Consolidated Working Fund	--	--	-44,478	136,000	--
Subtotal, Items in Appropriation Bill	24,799,512	28,107,518	28,866,146	25,792,000	--
Trust Funds	5,404,146	1,054,952	3,966,100	159,000	--
TOTAL, Office of Saline Water	30,203,658	29,162,470	32,832,246	25,951,000	--
Office of Water Resources Research					
Salaries and Expenses, in Appropriation Bill -- TOTAL	11,804,000	11,999,000	13,644,362	13,060,000	13,159,000
TOTAL, WATER AND POWER RESOURCES	42,007,658	41,161,470	46,476,608	39,011,000	13,159,000
Office of the Solicitor					
Salaries and Expenses, in Appropriation Bill -- TOTAL	6,412,000	6,686,000	6,579,632	7,331,000	7,850,000

a/ Transferred to Office of the Secretary

Outlays by Appropriation for Fiscal Years 1970 through 1974

Appropriation	1970	1971	1972	1973	1974
Office of the Secretary					
Salaries and Expenses, in Appropriation Bill	10,292,000	12,828,000	12,458,855	15,295,000	15,913,000
Departmental Operations	--	--	3,252,402	4,700,000	5,852,000
Special Foreign Currency Program - Salaries and Expenses	--	--	228,867	500,000	1,700,000
Saline Water Research	--	--	--	--	13,600,000
Central energy research and development fund	--	--	--	--	15,000,000
Forecast Supplemental-Land Use Planning	--	--	--	--	12,260,000
NOTE: See below					
Subtotal, Items in Appropriation Bill	10,292,000	12,828,000	15,940,124	20,495,000	64,325,000
Permanent Appropriation	--	--	--	100,000	100,000
Working Capital Fund	-11,000	180,000	-220,818	--	--
Consolidated Working Fund	--	--	171,697	119,000	--
Advances and Reimbursements	-19,000	-397,000	--	--	--
TOTAL, Office of the Secretary	10,262,000	12,611,000	15,547,609	20,714,000	76,685,000

NOTE: Does not include totals for Underground Electric Power Transmission Research which is included in the Public Works Appropriation Act.

TOTAL, DEPARTMENT OF THE INTERIOR (Exclusive of Power Agencies)	1,263,960,225	1,548,150,968	1,792,991,731	2,095,257,844	2,266,214,000

DEPARTMENT OF THE INTERIOR

S U M M A R Y

Appropriations for Research and Development by Activities
Fiscal Years 1972-1973-1974 and Comparison '73 vs '74

(In thousands of dollars)

Bureau and Appropriation	Fiscal Year 1972 Actual	Fiscal Year 1973 Estimated	Fiscal Year 1974 Estimated	Increase + Dec. - 1974 vs. 1973
Bureau of Land Management				
Management of Lands and Resources	725	673	611	- 62
Oregon and California Grant Lands	91	46	60	+ 14
Subtotal BLM	816	719	671	- 48
Bureau of Outdoor Recreation				
Salaries and Expenses (Planning and Research)	35	24	20	- 4
Geological Survey				
Surveys, Investigations, and Research:				
Special resource and environmental projects	1,690	3,433	3,433	--
Alaska pipeline related investigations	1,353	1,339	850	-489
Topographic surveys and mapping	1,095	1,000	1,000	--
Geologic and mineral resource surveys and mapping	26,998	35,968 1/	34,530	-1,438
Water resources investigations	14,460	13,996	13,672	-324
Conservation of lands and minerals	1,800	1,825	1,825	--
Earth resources observation systems	5,750	10,343	8,443	-1,900
Resource and land information program	--	--	900	+900
Subtotal GS	53,146	67,904	64,653	-3,251

1/ Includes $3,000 related to Earthquake Hazards Reduction Program in reserve.

DEPARTMENT OF THE INTERIOR

S U M M A R Y

Appropriations for Research and Development by Activities
Fiscal Years 1972-1973-1974 and Comparison '73 vs '74

(In thousands of dollars)

Bureau and Appropriation	Fiscal Year 1972 Actual	Fiscal Year 1973 Estimated	Fiscal Year 1974 Estimated	Increase + Dec. 1974 vs. 1973
Bureau of Mines				
Mines and Minerals:				
Mineral resource development:				
Energy	14,879	19,821	18,096	-1,725
Metallurgy	13,873	15,393	14,393	-1,000
Mining	5,784	5,733	5,033	-700
Engineering, evaluation and demonstration	2,809	5,519	3,919	-1,600
Mine health and Safety:				
Research	32,845	31,185	28,317	-2,868
Subtotal BM	70,190	77,651	69,758	-7,893
Bureau of Sport Fisheries and Wildlife				
Resource Management:				
Fishery resources	5,523	6,032	6,400	+368
Wildlife resources	9,358	8,863	9,488	+625
Endangered species	--	1,768	1,768	--
Construction and Anadromous Fish:				
Construction and rehabilitation	415	--	492	+492
Anadromous fish	350	350	350	--
Federal Aid in Fish Restoration and Mgmt.	3,000	3,020	3,000	- 20
Federal Aid in Wildlife Restoration	3,500	3,500	3,530	+ 30
Contributed Funds - (Trust Funds)	192	150	180	+ 30
Subtotal SF&WL	22,338	23,683	25,208	+1,525

DEPARTMENT OF THE INTERIOR

SUMMARY

Appropriations for Research and Development by Activities
Fiscal Years 1972-1973-1974 and Comparison '73 vs '74

(In thousands of dollars)

Bureau and Appropriation	Fiscal Year 1972 Actual	Fiscal Year 1973 Estimated	Fiscal Year 1974 Estimated	Increase + Dec. - 1974 vs. 1973
Office of Water Resources Research				
Salaries and Expenses:				
Assistance to States for institutes	5,100	7,140 1/	5,100	-2,040
Matching grants to institutes	3,000	3,000	3,000	--
Additional water research	4,300	4,300	3,170	-1,130
Scientific information center	930	934	934	--
Administration	960	970	945	- 25
Subtotal OWRR	14,290	16,344	13,149	-3,195
Office of Coal Research				
Salaries and Expenses	30,650	43,490	52,500	+9,010
Cosponsor Funds (Trust Funds)	2,084	17,916	10,000	-7,916
Subtotal OCR	32,734	61,406	62,500	+1,094
Office of the Secretary				
Salaries and Expenses (Special Foreign Currency Program)	500	500	1,630	+1,130
Central Energy Research and Development Fund	--	--	25,000	+25,000
Saline Water Research	27,025	26,871	2,527	-24,344
Subtotal Secretary	27,525	27,371	29,157	+1,786
TOTAL, DEPARTMENT OF THE INTERIOR, except Reclamation, Water and Power Marketing Bureaus	221,074	275,102	265,116	-9,986

1/ Includes $2,040 in reserve.

DEPARTMENT OF THE INTERIOR

Other than Reclamation and Power Marketing Agencies

Analysis of Permanent Positions, Fiscal Years 1972-1974

Bureau or Office and Appropriation Title	Permanent Positions in 1974 Budget			
	1972	1973	1974	Increase or Decrease (-)
PUBLIC LAND MANAGEMENT				
Bureau of Land Management				
Management of lands and resources	3,271	3,309	3,563	254
Construction and maintenance	100	85	85	--
Public lands development roads and trails (Liquidation of contract authority)	83	83	83	--
Oregon and California grant lands	503	475	456	-19
Allocations to other agencies	-142	-114	-95	+19
Net, Total	361	361	361	--
Range improvements	44	44	44	--
Other funds	36	34	34	--
Total, Bureau of Land Management	3,895	3,916	4,170	254
Bureau of Indian Affairs				
Education and welfare services	10,108	10,157	9,885	-272
Resources management	3,922	4,091	3,931	-160
Construction	452	475	236	-239
Allocation to another bureau	-109	-132	-121	+11
Net, Total	343	343	115	-228
Road construction (Liquidation of contract authority)	407	467	467	--
Allocations to another agency	-7	-7	-7	--
Net, Total	400	460	460	--
General administrative expenses	327	327	327	--
Subtotal	15,100	15,378	14,718	-660
Other funds	636	628	628	--
Total, Bureau of Indian Affairs	15,736	16,006	15,346	-660
Bureau of Outdoor Recreation				
Salaries and expenses	233	219	219	--
Land and water conservation	841	853	837	-16
Allocations to other bureaus and agencies	-549	-557	-541	+16
Net, Total	292	296	296	--
Subtotal	525	515	515	--
Other funds	29	39	28	-11
Total, Bureau of Outdoor Recreation	554	554	543	-11
Territorial Affairs				
Administration of Territories	58	62	71	+9
Trust Territory of the Pacific Islands	254	221	208	-13
Total, Territorial Affairs	312	283	279	-4
TOTAL, PUBLIC LAND MANAGEMENT	20,497	20,759	20,338	-421

Analysis of Permanent Positions, Fiscal Years 1972-1974

Bureau or Office and Appropriation Title	Permanent Positions in 1974 Budget			
	1972	1973	1974	Increase or Decrease (-)
MINERAL RESOURCES				
Geological Survey				
Surveys, investigations, and research	5,759	5,799	5,849	+50
Other funds	2,248	2,208	2,208	--
Total, Geological Survey	8,007	8,007	8,057	+50
Bureau of Mines				
Mines and minerals	5,567	5,629	5,619	-10
Helium fund	267	258	258	--
Subtotal	5,834	5,887	5,877	-10
Other funds	303	299	299	--
Total, Bureau of Mines	6,137	6,186	6,176	-10
Office of Coal Research				
Salaries and expenses	30	+37	55	+18
Office of Oil and Gas				
Salaries and expenses	67	67	67	--
Other funds	9	9	9	--
Total, Oil and Gas	76	76	76	--
TOTAL, MINERAL RESOURCES	14,250	14,306	14,364	+58
FISH AND WILDLIFE AND PARKS				
Bureau of Sport Fisheries and Wildlife				
Resource Management	3,305	3,341	3,391	+50
Construction and anadromous fish	110	110	110	--
Migratory bird conservation account	206	198	190	-8
Subtotal	3,621	3,649	3,691	+42
Other funds	466	502	521	+19
Total, Bureau of Sport Fisheries and Wildlife	4,087	4,151	4,212	+61
National Park Service				
Operation of the National Park System	6,625	6,627	6,551	-76
Planning and construction	489	476	476	--
Road construction (Liquidation of contract authority)	233	208	208	--
Allocations to other agencies	-108	-83	-83	--
Net, Total	125	125	125	--
Preservation of historic properties	102	139	139	--
John F. Kennedy Center for the performing arts	--	82	82	--
Planning, Development and Operation of Recreation Facilities	--	--	130	+130
Subtotal	7,341	7,449	7,503	+54
Other funds	498	511	511	--
Total, National Park Service	7,839	7,960	8,014	+54
TOTAL, FISH AND WILDLIFE AND PARKS	11,926	12,111	12,226	+115

Analysis of Permanent Positions, Fiscal Years 1972-1974

Bureau or Office and Appropriation Title	Permanent Positions in 1974 Budget			
	1972	1973	1974	Increase or Decrease (-)
SECRETARIAL OFFICES				
Office of the Solicitor				
Salaries and expenses	348	370	370	--
Other funds	9	3	3	--
Total, Office of the Solicitor	357	373	373	--
Office of the Secretary				
Salaries and expenses	609	683	689	+6
Departmental operations	201	225	225	--
Saline Water Research	149	140	78	-62
Subtotal	959	1,048	992	-56
Other funds	241	257	258	+1
Total, Office of the Secretary	1,200	1,305	1,250	-55
Office of Water Resources Research				
Salaries and expenses	46	46	46	--
TOTAL, SECRETARIAL OFFICES	1,603	1,724	1,669	-55
GRAND TOTAL	48,276	48,900	48,597	-303
Annual Appropriations:				
Gross positions	44,716	45,303	44,945	-358
Allocations to other bureaus and agencies	-915	-893	-847	46
Net positions	43,801	44,410	44,098	-312
Other funds	4,475	4,490	4,499	+9

NOTE: "Other funds" includes permanent appropriations; trust funds; advances and reimbursements; revolving and management funds; and allocations from other bureaus and agencies.

BUREAU OF LAND MANAGEMENT

Miscellaneous Permanent Appropriations

Appropriated, 1973 (estimate)	$94,881,000
Estimate, 1974	96,096,000
Increase	1,215,000

JUSTIFICATION

1. Payments to Oklahoma (royalties) receipts limitation), $1,000. The joint resolution of Congress approved June 12, 1926, provides for payment to the State of Oklahoma of 37 1/2 percent of oil and gas royalties received from the south half of the Red River, Oklahoma. The payment is in lieu of all State and local taxes upon Kiowa, Comanche, and Apache tribal funds received from such lands under the Act of March 4, 1923 (42 Stat. 1448), and is to be used by the State for the construction and maintenance of public roads, or for the support of public roads, or for the support of public schools, or other institutions of learning (44 Stat. 740). The estimate is the same as FY 1973.

2. Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands, $525,000. Not to exceed 75 percent of the receipts in any one year from the Coos Bay Wagon Road grant lands in Oregon are for payment annually, in lieu of taxes, to Coos and Douglas Counties, as provided in the Act of February 26, 1919 (40 Stat. 1179), and the Act of May 24, 1939 (53 Stat. 753-754). The estimate is the same as FY 1973.

3. Payments to Counties, Oregon and California grant lands, $35,000,000. In accordance with Title II of the Act of August 28, 1938 (50 Stat. 874, 43 U.S.C. 1181f), 75 percent of the moneys deposited in the Oregon and California grant-land fund is to be paid to the counties in which the revested lands are situated. However, the "Oregon and California Grant Lands" appropriation of the Bureau of Land Management provides that 25% of the receipts collected from sale of timber and other products on the O&C lands are available for construction, operation, maintenance of access roads, reforestation, and other Federal lands in the Oregon and California land-grant counties of Oregon. The amount appropriated will be a reimbursable charge against the Oregon and California land grant fund and be reimbursed to the general fund of the Treasury from amounts otherwise payable to the counties. The estimate is a decrease of $2,667,000 resulting from a decrease in the allowable cut in Western Oregon.

4. Payments to States (proceeds of sales) (receipt limitation), $303,000. Under various Acts of Congress including 31 U.S.C. 711, States receive for education, roads and improvements, 5% of the proceeds of sales of public lands and of various materials from the public land after deducting all the expenses incident to sale. The estimate is a decrease of $17,000 from FY 1973.

5. Payments to States from grazing receipts, etc., public lands outside grazing districts, $559,000. States are paid 50% of moneys received as grazing fees from public lands outside grazing districts, under the provisions of section 10 of the Act of June 28, 1934, as amended (43 U.S.C. 315i, 315m). The estimate is an increase of $42,000 over FY 1973 attributable to grazing fee increases.

6. Payments to States from grazing receipts, etc., public lands within grazing districts, $649,000. Under the provisions of section 10 of the Act of June 28, 1934, (43 U.S.C. 315b, 315i), 12 1/2% of receipts from grazing fees from public lands within grazing districts is paid to States in which the lands are situated. The estimate is an increase of $115,000 over FY 1973.

7. Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous, $8,000. The States are paid such amounts from grazing fees on miscellaneous lands within grazing districts when fees are not susceptable to a standardized and uniform distribution on a percentage basis (43 U.S.C. 315). The estimate is an increase of $5,000 over FY 1973.

8. Payments to States from receipts under Mineral Leasing Act, $57,609,000. Alaska is paid 90% and other States are paid 37 1/2% of receipts from bonuses, royalties, and rentals under the provision of the Mineral Leasing Act (30 U.S.C. 191), and 37 1/2% of receipts from bonuses, royalties, and rentals from leases of potash deposits under the Act of February 7, 1927, (30 U.S.C. 1012). The estimate is a increase of $3,580,000 from FY 1973.

9. Payments to counties, natural grasslands, $242,000. Counties in which submarginal lands, under the Bankhead-Jones Farm Tenant Act of July 22, 1937 (50 Stat. 525, 7 U.S.C. 1010) transferred to the jurisdiction of the Department by Executive Order 10787, dated November 6, 1958, are located, are paid 25% of net revenues received during each calendar year from the use of such lands; such funds to be used for school or road purposes or both (7 U.S.C. 1012). The estimate is an increase of $79,000 over FY 1973.

10. Expenses, Public Land Administration Act, $1,200,000. Public Law 86-649 of July 14, 1960 (43 U.S.C. 1381-1383) permanently appropriated to the Secretary of the Interior moneys received as a result of forfeitures by timber sale contractors for failure to restore areas damaged by cutting operations and other amounts received in settlement of damage to timber lands and moneys received from road users for road maintenance. The amounts appropriated remain available until expended. Any amounts in excess of the cost of doing the work authorized are transferred to miscellaneous receipts (74 Stat. 507-508). The estimate is an increase of $78,000 over FY 1973.

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
CLAIMS AND TREATY OBLIGATIONS

Statement Relating 1972, 1973 and 1974 Programs

1972 appropriation	$ 238,117
1973 appropriation - estimate	161,000
1974 appropriation - estimate	161,000

JUSTIFICATION

Claims and treaty obligations - $161,000.

A. Fulfilling treaties with Senecas of New York - $6,000.

This is a permanent annuity made pursuant to a provision in the Act of February 19, 1831, which reads as follows:

> "That the proceeds of the sum of $100,000 being the amount placed in the hand of the President of the United States in trust for the Seneca Tribe of Indians situated in the State of New York, be hereafter passed to the credit of the Indian appropriation fund, and that the Secretary of War be authorized to receive and pay over to the Seneca Tribe of Indians the sum of $6,000 annually in the way and manner as heretofore practiced, to be paid out of any money in the Treasury not otherwise appropriated."

This money is paid in equal share to about 5,361 members of the Seneca Nation, and any small balance is deposited to the credit of the tribe.

B. Fulfilling treaties with Six Nations of New York - $4,500.

The Six Nations comprise the Senecas, Tonawanda Band of Senecas, Tuscarora, Onondago, Oneida, and Cayuga Tribes. This appropriation is made annually in fulfillment of treaty obligations for permanent annuity in accordance with the Act of November 11, 1794, which reads in part as follows:

> "In consideration of the peace and friendship hereby established *** and with a view to promote the future welfare of the Six Nations and of their Indian friends aforesaid, the United States will add the sum $3,000 to the $1,500 heretofore allowed them by an article ratified by the President on the 23rd day of April, 1792, making in whole $4,500, which shall be expended yearly forever in purchasing clothing, domestic animals, implements of husbandry and other utensils suited to their circumstances, and in compensating useful artificers who shall reside with or near them and be employed for their benefit."

Approximately $2,700 is allocated annually to the New York Indians and is utilized for the purchase of dress goods; the remainder, approximately $1,800 is distributed per capita to the Oneida Indians under the jurisdiction of the Great Lakes Agency, Wisconsin.

C. Fulfilling treaties with Pawnees, Oklahoma - $30,000.

This sum is to pay the permanent annuity to the Pawnees, as required by Article 2 as amended, of the treaty of September 24, 1857. As amended, this article provides:

> "The United States agrees to pay to the Pawnees the sum of $30,000 per annum, as a perpetual annuity to be distributed annually among them per capita, in coin unless the President of the United States shall from time to time otherwise direct. But it is further agreed that the President may, at any time in his discretion, discontinue said perpetuity by causing a value of a fair computation thereof to be paid to or expended for the benefit of said Indians in such manner as to him shall seem proper."

D. Payments to Indians of Sioux Reservation - $120,500.

This is an annual charge against the general fund of the Treasury, the amount being indefinite until applications are made and approved.

The Act of March 2, 1889, provides for the issue of certain articles necessary to aid individual Sioux Indians in industrial pursuits, particularly on their own allotments. Later, by the Act of June 10, 1896, authority was granted to compute the value of the articles named and to pay these Indians cash in lieu thereof. Payments made under this appropriation are commonly referred to as "Sioux Benefits" and can be made only upon application of the individuals entitled thereto. When cash payments are made, funds are used for purposes of direct benefit to the individual involved, including the purchase of farm equipment or livestock, and home improvement.

The legal authority for these payments is found in the Act of March 2, 1889, section 17 (25 Stat. 894); Act of June 10, 1896 (29 Stat. 334); and the Act of June 21, 1906 (34 Stat. 326).

DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS
MISCELLANEOUS PERMANENT APPROPRIATIONS

Statement Relating 1972, 1973 and 1974 Programs

1972 appropriation	$9,712,253
1973 appropriation - estimate	7,420,000
1974 appropriation - estimate	7,579,000

JUSTIFICATION

1. Acquisition of lands and loans to Indians in Oklahoma, Act of June 26, 1936 - $10,000.

It is estimated that $10,000 will be derived from mineral deposits underlying certain lands purchased in Oklahoma and will be used for the acquisition of lands and for loans to individual Indians, associations, or corporate groups of Indians residing in Oklahoma (25 U.S.C. 507).

2. Operation and maintenance, Indian irrigation systems - $4,169,000.

All funds requested under this appropriation are obtained from the collection of assessments against waterusers on the various projects and are deposited in the Treasury to the credit of the respective projects. By the expenditure of these funds, the various projects located on Indian reservations are maintained in good operating condition, thus permitting the facilities constructed by the Government to be utilized by the Indian and non-Indian landowners within the project who depend upon proper operations and maintenance of the projects for irrigation farming and subsistence.

The funds are used for operation of the irrigation systems to provide adequate water deliveries; for the annual cleaning of canals and laterals to remove silt, moss, and weed growth; for the repair and replacement of water control structures; for the operation and maintenance of reservoirs, dams, and pumping plants, including the purchase of electrical energy; for the purchase of materials and supplies and equipment used in operating and maintaining the irrigation system; for the maintenance, heating, and lighting of offices used for project administration and quarters occupied by project employees; for payment to the United States Geological Survey for stream gaging and water recording services; for payment to other government agencies and irrigation districts for operation and maintenance of irrigation systems on Indian lands included and benefited; for the repair of flood damage and for all incidental and necessary expenses for the proper operation, maintenance, and administration of Indian irrigation projects. The policy in administration of Indian irrigation projects is to make the assessment rate for the various projects on a basis of actual costs.

3. Power systems, Indian irrigation projects, $3,400,000.

All funds under this permanent indefinite appropriation are from earned revenue deposited in the Treasury to the credit of the respective projects. This appropriation provides funds for the operation and maintenance of two hydrogenerating plants; a diesel power generating plant; transmission lines;

distribution systems and pumping plants for the use of the project irrigation systems; the purchase of power for resale and for all necessary expenses for operation of power systems. The project power systems not only serve their primary purpose of furnishing electrical energy to the projects for irrigation and drainage pumping, but also furnish energy to mining and milling properties, public utilities and domestic consumers on the project proper, in nearby towns and villages, and in outlying farming areas. The energy supplied by these projects in many instances is the only source of electrical energy available to the customers. At present, there are approximately 9,600 domestic and commercial customers being served. A large number of potential customers have applied for electrical service.

The activities under the appropriation consist of operation, maintenance, and improvement of power systems built in connection with irrigation projects on the Gila River, Colorado River, and Flathead Indian Reservations. The facilities under these power projects consist in the aggregate of four generating plants of 17,620 KW capacity; over 1,767 miles of transmission system; 113 project pumping plants; and approximately 116 buildings used as quarters, power houses, and warehouses for both power and irrigation activities. Funds are used for payment of the salaries of power superintendents; power and pumping plant operators; line repair and maintenance crews; meter reading and reporting and a clerical force for billing and accounting for revenues; for the purchase of energy; and for the purchase and repair of equipment used on the power systems. Approximately 115 million kilowatt-hours are transmitted over all project transmission and distributary systems annually.

OFFICE OF TERRITORIES
Internal Revenue Collections for the Virgin Islands

Appropriated, 1972	$38,849,404 1/
Estimate, 1973	18,600,000 1/
Estimate, 1974	17,644,000 1/
Decrease 1974 compared with 1973	-956,000

JUSTIFICATION

Under the provisions of Section 28(b) of the Revised Organic Act of the Virgin Islands, Public Law 517, 83rd Congress, approved July 22, 1954, the Treasury Department is authorized to transfer customs duties and certain taxes into the Treasury of the Virgin Islands, to be available for expenditure as perscribed therein.

In fiscal year 1972 the Treasury Department began a new procedure for transferring the collections to the Virgin Islands account. Previously the collections made in one fiscal year were not transferred into the account until the next fiscal year when they were to be paid to the Virgin Islands. In fiscal year 1972, fiscal year 1971 collections were transferred but all new collections for fiscal year 1972 were also deposited directly into the account. This resulted in an appropriated amount of $38,849,404. However by law only the fiscal year 1971 collections were paid to the Virgin Islands in fiscal year 1972. The remaining balance (fiscal year 1972 collections) will be paid to the Virgin Islands in fiscal year 1973. The above estimates for fiscal year 1973 and fiscal year 1974 are the collections for those fiscal years. Payment of these funds will not be made until the following fiscal year.

The net Internal Revenue collections paid to the Virgin Islands under the provisions of the Revised Organic Act amounted to $19,415,523 for fiscal year 1972, and is $18,505,521 for the current 1973 fiscal year. It is estimated that $17,955,000 will be available in fiscal year 1974. Any balance of Internal Revenue collections remaining after the amount equal to the revenue collected in the Virgin Islands has been transferred will be deposited into the Treasury as miscellaneous receipts.

1/ P.L. 90-496 approved August 23, 1968 provided that the salaries and expenses of the Government Comptroller of the Virgin Islands shall be paid from this account, effective as of the date of the Act. Prior to the enactment of P.L. 90-496 these expenses were financed from the Administration of Territories appropriation. Government Comptroller expenses financed from this permanent account are deducted from the gross collections available to the Virgin Islands in the following amounts: $458,360, $470,000, and $645,000 for fiscal years 1972, 1973, and 1974, respectively.

Appropriation	F.Y.	Transfer to Comptroller	Paid to Virgin Islands	Balance
$38,849,404	1972	$458,360	$19,415,523	$18,975,521
18,600,000	1973	470,000	18,505,521	18,600,000
17,644,000	1974	645,000	17,955,000	17,644,000

OFFICE OF THE COMPTROLLER FOR GUAM

Appropriated, 1972	$367,000
Appropriated, 1973	469,000
Estimate, 1974	420,000
Decrease 1974 compared with 1973	-49,000

P.L. 90-497 approved August 23, 1968 provided that the salaries and expenses of the Government Comptroller for Guam would be paid from revenues locally collected in Guam derived from Federal income taxes, customs duties, and other sources. Once these funds are approved they are transferred to the Administration of Territories appropriation for obligation and disbursement.

GEOLOGICAL SURVEY

Permanent Appropriation

Appropriated, 1972	$1,626
Estimate, 1973	--
Estimate, 1974	--

JUSTIFICATION

Payments from Proceeds, Sale of Water, Mineral Leasing Act of 1920, Sec. 40(d), Geological Survey

When lessees or operators drilling for oil and gas on public lands strike water, water wells may be developed by the Department from proceeds from the sale of water from existing wells (30 U.S.C. 221-229). No obligations are anticipated in 1973.

BUREAU OF SPORT FISHERIES AND WILDLIFE

MIGRATORY BIRD CONSERVATION ACCOUNT

1973 Appropriation (estimated receipts for F.Y. 1973) $7,000,000
1974 Appropriation (estimated receipts for F.Y. 1974) 7,000,000

Acquisition of refuges and other areas:

	Amount Available 1972	Amount Available 1973	Estimate 1974	Increase or Decrease (-)
Advance (current definite)	$ 7,500,000	$7,100,000	....	$-7,100,000
Duck stamp receipts (permanent indefinite)	7,351,425	7,000,000	$7,000,000	....
TOTAL	$14,851,425	$14,100,000	$7,000,000	$-7,100,000

The program funded from the Migratory Bird Conservation Account provides for acquisition of habitat to maintain the National migratory bird resource pursuant to the Migratory Bird Conservation Act (16 U.S.C. 715-715s), and the Migratory Bird Hunting Stamp Act as amended in 1958 (16 U.S.C. 718d). Basic funding is from money available from the sale of migratory bird hunting stamps commonly known as duck stamps. Receipts from the sale of duck stamps and advance appropriations authorized by the wetlands loan act of October 4, 1961 (16 U.S.C. 715k-3-5), are merged in the Migratory Bird Conservation Account. These funds are available exclusively for payment of U. S. Postal Service expenses of printing and selling duck stamps and the costs of location, ascertainment, and acquisition of suitable areas for migratory bird refuges and waterfowl production areas.

In the twelve years of the accelerated waterfowl land acquisition program (fiscal years 1962-1973) the advance appropriations have totaled $81.4 million of the $105 million authorization. Duck stamp receipts are estimated at $65.8 million for a total available of $147.2 million. With this money, 1,648,000 acres will have been acquired toward a 2,500,000-acre objective. The accelerated program terminates June 30, 1976, when repayment of the loan begins with 75 percent of duck stamp receipts.

In fiscal year 1973, the advance appropriation was $7,100,000 to be added to an estimated $7,000,000 of duck stamp receipts. However, obligations will be held to $12.1 million in fiscal year 1973.

No advance appropriation is being requested for fiscal year 1974. The obligation program of $9.0 million will be used to acquire the most critical tracts for refuges and waterfowl production areas. The funds will also be used to purchase long-term options that can be accepted in future years and to lease tracts in order to hold them from being converted to other uses. Even though wetlands continue to be threatened with destruction and prices are escalating at a rapid rate, there is this means of flexibility that permits postponement of obligations for a limited time without undue risk during temporary fiscal restraints. Thus, existing staff can be used to stockpile future commitments.

Accomplishments and Future Program: Shown below is a tabulation giving estimated accomplishments through fiscal year 1974 compared to the objectives of the accelerated program. The accomplishments include the establishment of 40 new refuges and completion of 36 of these refuges or others that were already under acquisition. If the estimated acreage is acquired, this will represent 70 percent of the objective. However, at current rates of acquisition, and

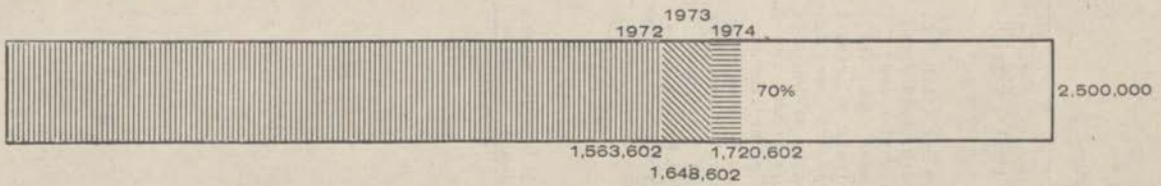
presuming all of the $105 million loan is appropriated, only about 2.1 million acres of the total 2.5 million acres in the accelerated program will be acquired upon expiration of the present wetlands loan authority on June 30, 1976.

ESTIMATES OF ACCOMPLISHMENTS AND OBJECTIVES
LOAN FUND PERIOD 1962-1976

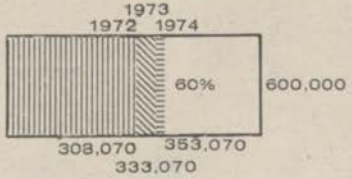
Year	Refuges	Waterfowl Production Areas			Total
	Fee Acres	Fee Acres	Easements	Total	Acres
1962-1972	374,293	308,070	881,239	1,189,309	1,563,602
1973 (estimate)	10,000	25,000	50,000	75,000	85,000
1974 (estimate)	2,000	20,000	50,000	70,000	72,000
Total 1962-1974	386,293	353,070	981,239	1,334,309	1,720,602
Objectives	750,000	600,000	1,150,000	1,750,000	2,500,000
Difference (Objectives v. accomplishments)	363,707	246,930	168,761	415,691	779,398

A chart illustrating objectives and accomplishments of the accelerated land acquisition program is shown on the next page.

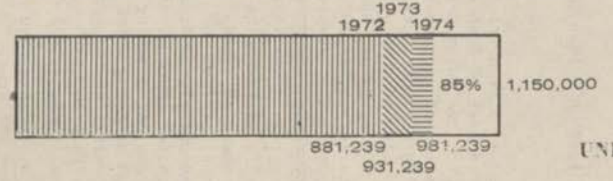
PROGRAM OBJECTIVE – TOTAL ACRES



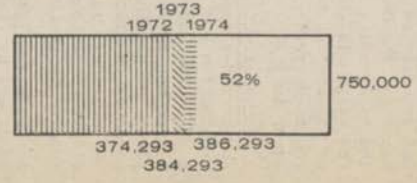
WATERFOWL PRODUCTION AREAS – FEE

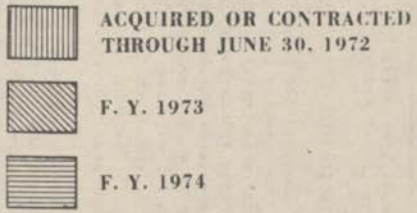


WATERFOWL PRODUCTION AREAS – EASEMENT



REFUGES





UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE

ACCELERATED FEDERAL WATERFOWL LAND ACQUISITION PROGRAM

FISCAL YEARS 1962 - 1976

ACCOMPLISHMENT

DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE

FEDERAL AID IN FISH RESTORATION AND MANAGEMENT

Statement Relating Appropriation Estimate to Current Appropriation

1973 appropriation (receipts for fiscal year 1972)	$13,022,667
1974 estimate (estimated receipts for fiscal year 1973)	$14,300,000

JUSTIFICATION

The Act of August 9, 1950, commonly known as the Dingell-Johnson Act (16 U.S.C. 777a-k) authorizes the Secretary of the Interior to cooperate with the States through their respective fish and game departments in fish restoration and management projects. The Act authorizes appropriation of an amount equal to collections of the 10 percent manufacturer's excise tax on fishing rods, creels, reels, artificial lures, etc. There is authorized to be deducted from amounts so appropriated not to exceed 8 percent for expenses of administration of the Act. The remainder is apportioned to the States on the basis of a formula which takes into account the land area and number of persons holding paid fishing licenses. The Act provides for 1 percent minimum and 5 percent maximum apportionments to the States. The Commonwealth of Puerto Rico will receive 1 percent. Guam, the Virgin Islands, and American Samoa will each receive one-third of 1 percent. The States, the Commonwealth of Puerto Rico, and the territories of American Samoa, Guam, and the Virgin Islands have two years in which to obligate the apportionments. Any funds not obligated revert to the Bureau and are used for the sport fish research program.

The 1974 program is $1,188,000 less than 1973 as follows:

	FY 1973 Estimate	FY 1974 Estimate	Increase or Decrease (-)
1. Payments to States. -- States are reimbursed up to 75 percent of the cost of fish restoration and management projects, including research into fish culture; formulation of restocking plans; and acquisition and improvement of fish habitat. The Commonwealth of Puerto Rico and the territories of American Samoa, Guam, and the Virgin Islands are reimbursed 100 percent of the cost of such projects. Because of recent decreases in receipts, the program is lower in 1974	$14,393,000	$13,205,000	$-1,188,000
2. Administration. -- Administration of the Act includes apportionment of funds; examination and approval of fish restoration and management plans; processing of project agreement after approval of State plans, inspection of projects; making payments to States and auditing State expenditures; and coordinating research effort of various States. The 1974 program is at the same level as 1973	950,000	950,000	....
3. Sport Fish Research. -- Reverted funds are available for the sport fishery research program of the Bureau. The program in 1974 is at the same level as 1973	210,000	210,000	....
Total program	$15,553,000	$14,365,000	$-1,188,000

DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE

FEDERAL AID IN WILDLIFE RESTORATION

Statement Relating Appropriation Estimate to Current Appropriation

1973 appropriation (receipts for fiscal year 1972)	$43,333,533
1974 estimate (estimated receipts for fiscal year 1973)	44,985,000

JUSTIFICATION

The Act of September 2, 1937, commonly known as the Pittman-Robertson Act (16 U.S.C. 669-669j) authorizes the Secretary of the Interior to cooperate with the States through their respective fish and game departments in wildlife restoration projects. The Act authorizes the setting aside in a special Federal Aid to Wildlife Restoration fund an appropriation of amounts equal to revenues received from the 11 percent manufacturer's excise tax on sporting firearms, shells and cartridges. An amount not to exceed 8 percent is authorized to be deducted for expenses of administration of the Act. The remainder is apportioned to the States on the basis of a formula which takes equally into account the land area and the number of persons holding paid hunting licenses. The Act provides for one-half of 1 percent minimum and 5 percent maximum apportionments to the States. The Commonwealth of Puerto Rico will receive one-half of 1 percent. Guam and the Virgin Islands will each receive one-sixth of 1 percent. The States, the Commonwealth of Puerto Rico, and the territories of Guam and the Virgin Islands have two years in which to obligate the apportionments. Any funds not obligated revert to the Bureau and are used for carrying out the purposes of the Migratory Bird Conservation Act.

The Federal Aid in Wildlife Restoration Act Amendments of 1970, (PL 91-503) authorizes the setting aside of the 10 percent manufacturer's excise tax on pistols and revolvers into the Federal Aid in Wildlife Restoration fund beginning with 1971 tax receipts. One-half of these receipts are apportioned to each State based on population, and may be used to support hunter safety programs including the construction of target ranges.

The 1974 program is $1,900,000 above 1973 as follows:

	FY 1973 Estimate	FY 1974 Estimate	Increase or Decrease (-)
1. Payments to States. -- States are reimbursed up to 75 percent of the cost of approved wildlife restoration projects including the acquisition and development of land or water areas and for wildlife management research and for maintenance of completed projects. The Commonwealth of Puerto Rico and the territories of Guam and the Virgin Islands are reimbursed 100 percent of the cost of such projects. States may also be reimbursed for up to 50 percent of the cost of hunter safety programs including construction of target ranges. Because of the increase in receipts, the program is higher in 1974	$40,200,000	$42,000,000	$1,800,000

	FY 1973 Estimate	FY 1974 Estimate	Increase or Decrease (-)
2. Administration. -- Administration of the Act includes apportioning funds; examining and approving State wildlife restoration project plans, specifications and estimates; processing project agreements; inspecting projects; making payments to States and auditing State expenditures; and coordinating research efforts of the various States. Because of non-recurring contracts, the 1974 program is at a slightly higher level than in 1973	$2,600,000	$2,700,000	$100,000
3. Carrying out Migratory Bird Conservation Act. -- Reverted funds are available to carry out the provisions of the Migratory Bird Conservation Act and supplement amounts available for wildlife research program of the Bureau. The 1974 program is at the same level as 1973	300,000	300,000	....
Total program	$43,100,000	$45,000,000	$1,900,000

DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE

NATIONAL WILDLIFE REFUGE FUND

Statement Relating Appropriation Estimate to Current Appropriation

1973 appropriation	$4,500,000
1974 appropriation	$4,500,000

JUSTIFICATION

The Migratory Bird Conservation Act (16 U.S.C. 715s) authorizes the expenditure of revenues from the National Wildlife Refuge System. Revenues consist of receipts from the sale or other disposition of animals, timber, hay, grass or other products of the soil, minerals, shells, sand or gravel, from other privileges, or from leases for public accommodations or facilities on refuges. The Act authorizes deduction of necessary expenses incurred in connection with the revenue-producing measures and payment to participating counties of the larger of either 25 percent of new revenues of each refuge or 0.75 percent of the value of lands acquired in fee. The remainder of the receipts revenue is available for management of the National Wildlife Refuge System and for Enforcement of the Migratory Bird Treaty Act.

The following table shows the program for fiscal year 1972 through 1974:

	1972	1973	1974
Total receipts	$4,803,049	$4,500,000	$4,500,000
Deductions:			
Expenses for sales	491,175	500,000	500,000
Payments to counties	2,517,023	2,833,163	2,850,000
Total deductions	3,008,198	3,333,163	3,350,000
Net receipts available - current year	1,794,851	1,166,837	1,150,000
Unobligated balance from prior years	3,769,827	4,225,708	4,122,545
Total funds - current year	5,564,678	5,392,545	5,272,545
Program - current year	1,338,970	1,270,000	1,270,000
Balance forwarded	4,225,708	4,122,545	4,002,545

The program for 1974 is as follows:

Expenses for sales - $500,000. The Act provides for payment of expenses incurred in connection with revenue-producing measures prior to distribution of the revenues. Examples of such expenses are salaries of foresters to cruise and mark timber for sale, auctioneer's fees, transportation of furs to auction houses, and labor and supplies for butchering and shipping buffalo. The program for 1974 is the same as in 1973.

Payments to counties - $2,850,000. The Act provides for participation of counties in net revenues. The distribution is 25 percent of net revenues or 0.75 percent of the value of lands acquired in fee in case of each refuge to be expended by the county for the benefit of the public schools and roads. When a refuge consists of reserved public lands and is situated in more than one county, the net receipts are prorated to each county in proportion to the area of the refuge in the particular county. The Act provides every five years for a re-examination of land values in order to reflect the current land cost levels. This was done in FY 1971 and increases FY 1972 payments by $435,000. The 1974 program is the same as 1973.

Development and maintenance to wildlife refuges - $850,000. The receipts remaining after payments of expenses and distribution to counties are available to supplement funds provided for management of wildlife refuges in the appropriation Resource Management. The 1974 program is the same as 1973.

Enforcement activities - $420,000. Net receipts are also available to supplement funds provided in Resource Management appropriation for enforcement of the Migratory Bird Treaty Act. The 1974 program is at the same as 1973.

DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE

PROCEEDS FROM SALES, WATER RESOURCES DEVELOPMENT PROJECTS ACCOUNT

1973 appropriation	$15,000
1974 appropriation	$15,000

These receipts will be used to cover the expenses of forestry technicians administering timber harvest activities and for development and maintenance of wildlife habitat not to exceed the amount of receipts deposited as proceeds from sales. The Eufaula National Wildlife Refuge in Alabama, located on a Corps of Engineers project, is currently engaged in the initial Bureau of Sport Fisheries and Wildlife activity of timber harvesting on a water resources development project. It is anticipated that additional projects eventually will qualify for utilization of this account.

A new special fund receipt account was established for deposit of these receipts in accordance with Treasury Announcement No. 11578, dated September 17, 1971. This is in pursuant to 16 U.S.C. 460d, which states in part ". . . That in any such lease or license to a Federal, State, or local governmental agency which involves lands to be utilized for the development and conservation of fish and wildlife, forests, and other natural resources, the licensee or lessee may be authorized to cut timber and harvest crops as may be necessary to further such beneficial uses and to collect and utilize the proceeds of any sales of timber and crops in the development, conservation, maintenance, and utilization of such lands. . . ."

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Analysis by Appropriation

	Available 1973	Estimate 1974	Increase
1. Educational Expenses, Children of Employees, Yellowstone National Park	$305,000	$294,000	$-11,000
2. Payment of Tax Losses on Land Acquired for Grand Teton National Park	21,000	23,000	+2,000
3. Operation, Management, Maintenance and Demolition of Federally Acquired Properties, Independence National Historical Park	10,000	19,000	+9,000
Total	336,000	336,000	-0-

1. Educational expenses, children of employees, Yellowstone National Park: Fiscal year 1973, $305,000; fiscal year 1974, $294,000; decrease, $11,000. The decrease consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $-11,000	--	$294,000	--	Reduction reflects completion of improvements to facilities in 1973; amount is not needed in fiscal 1974.

Program of Work: Public Law 80-604 (62 Stat. 338) approved June 4, 1968, authorizes the use of visitor fees collected at Yellowstone National Park, to provide funds necessary for the education of dependent children of park employees. Assistance is provided for maintaining educational standards at levels consistent with the Park County School District of Montana, for incremental teacher compensation, school supplies, educational aids, payment to school districts for supporting transportation and other services, and for the sound maintenance of the school plant and facilities. A decrease of $11,000 is requested due to completion of improvements to facilities in fiscal year 1973.

2. Payment for tax losses, on land acquired for Grand Teton National Park: Fiscal year 1973, $21,000; fiscal year 1974, $23,000; increase, $2,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+2,000	--	$23,000	--	For additional tax compensation to State of Wyoming.

Need for Increase: Pursuant to the act of September 14, 1950, (64 Stat. 851), the Secretary of the Interior is authorized to use visitor fees collected at Grand Teton and Yellowstone National Parks to compensate the State of Wyoming for tax losses on lands acquired for Grand Teton National Park. The amounts paid by the Service vary from year to year, due in part to the change in the tax rate and assessed valuation, the withdrawal of additional lands from the tax rolls for addition to the park, and the gradual reduction (5 percent per year after a 10-year period) in the computed amount due. An additional $2,000 will be required for tax compensation to the State of Wyoming

It is estimated that $23,000 will be required to compensate the State for 1973 calendar year tax losses.

3. Operation, Management, Maintenance, and Demolition of Federally Acquired Properties, Independence National Historical Park: Fiscal year 1973, $10,000; fiscal year 1974, $19,000; increase, $9,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+9,000	--	$19,000	--	For additional expenses to operate, manage, and maintain Irwin Building due to increased number of occupants.

Need for Increase: Pursuant to the act approved June 28, 1948,(62 Stat. 1061), the Secretary of the Interior, following the consummation of an agreement with the city of Philadelphia and the Carpenter's Company of Philadelphia, was authorized to acquire by donation, with donated funds, or by purchase, real and personal properties for the establishment of Independence National Historical Park. Two amendments have been made to the basic legislation which enlarge and extend the authorization contained in the original act. The act approved October 26, 1951 (65 Stat. 644), authorized the use of all monies collected from rental operations for the operation, management, maintenance, and demolition of federally acquired properties until such time as the buildings on them are demolished or until the properties and buildings are devoted to park purposes. Income from rental of office space in the Irwin Building is estimated to be $19,000 and will be used for its operation, management and maintenance. This is expected to continue until it is replaced by a reconstructed historical building prior to the Bicentennial Celebration.

DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY

LITTER PREVENTION AND CLEANUP

Appropriation, 1972	1/
Appropriation, 1973 estimate	$100,000
Appropriation, 1974 estimate	100,000

JUSTIFICATION

Public Law 91-419, approved September 25, 1970, permanently appropriated certain moneys to the Secretary of the Interior. Royalty fees for the manufacture, reproduction, or use of the Character "Johnny Horizon" will be used for public service anti-litter programs to maintain the beauty and utility of the Nation's public lands (18 U.S.C. 714). This account was transferred from the Bureau of Land Management on July 1, 1972, under authority of Reorganization Plan No. 3 of 1950 (43 U.S.C. 1451).

1/ $77,000 for this account is included in the permanent appropriations for the Bureau of Land Management for fiscal year 1972.

Mrs. HANSEN. I am sure Dr. Whitaker, that you have a general statement. Please summarize it for us, or read it, as you wish.

SECRETARY MORTON'S HEALTH

Dr. WHITAKER. First of all, I would like to make a personal remark about the Secretary's health, if I may.

Mrs. HANSEN. Please do.

Dr. WHITAKER. The last time I saw the Secretary, as he left town Monday right over the George Washington weekend, he was in terrific spirits. He tried to get a group together to play paddle-ball tennis to try to run a group of us into the ground. His moral courage on a thing like this is exemplary. I think it is not just courage but also the fact that he caught this condition early enough and in time so that the doctor said to him that he had no more danger in this matter than he would have trying to get home at night. He is going to be fine. He has an office in Menlo Park, Calif. We set up a Thermofax unit to transmit copies of correspondence out to him quickly.

People will be going out to see him on a regular basis. I think he can stay on top of things that way. Since I am representing the Secretary, I would like to read the Secretary's actual statement rather than my own.

Mrs. HANSEN. Please do.

SECRETARY'S OPENING STATEMENT

Dr. WHITAKER. I appreciate the opportunity to appear before this committee to discuss the 1974 budget requests of the Department of the Interior, which total $1.6 billion, compared with $1.8 billion appropriated for 1973.

We estimate that the bureaus and offices included in this bill will generate receipts totaling $4.7 billion for the 1973 fiscal year and $2.6 billion for the 1975 fiscal year. The largest part of these receipts comes from royalties, rents, and bonuses received from the Outer Continental Shelf lands and are estimated at $4.2 billion in 1973 and $2.1 billion in 1974.

IMPOUNDMENT OF 1973 FUNDS

In line with the administration's efforts to hold 1973 spending to $250 billion, the Department presently has a total of $481.6 million not apportioned for use.

Mrs. HANSEN. The committee has already discovered this.

Dr. WHITAKER. However, of the total amount, $235.6 million was not originally programed for use in 1973, the net effect being an impoundment of $246 million. We will provide to the committee and for the record a listing by appropriation account and, where applicable, by individual projects, of those funds currently not apportioned for use in fiscal year 1973.

First of all, I want to assure you that we are committed within the Department to plan, manage, and implement our programs in a manner which will be most efficient and of benefit to the country and our people.

REORGANIZATION OF THE DEPARTMENT

To this end, I have directed that several major organizational changes be made in the Department in order to better aline mission responsibilities. The revamped structure of the Department is depicted on the charts that you have before you (see attachment). Please note the broadened responsibilities of our three "line" Assistant Secretaries: The Assistant Secretary for Fish and Wildlife and Parks, Nathaniel Reed, will have cognizance over the Bureau of Outdoor Recreation, as well as the National Park Service and the Bureau of Sport Fisheries and Wildlife; there will be an Assistant Secretary for Energy and Minerals, who will direct the activities of the Bureau of Mines, Geological Survey, and the Office of Oil and Gas, the four power agencies, and the Office of Coal Research. This organizational configuration will allow one executive to exercise authority over our energy-related missions; the third "line" executive will be an Assistant Secretary—Land and Water Resources, under whom will be grouped the Bureau of Land Management, the Bureau of Reclamation, the Office of Saline Water, and the Office of Water Resources Research.

That, of course, is Mr. Jack Horton, who is now before the Senate for confirmation.

This structure colocates all our land and water use planning activities. I would like to call your attention to the placement of the Commissioner of Indian Affairs in this structure. The Commissioner will report directly to me now, with no Assistant Secretary interposed between the Bureau of Indian Affairs and the Secretary. I believe this arrangement will facilitate more effective communication between the Secretary and the Indian community. Also, we intend to introduce legislation which will elevate the Commissioner of Indian Affairs to Assistant Secretary.

RECRUITMENT OF COMMISSIONER FOR THE BUREAU OF INDIAN AFFAIRS

At this point in the record, I would like to make a remark for myself on this point so that I in no way mislead the committee as to the potential intentions of the Secretary.

We have a recruitment program going on right now looking for a Commissioner for the Bureau of Indian Affairs and at the same time we are proposing legislation to establish an Assistant Secretary for Indian Affairs, an executive level IV position. Therefore, if the legislation were to pass at a reasonable early stage, it may be that we would decide to skip the recruitment of a Commissioner and go directly for an Assistant Secretary for Indian Affairs.

That is just a distinction I want to make for the record.

Now, back to the Secretary's statement, if I may.

At the staff level, I have designated an Assistant Secretary for Congressional and Public Affairs, and of course that is John Kyl, well known to all of you, and confirmed last week by the Senate. This individual will direct the activities of our Office of Congressional Liaison, the Office of Communications, and the Legislative Council.

Additionally, there will be an Assistant Secretary for Management, and an Assistant Secretary for Programing and Budget. The major change here is that I am colocating the departmental budget responsibilities with the responsibilities for program development. My ex-

perience in the last 2 years convinces me that these two major functions cannot operate under the direction of different executives. One man must have both responsibilities.

I will be happy to discuss this concept in more detail later, but in the interest of conserving the committee's time, I will devote the balance of these opening remarks to the budget request itself.

You will be examining bureau witnesses in detail later during the hearings, and we have submitted detailed justifications supporting our budget request. However, there are several aspects of our program for 1974 that should be highlighted. We are faced with challenges to our environment and our resources. These as well as our responsibilities in Indian and territorial affairs must be met with vision and vigorous commitment.

In a most stringent budget year, our request emphasizes the urgency for meeting the Nation's growing needs for energy as well as providing for a more effective use of our land resources. To this end, we have tried to direct our efforts and funds into those programs which we believe are most urgent.

ENERGY PROGRAMS

The budget provides for an accelerated oil and gas leasing schedule and study of new areas on the Outer Continental Shelf, investigations and selections of potential tracts for geothermal steam leasing. an accelerated program for converting coal to clean-burning synthetic fuels, and continuation of the proposed oil shale leasing programs; $52.5 million, an increase of approximately $8 million over fiscal 1973, is being requested for the Office of Coal Research to continue its research programs including accelerated cooperative Feleral-industry coal gasification program.

In line with this effort, the budget provides for establishing in the Office of the Secretary a "central energy research and development" fund of $25 million. This fund will provide a central and flexible source of support to encourage and stimulate research and development programs involving nonnuclear energy use with particular emphasis on the solution of near-term problems. This program represents a comprehensive approach for maximizing the payoff of the most promising energy research and development efforts of the Federal Government and private industry and will be carried on through contract research or through other departments or agencies possessing high caliber technical management capability to conduct investigations of energy projects. These projects will be identified by the Department and reviewed by the Energy Board, which I chair.

TRANS-ALASKA PIPELINE

As far as the trans-Alaska pipeline is concerned, you know that the court of appeals recently held the Department was without authority to issue special land use permits for the area needed during construction of the line and refused to rule on the adequacy of the Department's environmental impact 102 statement. Consequently, expenditures for surveillance and monitoring of pipeline construction will not be incurred until there is a resolution of the issue of authority to issue the necessary permits.

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Mr. WYATT. Is that court of appeals ruling on appeal or has that yet to be determined?

Dr. WHITAKER. That has yet to be determined. I can go into that later in more detail.

Mrs. HANSEN. Please do.

Dr. WHITAKER. However, some other expenditures, to be reimbursed by the oil company applicants if a permit is issued, will be necessary prior to issuance of the permit.

These include personnel costs for completing some additional baseline information studies, continuing work necessary for detailed design review and, if ultimately required by the court, amending the environmental impact statement.

The budget before this committee includes $7.4 million for surveillance and monitoring of construction on the pipeline. It also includes a limitation prohibiting the use of these funds until a right-of-way is issued. It is recommended that the committee act favorably on this request so that the Department will be in a position to move ahead with this work if the necessary clearances are obtained.

INDIAN AFFAIRS

The future of the American Indian is one of my greatest concerns and it will receive the highest priority in our plans.

We propose to devote maximum effort to assist the Indian people in achieving their goal of self-determination through assuming greater responsibility in planning and managing programs for their educational, economic, and social betterment. As a major step for turning over the management of Indian affairs to the tribes, legislation will be proposed to provide block grants to the tribes to carry out development projects as provided in tribally prepared plans. $25 million is included in the budget for this purpose. This fund would be used for projects such as water, sewer and utility systems, industrial and commercial tracts and facilities, street and access road construction, tourist and recreational facilities, and other projects which have as their aim the development of their natural and related human resources.

The education of Indians is one of our foremost goals and we are determined that education standards and classroom construction will be of the highest professional quality.

Included in the budget is a request of $70 million for the settlement of certain land claims of Alaska Natives authorized by law. This is an increase of $20 million over 1973.

MINE HEALTH AND SAFETY

The health and safety program of the Bureau of Mines will continue to be geared to providing the safest and healthiest working environment for the miner. In 1972 work fatalities in the coal mining industry totaled 157 and occurred at a frequency rate of 0.56 per million manhours of worktime. This is well below the previous low of 1971 when 181 fatalities occurred at a frequency rate of 0.72. While we will not be satisfied so long as there are any fatalities, definite progress has been made in reducing the fatality rate. We believe this is a direct result of our concentrated effort in inspections, education and training, technical support, and research.

Additional effort is proposed in the 1974 budget to improve safety in metal and nonmetal mines. This additional effort will be directed toward correcting those hazards which jeopardize a miner's safety and his life and to avert a repetition of the tragedy that occurred at the Sunshine Silver mine in Kellogg, Idaho.

PARKS, RECREATION AND WILDLIFE

The budget of the National Park Service provides for the initial operation of 11 new areas and additions in three existing areas authorized by Congress in 1973. Two of these areas, Gateway National Recreation Area in New York Harbor and Golden Gate National Recreation Area in San Francisco will provide accessible recreational opportunities for some 60 million people and will serve as an outstanding example in carrying out the President's "Parks to the people program." An initial appropriation of $8.7 million is programed for these areas.

A new $8 million special bicentennial grants-in-aid program, is available to the States on a matching basis for funding special historic preservation projects in those cities which figured prominently in the movement leading to independence and that may be expected to host large numbers of visitors during the bicentennial years.

Mrs. HANSEN. Would this be in the original thirteen colonies?

Dr. WHITAKER. Madam Chairman, the criteria for the grants would favor cities that played a significant role in the movement that led to independence and that have developed viable projects with high potential for enhancing the idea that shaped the American heritage.

Another significant part of the budget is a $39.6 million development program for continued planning and construction of selected areas associated with the American Revolution bicentennial celebration.

The Bureau of Outdoor Recreation will carry on an active program of grants to States to acquire land for recreation purposes. The land and water conservation fund program has a carryover of $239.6 million of unobligated funds from previous appropriations which will allow for an obligational program in 1974 of approximately $263.4 million. Of this amount, $128.2 million together with $50 million being requested in fiscal year 1974 will provide the States with $178.2 million to continue their acquisition and development of public recreation areas.

By the end of this fiscal year the States will have received over $800 million in Federal grants for outdoor recreation planning, acquisition, and development under the land and water conservation fund. This program is doing an outstanding job in helping State and local governments meet their responsibilities for providing much-needed outdoor recreation opportunity.

While no new funds are being requested for land acquisition by Federal agencies, carryover funds from previous years will be available in 1974 to finance a program level of approximately $80 million, close to the acquisition programs of $91.6 million in 1972 and $87 million in 1973.

We propose through the Bureau of Sport Fisheries and Wildlife to continue to seek closer relationship with State fish and game departments to provide meaningful and far-reaching programs in wildlife

management and seek to strengthen our efforts in protecting endangered species.

The polar bear, walrus, sea otter, and other marine mammals will receive more critical attention, both domestically and internationally. It is our intention to make the Bureau of Sport Fisheries and Wildlife the biological arm of the Government for wildlife resources. This involves the study and management of fish and wildlife less as individual species, and more as members of animal communities. Animals reflect subtle changes in the environment that serve as early warnings.

SALINE WATER RESEARCH

Research and development associated with the distillation and brackish water membrane processes will be phased out this fiscal year, although limited seawater membrane testing will be carried out at Wrightsville Beach in 1974. We believe that we have progressed with our research testing on distillation technology to the point where private industry is now in a position to construct multimillion gallons per day plants. Continued research effort in distillation—because of the size of equipment involved—would provide marginal payoff in relation to the required investment. Thus, the level of effort toward developing promising processes can be conducted at a satisfactory rate at the proposed funding level.

We are, therefore, proposing to redirect the saline water research program toward research on promising methods for which technology has not been sufficiently developed for assumption by private industry.

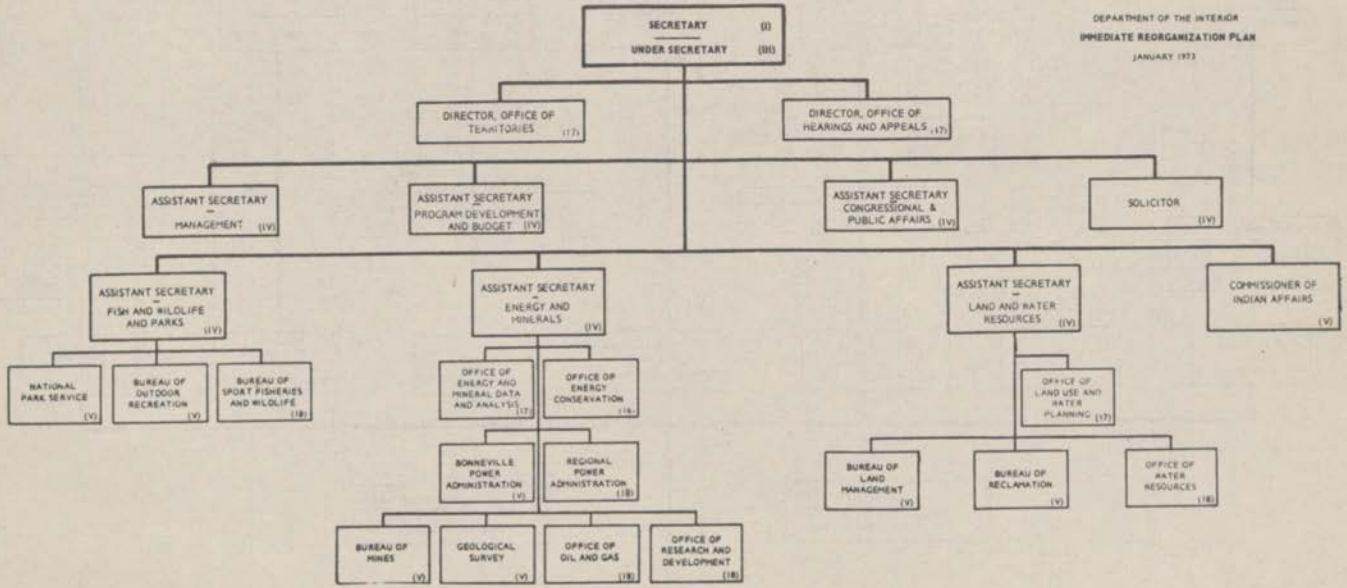
We are most appreciative of your interest and strong support of the Department's programs and hope that we shall merit your continued assistance.

(Charts follow:)

DEPARTMENT OF THE INTERIOR

IMMEDIATE REORGANIZATION PLAN

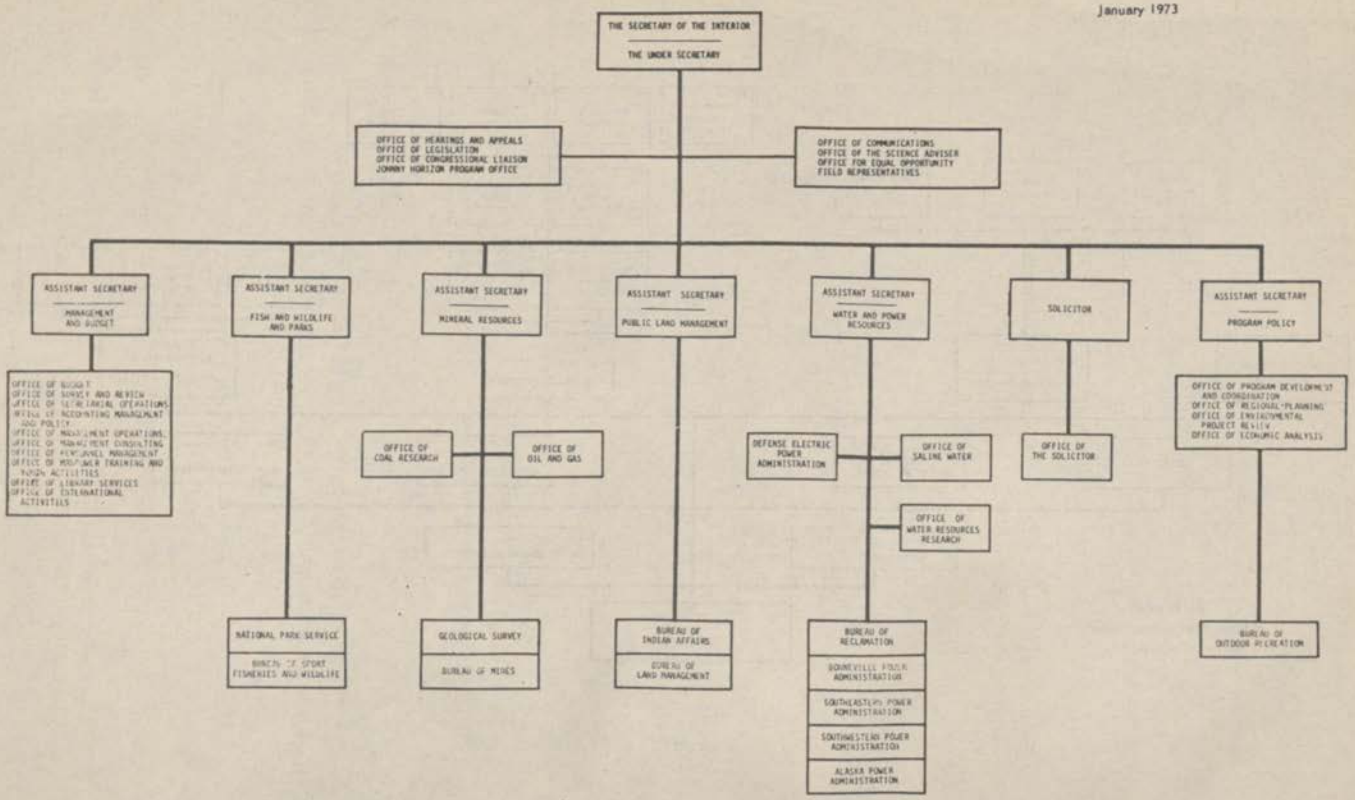
JANUARY 1973



Department of the Interior

PRESENT ORGANIZATION

January 1973



Dr. WHITAKER. I apologize for the length of that statement. But I felt it was the Secretary's and I should not change it.

Mrs. HANSEN. It is only matched by the length of your impoundment list.

Dr. WHITAKER. Touché.

PRIOR ROLE OF ASSISTANT TO PRESIDENT FOR NATURAL RESOURCES

Mrs. HANSEN. On January 5, 1973, the White House announced a new executive reorganization. It was announced that Secretary Butz will become the Counselor to the President for Natural Resources, with an office in the Old Executive Office Building. Could you each explain to the committee your respective roles in the area of natural resources policy?

Dr. WHITAKER. I would be glad to go first.

In a small way, with a small "s," I had part of Counselor Butz' job when I was at the White House, so I think I can speak at least to that stage with some relevancy. I was Deputy Assistant to the President on the Domestic Council in the area of natural resources. In other words, I was trying to do what the President is presently proposing to move toward, a Department of Natural Resources.

Let me be more specific. I coordinated the activities, as best I could, between what would be a Department of Natural Resources, basically NOAA in Commerce, the various pieces from the Department of Agriculture, the water activities of the Corps of Engineers, and virtually everything Interior was doing, excluding the Indian programs.

Let me go from that general area to the kind of nitty-gritty things that you get involved in, if I may.

Mrs. HANSEN. Please do.

Dr. WHITAKER. The involvement is at two levels. First, there are "Olympian" vantage point issues that get into the President's business whether he wants them to or not. By that I mean there is a tendency, if I can speak now in deference to the Secretary of Agriculture and in the absence of the Secretary of Interior and placing myself in my former role, for the Cabinet members to get locked in by their own people giving them one point of view. That does not mean they do not try to get out of that narrow point of view, but they tend to get locked into it.

So obviously issues come to the White House not because they need to be resolved by the President, but because there is no other protocol way to resolve it except by the President.

Then I can mention areas like water policy, for example. It is included in the small watershed program in the soil and conservation part of the Department of Agriculture and a portion is in the Bureau of Reclamation in our Department of Interior. The program also includes the Department of Defense's Corps of Engineers, and because it does not always work very well, we have a Water Resources Council which tries to coordinate all of them and does not always succeed.

That is one of the many interdepartment agencies in this town that, in my candid opinion, do not work very well.

That kind of coordination is necessary.

Presumably you might also speak to this area from your budget work. Let me take another one, timber, I cannot help but mention this.

Taking an extremist position by some people in the Department of Interior, timber is something to be untouched by human hands, while over in the Agriculture Department, it is a crop.

Problems we are having with energy today—I think there is a Smithsonian study that shows there is something like 60 little bureaus, oligarchies, bureaucratic fiefdoms, around this town that have something to do with energy. We have fossil fuels in Interior, nuclear fuels in AEC. This is why you need this coordination.

In the oil shale area, EPA obviously has a large input. I can go on forever. It is obvious why you need this coordination. Forming a Counselor to the President I think is a great step forward. But at best it is half a loaf. The Secretary will speak to that, because he cannot, day by day, be on top of all those issues. It is just impossible from that position. But it is a start toward institutionalizing what we hope the President will come along with later, a Department of Natural Resources, and the other departments which he has proposed.

PRESENT ROLE OF COUNSELOR TO THE PRESIDENT FOR NATURAL RESOURCES

Mrs. HANSEN. Mr. Butz, do you want to comment on this matter?

Counselor BUTZ. I think Secretary Whitaker has done a very good job of describing this.

The three Counselors to the President, one for natural resources, one for human resources, and one for community development, each will have a very small cadre of staff located in the Executive Office Building. We will have dual responsibilities. We continue as Secretaries in the Cabinet just as we always were, obviously with a need to shed a great deal of day-to-day operating responsibility on the Under Secretary or the rest of the staff and retain what time is necessary for policy formulation, at this time of the year for contact with the Congress, a committee such as this one right here.

I may say that the role of those counselors will be just what Secretary Whitaker has described, perhaps a little broader than that.

They will be used to resolve the inevitable conflicts of interest that arise as, for example, between environmentalists on the one hand and those who want to use natural resources on the other hand, a perfectly natural conflict of point of view, if not of interest, that is bound to arise; or between the environmentalist on the one hand and those who want to exploit our energy resources on the other hand, particularly in view of the current energy crunch we face.

An attempt will be made to keep as many of these decisions off the President's desk as possible. Indeed, my own philosophy is going to be that I want to keep decisionmaking as close to the level of expertise as possible.

I have been in administration half my life, and that is the basis on which I operate, that I want to push decisionmaking just as close to the experts as possible, which means it is right where you saw it this morning in the Department of the Interior, or in the Department of Agriculture, as the case may be.

We hope that this new counselor setup will serve as an effective avenue of communication to interpret the Presidential policy and the administration policy to the cognizant departments and agencies so that we all sing from the same sheet of music when we are discussing

policy matters. That is the way we hope to have this operate, Madam Chairman.

RESPONSIBILITIES OF PRESIDENT'S COUNSELOR VERSUS AGENCY HEAD

Mrs. HANSEN. Because there is a question of who, after all, does make the decisions, what were your respective roles in the recent environment and natural resources message?

Counselor BUTZ. I know that every cognizant department had some input into that message originally.

Mrs. HANSEN. Who sifted them and brought it together?

Counselor BUTZ. These were sifted finally with OMB having a substantial input, also by the Domestic Council, and in the final analysis the President, of course, when it gets to him.

ROLE OF COUNSELOR TO PRESIDENT IN FORMULATION OF BUDGET

Mrs. HANSEN. What will be your respective responsibilities in connection with the budget formulation process?

Counselor BUTZ. It will be the same. At the present time, as you may know, in preparation for the 1974 budget, the role of the counselor was minimal, if he had any role at all, because the budgets were formulated prior to the announcement of this counselor arrangement. They were pretty well locked in concrete. They were not submitted until January 29. So far as the 1974 budget is concerned, the new counselor setup had no involvement whatever. The OMB obviously had its participation.

Mrs. HANSEN. Obviously.

Counselor BUTZ. I presume you operate as we did in Agriculture, where it comes out to be a joint effort, as it should be, Madam Chairman. After all, you have to have some central control in the budget in Government somewhere.

Mr. YATES. Is it joint or only OMB?

Counselor BUTZ. I can only speak for Agriculture at this point; it is joint. I may say we got a ceiling from OMB which had the concurrence of the President. The ceiling came fairly early. Having gotten that ceiling, we decided together on the priority, relative priorities, of various items. At that point it was a joint decision. The ceiling, however, was not a joint decision.

I presume Interior did the same thing.

Dr. WHITAKER. That is correct.

Mrs. HANSEN. What about the budget process for fiscal year 1975?

Counselor BUTZ. In 1975 in the budget process, it is anticipated the counselors will have some input again as a joint product, along with the Secretaries involved, and the budgetmaking officers in the cognizant departments, again primarily to assure that there is uniformity in the way we establish priorities and programs in the various departments and agencies involved in natural resources.

As Secretary Whitaker just said, in the case of water policy, for example, there are half a dozen major departments keenly and directly involved in a major way.

I think the role of the counselors will be to make sure that we are following uniform policy and a fairly uniform set of priorities as we approach the budgetmaking process.

HANDLING CONFLICTS BETWEEN PRESIDENT'S COUNSELOR AND AGENCY HEAD

Mrs. HANSEN. Mr. Secretary, it would appear that there would be a conflict of interest between your role as Counselor and your secretarial job in areas where Agriculture and Interior have similar programs.

I will call your attention to two that this committee handles: forestry and grazing fees.

Counselor BUTZ. That is right. And there are potential areas of conflict. I guess I have to answer that in this new setup each Cabinet member retains his identity and responsibility as a Cabinet member just as he did before this counselor setup. Each has access to the President, each has access to the Assistant to the President, to the Director of OMB, in identically the same way he had before.

Somebody asked me a question a while back, suppose I come into a situation where my interest as Secretary of Agriculture conflicts with my interest as Counselor for Natural Resources. "What are you going to do in that case?"

I answered somewhat facetiously, but not so facetiously either, that if the Counselor for Natural Resources makes a decision that I don't like, I don't think the Secretary of Agriculture will appeal the decision to the President.

Mr. MCKAY. But here he is the same person.

Mr. YATES. Is that your only power, to appeal to the President if you do not like a decision in Interior?

Counselor BUTZ. On some problems we have now, as I have had in 15 months, I have appealed rulings of OMB to the highest court, and that is the President.

Mr. WYATT. What is your record on appeals, Mr. Secretary?

Counselor BUTZ. Probably one out of three.

The point I want to make is that the right of approach to the highest voice in Washington; namely, the President, remains intact.

Dr. WHITAKER. By either Secretary, I think.

Counselor BUTZ. That is correct, by either Secretary.

Mrs. HANSEN. Mr. Yates?

POWERS OF PRESIDENT'S COUNSELOR

Mr. YATES. Mr. Secretary, what powers does the Secretary of Agriculture have as a counselor? What can you do by way of overruling a decision of the Department of Interior?

Is your function only to advise with them and, if you disagree, to appeal to the President, is this the only power you have?

Counselor BUTZ. This power is not clearly defined at the moment. This system has to be worked out obviously.

All I can say is, my own method of operation in a case like this is to get as much input as you can get from all of the interested parties. I think we will operate in this case identically to the way John Whitaker described.

Mr. YATES. Suppose you do not agree with John Whitaker, do you just disagree or can you get the President to overrule John Whitaker?

Counselor BUTZ. In this case, where you have a conflict of interest, a conflict of areas, let's say between Interior and EPA, after you get the entire input somebody has to make a decision. In that case, I

presume it would be the counselor. If either EPA or Interior feels it is an unfair decision, they obviously go to the higher court.

Mr. YATES. Was there a direction given to you when you were appointed counselor, was there something in writing setting out what your powers are?

Counselor BUTZ. No, sir; various responsibilities were generally discussed.

Mr. YATES. It was just a Presidential directive to the effect that the Secretary of Agriculture will now act as a counselor to the Secretary of the Interior?

Counselor BUTZ. No, sir, he did not ask the Secretary of Agriculture that. He asked me as an individual to do it.

Mr. YATES. Then it is just an individual job that you have?

Counselor BUTZ. That is correct.

Mr. YATES. As an individual?

Counselor BUTZ. That is right. This is not an ex-officio position.

Mr. YATES. You are sort of riding herd over the Department of the Interior?

Counselor BUTZ. Over all the natural resources parts of the Government. It is not as the Secretary of Agriculture.

Mr. YATES. Earl Butz?

Counselor BUTZ. That is right. The President tomorrow morning may decide to have this changed over to EPA, Corps of Army, or get somebody from outside.

Mr. YATES. Are we appropriating money for you under this budget in your role as counselor?

Counselor BUTZ. No, sir.

Mr. YATES. That is under the Agriculture budget?

Counselor BUTZ. Yes, sir.

Mr. YATES. Did you want to say anything, Mr. Whitaker?

OPTION PAPERS PREPARED FOR PRESIDENT'S DECISION

Dr. WHITAKER. I only want to make the point that the President makes tough decisions like this usually by putting together option papers rather than by oral argument. I am sure Secretary Butz in his role as counselor has a lot more clout than John Whitaker ever had as Deputy Assistant to the President, I have to say that to start with, but he will do his very best, I am sure, to make those option papers neutral.

I have had my concerns about the option papers presented to the President, but I can also understand their position that it is extremely tough to write an editorially neutral option paper. I know the Secretary will be doing that. I know that as they get written by his staff that he will be calling Secretary Morton and in effect saying, is this precisely your point, do we have it boiled down. He will bend over backwards to represent Interior on any other piece of a potential Department of Natural Resources, so that the paper that goes in is editorially neutral and starts with the same set of facts.

Mr. YATES. So he is in the nature of an adviser to you?

Dr. WHITAKER. To the President.

Counselor BUTZ. This is a case where the decision has got to go to the President. Already we have had cases where we have had the parties together that have different points of view and resolved it around the table.

Mr. YATES. Do you have any powers under the natural resources area in energy?

Counselor BUTZ. Energy, fuels.

Mr. YATES. Do you have decisions to make with respect to oil and gas?

Counselor BUTZ. Obviously there will be. But in cases like this, option papers will go to the President.

Again let me say we will do our level best to do what we have already done, get the people around the table and get a consensus without bothering the President on it.

Mr. YATES. You indicate earlier there has been a Smithsonian study to the effect that over 50 agencies were engaged in the field of energy in one form or another.

Dr. WHITAKER. Yes.

Excuse me, if I said Smithsonian I erred. The Library of Congress made a study.

Mr. YATES. You said Smithsonian. I will accept the change.

Dr. WHITAKER. All right.

ENERGY PROGRAM RESPONSIBILITY

Mr. YATES. Does your statement now mean that there has been reorganization and that the Department of the Interior now has exclusive jurisdiction in this field?

Dr. WHITAKER. No, sir; it does not. That is a decision that the President has not yet made.

Mrs. HANSEN. Wouldn't that involve a change in current legislation?

Dr. WHITAKER. Yes; that is correct. The previous plan for the Department of Natural Resources contained this responsibility. I think the President is retaining the open option as to whether he wants to change that again, and he might.

Mr. YATES. What do you mean by again?

Dr. WHITAKER. He might suggest new legislation to change the structure of a Department of Natural Resources that was different than the legislation that he proposed last year. If he does, it will probably primarily focus on the area of energy.

Mr. YATES. Has he by Executive order moved any of the powers over energy that other organizations had, who are not in Interior, to the Department of the Interior?

Dr. WHITAKER. No, sir; I do not think so.

Mr. YATES. Then whatever organizations that were in existence that had such powers still continue to have such powers?

Dr. WHITAKER. Yes, sir.

Mr. YATES. I see.

Mrs. HANSEN. Congressman McKay?

PROPOSALS FOR REORGANIZATION OF DEPARTMENTS

Mr. MCKAY. Mr. Secretary Butz, is this in fact a preliminary trial run to what is hoped to be put into law?

Counselor BUTZ. I cannot answer that, except that the organization of these three counselors, in addition to Counselor Shultz who has a somewhat different role here, he has the economic area, do in fact

follow the general outlines recommended in the initial Commission report.

As I understand it, it is an informal attempt to bring together focuses for decisionmaking that follow these four general uses of proposed organizations. Still, to keep the Cabinet intact in their organization, not to change the committee structure on the Hill as it obviously would have to be changed if we consolidated seven existing departments into four existing surviving departments.

Mr. McKay. I am not particularly adverse to some of these changes. I went through this same type of thing with a State reorganization committee, we called it the "Little Hoover Commission", in which, to begin with, we made similar arrangements, giving the governor authorities for, in essence, counseling positions, but coordinative efforts, as a trial run for 6 months, then it was proposed at the end of that time to put it into legislation. The idea I agree with, I may have some dispute as to how it will be finally alined, because I think we have definite conflicts and, although we have areas that need some emphasis, I think they have been frustrated in their efforts because of other operations.

So that to that extent I am in favor of reorganization, as long as we do not use it in fact to destroy given programs which need emphasis and cut them out entirely but, rather, to coordinate, combine and cut out duplication.

REDUCTION IN 1974 ESTIMATED REVENUES—OUTER CONTINENTAL SHELF LEASING

You noted in your offshore estimates a 50 percent drop in the estimated revenues in offshore and other incomes. What is that attributable to?

Dr. Whitaker. Two things, primarily, Congressman.

Number one, this last fiscal year, the Federal Government received a great, I do not know the exact figure, but a considerable amount of funds because litigation before the Supreme court on the OCS—on the limits of offshore ownership between the Federal Government and the State of Louisiana was settled. That case was decided in the Supreme Court in favor of the Government.

Therefore, we received all those escrow funds in one year. So that makes last year's budget higher. The second reason is more speculative.

That is, this year we propose more sales, offshore sales over a larger area, but because the geology is not as well known, we anticipate a lower amount of receipts. We could be wrong in that.

Specifically, the receipts we figure on are, No. 1, the Mississippi-Alabama-Florida sale, which will be $300 million; second, the Louisiana-East Texas general sale, which we think will be about $850 million; third, another Louisiana-Texas general sale of $650 million; and finally, about $300 million in royalties from ongoing production we now have, which gives us a total of $2.1 billion. We could err on the conservative side here. We hope we do. But in terms of our relationship with OMB and the White House, we would rather err that way than figure on amounts that in fact do not come in.

Mrs. Hansen. Do you have another question?

Mr. McKay. I will pass at this point.

Mrs. HANSEN. Congressman Evans.

Counselor BUTZ. Congressman Evans is a distinguished member of the Agricultural Subcommittee. He has already had me for 2½ days.

Mr. EVANS. Earlier today I had a conflicting subcommittee meeting. I have not heard the testimony. I do not want to waste the subcommittee's time. So I will pass the questioning.

Mrs. HANSEN. Mr. McDade?

Mr. MCDADE. Thank you.

Mr. Secretary, I want to welcome you and Secretary-Counselor Butz here. I want to begin by saying how delighted we are with the report on Secretary Morton, whom we hold in high esteem. We are glad to note that the prognosis is good. When you speak with him, tell him we all miss him; we look forward to his speedy return.

Mr. YATES. Return to the paddleball court, too, where he was so formidable a player.

ACTIVITIES OF PRESIDENT'S COUNSELOR TO DATE

Mr. MCDADE. Let me ask a few questions about your role as counselor. How many times have you functioned in that role thus far, since your appointment?

Counselor BUTZ. I cannot name it specifically. Much of it is by telephone. I think we have had half a dozen specific cases in which option papers have moved forward.

Mr. MCDADE. Am I correct in my assumption that those papers and the choices they outline are not public documents?

Counselor BUTZ. That is correct.

Mr. MCDADE. But are held within the executive?

Counselor BUTZ. That is correct.

Mr. MCDADE. Are you able to tell me in your conversations, for example, with the Department of Interior, what areas you discussed, if you had discussions in your role as counselor?

Counselor BUTZ. Oh, yes. They have been in the energy field; including the immediate problem we have on energy requirements in the Midwest coming up right now, for example.

Also in the interpretation of the Clean Air Act, for example, as it applies to the utilities. The predator problem, just to name two or three.

Mr. MCDADE. Suppose I were to ask you whether or not, as Counselor to the President, you have been able to focus on your top five priority issues that you feel you have to show some movement in; would you be able to respond to a question like that at this point?

Counselor BUTZ. I think so, maybe not the top five. But energy is one that is on the front burner right now, as the President will indicate in his upcoming energy message.

Mr. MCDADE. In that connection, did you participate at all in the preparation of this new $25 million fund within the Department of Interior—the energy planning and development fund?

Counselor BUTZ. No. You see, this budget—as I said a while ago—was pretty well set in concrete before the counselor system was set up.

Mr. MCDADE. That is one you did not participate in?

Counselor BUTZ. No.

Mrs. HANSEN. The concrete is congressional additions.

Dr. WHITAKER. I did not participate in that as it came over just at the time I left. So you ask about a question that just did not come to me for review.

MAJOR ENERGY CONCERNS

Mr. MCDADE. Suppose you tell me a little bit, if you will, about energy, some of the problems that you foresee. What problems in energy are you trying to focus on as Counselor to the President?

Counselor BUTZ. The major thing we have here is to resolve some of the obvious conflicts between environmental considerations and the real need to exploit our energy resources. The President said, in his state of the Union message, that we are consuming more energy than we are producing. It is a rather shocking statement. Where you have the very real problem of the environmentalists—on the one hand—who have successfully—from their point of view—blocked many projects that would have been involved in the production of more energy.

We have to strike a middle ground here. My personal opinion is that resources are to be used—intelligently, economically—but to be used, not hoarded. That is the problem we face.

Are we going to encourage American capital to develop foreign energy sources, for example? Are we going to change our pricing policy of energy in this country so that we really encourage domestic exploration and development. I think this is one of the top problem areas we face right now.

One of the problems is, even if we start now with those projects, we are 5 years away from production. In the meantime, our requirements continue to grow rapidly. I think that is by all orders one of the No. 1 problems we face. Others, of course, involve the land use policy, the use of water resources, budgetary considerations.

As Madam Chairman said, she talks about congressional money, I think by that you may mean impounded funds.

Mr. YATES. Another word is "frozen."

Counselor BUTZ. We face this very real conflict of interest, I guess you can say, between the President's real desire to get some kind of fiscal sanity in the overall budget, currently the $250 billion ceiling, and the sometimes rather strongly justified case for individual projects that take money.

Somewhere you have to resolve an inbetween stance on these matters. These are some of the problems we face.

Mr. MCDADE. Do you anticipate, for example, that you will be the last voice to the President on the question of, say, oil imports?

Counselor BUTZ. Well, no, not the last voice. This is a joint voice. You have the Committee on Foreign Economic Policy that comes into this. This is a case where Henry Kissinger's shop must have a very strong voice in it.

Mr. MCDADE. To you or to the President? How will that chain of command work?

Counselor BUTZ. In this case it runs through the Domestic Council. On this thing involving imports, it is the Domestic Council and the Committee on International Policy comes into play too. On that type of thing you have a broader committee before it gets to the President.

COAL STRIP MINING

Mr. McDade. What about strip mining? Suppose the Department of Interior makes a recommendation one way, do they have to clear that recommendation with you as counselor to the President?

Counselor Butz. In a case like this, if they make a recommendation on strip mining that runs counter to the recommendations of EPA, for example, they would. Obviously, those points of view have to be reconciled somewhere. Again there is a middle-ground we see, in this thing somewhere. Somebody has to make a cost assessment against everything we do. The cost may be in terms of its impact on the environment or in terms of the cost of the added resource, itself.

Mr. McDade. That is very interesting.

Counselor Butz. But in this town—in government nobody gets everything he wants. In this town compromise is the very essence of government, in my opinion. Anybody who holds out for everything ends up with nothing, usually.

Mr. McDade. This sounds like a worthwhile effort. I wish you well. It is not going to be easy, I do not have to tell you that. We will be interested in your program and hopeful that you can resolve some of these conflicts of opinion.

Counselor Butz. Well, Congressman McDade, I think most people are reasonable people. Most people at the top of the various departments are reasonable people. They obviously represent a point of view.

As Secretary Whitaker said a moment ago, the Secretaries tend to become the prisoners of their bureaucracy; they rely on them for information, for points of view, and they tend to become somewhat captured. Yet, it has been my observation when you get people at the Cabinet level together, they are reasonable people. And it is not too difficult to get compromises out of them. I have done that as Secretary of Agriculture, I often yield. Sometimes I get stubborn and I hold here. Sometimes I have to take it clear to the President, I do not always win.

As a matter of fact, I lost one last week, and won one right back. But the President and I have an agreement. If he has a point of view and I have another point of view, I adopt his point of view.

Mr. McDade. That is how you get to be a counselor.

Counselor Butz. But not without full representation to him. He is very good about seeing all sides of the issue. In this last one I lost to him, he sent a special message back in which he said, "I hated very badly not to go with you," but the arguments on the other side were compelling in his mind.

Mr. McDade. I understand.

Thank you, Mr. Secretary.

Mrs. Hansen. Mr. Wyatt?

Mr. Wyatt. Thank you, Madam Chairman.

I would like to welcome both Secretaries here and I certainly join other members of the committee in wishing our good friend Rog Morton well, and we hope he will be back with us soon.

IMPROVED COORDINATION PROVIDED BY PRESIDENT'S COUNSELORS

Secretary Butz, I am very interested in the new arrangements which we have been discussing this morning, because I think probably the

most frustrating thing I have had facing me in my rather short tenure in Congress has been the failure to find one voice in the executive department who really could speak to all aspects of natural resource problems.

Secretary Whitaker and I have discussed this briefly in the past from time to time.

For example, the wood fiber problem; we have had situations in the past, not too long past, where there have been conflicting policies of departments or agencies or people, who had maybe a limited input and limited interest in a certain aspect. And yet it appeared to me that there was no one really in charge of the overall policy.

The result has been, in a number of instances, that the car has been going in opposite directions at the same time. It has been very frustrating to try to put a label on it, to try to put it together.

I would hope sincerely that this new arrangement is going to correct that and set it on the right track.

Talking about the various inputs, I am referring to the Council of Economic Advisers, the Secretaries of the Treasury obviously, the Agriculture and Interior and EPA, and there are other agencies, too.

I wish you well. I just hope that things do work out in a coordinated fashion.

REORGANIZATION OF THE DEPARTMENT OF THE INTERIOR

Secretary Whitaker, of the new Assistant Secretary positions that are being created, which ones have been filled or nominations submitted? Will you give us their names?

Dr. WHITAKER. Secretary Reed for the Parks, Recreation and Fish and Wildlife are and Jack Horton for Assistant Secretary for the Lands and Water Resources area.

Mr. WYATT. He has to be back up this week, does he not?

Dr. WHITAKER. Not to go back up, he has to answer some written questions and the Senate will act however they act.

Finally, former Congressman John Kyl, who served on the authorization committees for Interior and Agriculture.

Mr. WYATT. Are we near, so far as the other vacancies are concerned?

Dr. WHITAKER. Yes, sir; I do not want to get into detail.

Mr. WYATT. I do not either.

Mrs. HANSEN. Mr. Wyatt, I informed the Department in the beginning that the committee will not appropriate funds to agencies who have unfilled vacancies at the directors level and above.

Mr. WYATT. I am interested in seeing them filled, as I am sure the administration is.

Dr. WHITAKER. Yes. I will be frank about one of the reasons for the slowness right now; when you have a—and I think you can call it such—a new administration, that was one of the President's main ideas; when an administration gets old and comfortable, it goes down, and you have to have an infusion of new talent.

To indicate the problem, the people at the FBI—the clearance process—it takes a good solid 3-week clearance process for a Presidential appointment. There is a backlog in there that is terrific right now, and that is one of our chief problems at the present time.

Mr. WYATT. I have seen a certain amount of paralysis here in the last 2 or 3 months which has been disquieting. I assume there are a lot of appointments being made and the appointees have to get on top of things before they can become fully operative. What can you tell me about the Office of Saline Water? Is it going to be terminated at the end of this next fiscal year?

OFFICE OF SALINE WATER RESEARCH

Dr. WHITAKER. As an office, I think so, sir.

Mrs. HANSEN. Will the gentleman yield?

Mr. WYATT. Yes.

Mrs. HANSEN. Will it be under you directly or under the water resources assistant secretary?

Dr. WHITAKER. It would probably, under our plan, go under Mr. Horton, the Assistant Secretary for Land and Water area. But there has been a considerable cutback in funds, as you know.

Mr. WYATT. Something like 90 percent.

Dr. WHITAKER. The theory behind that—and I am willing to defend it—is that the distillation methods where a great deal of the money has been spent, is at the point where I think private enterprise can and should take it over.

We are therefore getting involved more in economies of scale rather than we are research and development. If you add on enough units you can expand the size and get water at a cheaper price. That is a local decision to be made in R. & D. and has been done to move it that far. That is not the case with sea water membrane conversion water, which is the area which we are putting our emphasis on.

Mrs. HANSEN. Will the gentleman yield at that point?

Mr. WYATT. Yes, ma'am.

Mrs. HANSEN. Do you have indications that private enterprise will embark in this field?

Dr. WHITAKER. Madam Chairman, I cannot be specific about that. It's my recollection that there are in this country about 300 operating saline plants and about 800 in the world. That implies to me a very healthy private enterprise input into this.

Mrs. HANSEN. Please insert in the record a list of the private companies that are proceeding with research and development in the United States. Also, be sure that the OSW people are able to talk about these 300 plants in the United States, and the others abroad, who are operating desalting plants.

Dr. WHITAKER. I will be glad to do that, Madam Chairman.

(The information follows:)

Companies currently conducting visible distillation research and development:
Aerojet-General Corp., El Monte, Calif.
Beaird, Inc., Shreveport, La.
Resources Conservation Co., Seattle, Wash.
Aqua-Chem, Inc., Milwaukee, Wis.
Colt Industries, Beloit, Wis.
Hydrodyne, Massilon, Ohio.
General Electric Corp., West Lynn, Mass.
MECO–Mechanical Equipment Co., New Orleans, La.
Rosenblatt Co., New Jersey.

Westinghouse Electric Corp., Pittsburgh, Pa.
Struthers/Wells, Warren, Pa.
ALCOA, Pittsburgh, Pa.
Universal Desalting, New York, N.Y.

RATIONALE FOR TERMINATING SELECTED SALINE WATER RESEARCH IN 1974

Mr. WYATT. Mr. Secretary, I won't ask you to answer this question now, but I would like to have you submit an answer for the record after you have given it some thought. I would like to know why this particular year was selected for being the year at which the private enterprise system could pickup the work and carry it on without further work by the Office of Saline Water.

Both the chairman and I have a special interest in this program because we consider ourselves to be among those who are interested in guarding the Columbia River from being stolen and transported to the southwest portion of the United States by certain other members of Congress.

(The information follows:)

The fiscal year 1974 program for saline water conversion research and development is set at $9.2 million including a planned carryover of $6.7 million from fiscal 1973, for use in 1974. Fiscal 1974 research and development on freezing processes are programed at $0.4 million and on sea water membranes at $2.3 million. The remaining $6.5 million available for fiscal 1974 will be used to cover the cost of closing several facilities now involved in conducting research and development associated with the distillation and brackish water membrane processes, the continued operation and support of the water factory at Fountain Valley, Calif., and administering the program.

We believe that we have progressed, with our research testing and distillation technology, to the point where private industry is now in a position to construct multimillion gallon-per-day plants. Continued research effort in distillation—because of the size of equipment involved—would provide marginal payoff in relation to the required investment. The level of effort directed toward developing promising processes can be conducted at a satisfactory rate at the proposed funding level. Our proposed program is to redirect the saline water research effort toward research on promising methods for which technology has not been sufficiently developed for assumption by private industry.

Mr. WYATT. I would be very interested in knowing what the criteria was, or is, for selecting this moment. If it can be done this year, why, for example, wasn't it done last year? Why this year?

Mrs. HANSEN. I wish you would inform the Office of Saline Water to be sure when they appear to give us the differentials in cost between water at the storage area for the natural supply and the saline water supply. Incorporate in the costs of the natural water supplies those environmental costs which have now become a part of the sale of any water. I think they are vital.

Dr. WHITAKER. Yes; Madam Chairman, I will do that. Plus, we will try, if you want us to, to build in the subsidies, the cost of subsidies on what is referred to as natural water. For my preliminary briefing for Mr. O'Meara, he made the point to me that I hadn't thought about, that is, that you can cite per gallon costs but when you put in reclamation costs it's very hard to say what the real costs of saline water is first versus the costs of natural water because of the jungle of subsidies built into both.

Mrs. HANSEN. If you please, I think this is a figure the committee must have.

Mr. WYATT. I am delighted to hear you talk about the real cost of other water because the real cost of other water I am sure is a very difficult figure to determine. I have been attempting to do so for many years. If you have the exact cost of desalted water and you put that against what is being charged the consumer, it looks like a huge differential. In fact, in many cases it is not. I want to conclude by saying I have followed the program very carefully and I have had the impression that they were making a great deal more progress under Mr. O'Meara than they have in many, many years. I am disappointed to see the program being phased out. Thank you, Madam Chairman.

Mrs. HANSEN. Thank you. Congressman Veysey of California.

Mr. VEYSEY. Thank you, Madam Chairman. I am delighted to have this chance to welcome a friend of some time now. Counselor Butz, in this new relationship. I am sure we will have an interesting time here. Under Secretary Whitaker, you have some very important responsibilities. I look forward to working with you.

GEOTHERMAL RESOURCES

There is a very interesting interrelationship between your functions here. I would like to explore that with a question that relates to a problem that is of great importance in my area. That is the development of our geothermal resources in California. I think this is timely in view of the energy crisis and in view of the environmental cleanness of geothermal energy and also in view of its cost attractiveness.

Where are the decisions going to be made as to how we shall progress and how rapidly in the development of this resource? Will it be within the Interior? Is that where the initiative comes from? Or does it come from the natural resources area?

Dr. WHITAKER. First of all, within Interior, Congressman Veysey, we are involved to this extent. As you know, there is a program going on since the President's Energy Message of June 1, 1971, where he asks for a stepped-up program of geothermal work. Since that time the Department of Interior has undertaken an investigation and divided areas into known and potential geothermal areas.

Also, since that time the Department has been working on an environmental impact statement. That statement is not yet finished. In the limited sense of the Counselor relationship versus the Secretary of Interior, once that statement is finished and the Secretary has had a chance to read it, he would make the decision as to whether we would go forward.

The President, in effect, has said we will go forward if the Secretary of Interior can find out it is environmentally safe to do so.

With regard to future budgets, et cetera, in that area, I think that would properly be something that both the Secretary of Interior and Secretary Butz would become involved in. But it is a policy of the administration to move ahead as rapidly as we can in the area of geothermal steam.

One other comment. There has been a study by former Secretary Hickel to the University of Alaska, which I am sure you are familiar with. We think there are a lot of good things in there. There is no way, frankly, that we can possibly live with some of the budgets that were proposed in there. At least I don't see it. However, I share former

Secretary Hickel's enthusiasm that geothermal steam is really something of the future. It has a bit of a "Buck Rogers" connotation to it. On the other hand, it may be like the early discoveries of oil. It may be just the tip of the iceberg.

We recall the oil leaks and destruction associated with them. Geothermal steam may have a very promising and somewhat underrated future. It certainly looks like a reasonably clean energy approach.

Mrs. HANSEN. Will the gentleman yield?

Mr. VEYSEY. Certainly.

RESEARCH ON USE OF GEOTHERMAL STEAM AND LAND STRUCTURE PRESSURES

Mrs. HANSEN. What research work is currently proceeding on the release of this steam and the subsequent relationship to the land pressure?

Dr. WHITAKER. Do you refer to prices? Or do you refer to structures?

Mrs. HANSEN. The structure of the land. Do you know whether releasing waters in certain areas might provoke earthquakes? I would hope at the same time there is a considerable amount of research proceeding relative to the land itself through the Geological Survey.

Dr. WHITAKER. I don't know enough details to answer that specifically.

Mrs. HANSEN. Would you have them bring up some detailed information on this subject when they appear?

Dr. WHITAKER. I will. I recognize it is a problem and I recognize it in the face of cutting back on an earthquake reduction program.

PROGRESS IN EVALUATION OF GEOTHERMAL STEAM USE

Mr. VEYSEY. It seems to me, Secretary Whitaker, that the geothermal work in the Department has been moving along in a rather sleepy fashion. Since the passage of the legislation in 1970, which authorized development on Federal lands, there has been no development.

Dr. WHITAKER. We hope to provide it. The Secretary feels that the 102 environmental impact statement is sound. Provided we are not hung up in courts by some temporary or permanent injunction, the Secretary hopes to make an announcement. Later this spring we hope to start that program. I believe, Congressman, at least we have two or four sales this year to get this program started.

My personal philosophy is to get private enterprise into this as much as possible to facilitate it within good environmental management, that we should give the private sector every chance in the world to move this program, particularly at a time when Federal dollars are so scarce.

Mr. VEYSEY. Of course, the private sector is totally locked out of it at the present time until you do move.

Dr. WHITAKER. Those are the sales you refer to on Federal land scheduled for this year.

Mr. VEYSEY. You believe firmly that those will be moving by this spring?

Dr. WHITAKER. With the caveat that I haven't personally read the 102 statement, nor has the Secretary. It isn't finished yet. We have the

environmental responsibilities to look over that statement before he can arrive at a decision whether to go ahead with that program.

Mr. VEYSEY. If energy is now very much before us as an active concern, and will be for many years in the future no matter what we do, at what point then does someone try to give a kick in the rear to the development of an energy resource that looks like it is attractive?

Dr. WHITAKER. I think the kick in the rear is already there, Mr. Congressman, in the President's mandate that we get going on the program.

I cannot speak to a specific R. & D. budget with regard to geothermal energy.

Mr. WILES. We had in the budget $4 million for geothermal work: the Bureau of Land Management, $200,000; $2,530,000 in Geological Survey; and $1,270,000 in the Bureau of Reclamation in the 1974 budget for geothermal work..

Dr. WHITAKER. We call that a kick.

Mr. VEYSEY. I am not worried about that, Mr. Secretary, but I am worried about how we clear the deadwood out of the way so private enterprise can begin to do whatever it has to do to find out whether there is anything here or not.

Dr. WHITAKER. I think the deadwood you refer to is the necessary mapping to determine potential geothermal energy. That in itself results in leasing conditions.

Mrs. HANSEN. That is what disturbs me about the $3 million impoundment of earthquake funds, which is very relevant to this entire area of the geothermal work.

Dr. WHITAKER. There is a possibility of a subsidence problem as you take the steam out. However, after it is cooled and the water is used, it is put back in the ground.

Mrs. HANSEN. Nobody knows all the answers.

Dr. WHITAKER. No. That is true. That is certainly part of the environmental impact statement and the responsibilities the Secretary has on the other side under the law enacted, the National Environmental Policy Act.

Mrs. HANSEN. The reason I bring this to your attention, Mr. Secretary, is that we discovered in this committee as long as 7 years ago that the Geological Survey and the Bureau of Land Management were granting offshore leases when they were not in possession of the same amount of detailed information relative to the earth and the land as those people in private industry.

How could you competently issue leases if you did not have the basic information or the basic supervision of the leases after they were granted?

Through a great deal of effort over the years, the Committee, as you recall, increased the appropriations in these areas. Dr. Pecora discussed this subject at great length with this Committee. I think the Nation is indebted to Dr. Pecora for presenting the kind of material and information that he did so that appropriations might reflect the needs. That is what concerns me. Sometimes we are pennywise and extremely pound foolish because if we had had better answers perhaps we would have done a better leasing job and could have avoided some of the perils which we did have and which still prevail.

Mr. Veysey.

DETAILS NEEDED ON ACTIVITIES INVOLVING GEOTHERMAL ENERGY

Mr. VEYSEY. Relating to that point, Madam Chairman, I believe we were given a figure of $2½ million going in the Geological Survey work with respect to the geothermal energy. That isn't broken down as to how much might be related to subsidence and other concerns of that type and how much in the area of mapping and identifying and understanding geothermal areas. Do you have a definition?

Mr. WILES. I don't have that breakdown here, but we can get that for you.

Dr. WHITAKER. I would be glad to supply it for the record, either when Dr. McKelvey is here to testify or now, if you wish. Would you prefer it now?

Mrs. HANSEN. The Geological Survey can supply the information when they testify because I want to inquire about the interrelationship between that fund and the $3 million of impounded earthquake money.

Mr. VEYSEY. Thank you.

BALANCE BETWEEN PRESERVATION AND DEVELOPMENT OF NATURAL RESOURCES

Mrs. HANSEN. The President's budget message talks about the need to seek a proper balance between development and preservation of natural resources. It also says that heavy responsibility for seeking this balance must fall on State and local government, private industry, and the general public. Can you each tell us how the 1974 natural resources budget reflects this directive?

Dr. WHITAKER. In general, yes, Madam Chairman. I think we have emphasized, first, energy which reflects our growing concern with that problem but at the same time emphasis on making sure we do our work properly. For example, I don't know the exact amount of funds, but there will be a need for funds and an increase, I believe, to do adequate 102 environmental impact statements at the same time that we increase the rate at which we do our leasing. That is one area. Second, the Indian budget has stepped up quite strongly, I believe, although you may question that later on.

Mrs. HANSEN. We have some questions on that subject.

Mr. WILES. I might add that the work involved in environmental statements and the whole environmental picture we are gathering for the whole Department, we used roughly $10 million in 1972. We will use $16 million in 1973, and there is $18 million of the 1974 budget for the total environmental picture.

Mrs. HANSEN. I notice the Forest Service has, I believe, between $15 million and $18 million in fiscal year 1973 budgeted for environment work. Is this not correct?

Counselor BUTZ. Yes, ma'am.

Mrs. HANSEN. In spite of that, the total budgets are down.

Mr. WILES. That is right, Madam Chairman.

Dr. WHITAKER. Yes; obviously because of the areas we have taken away, like the Land and Water Conservation Fund.

Mrs. HANSEN. Obviously, and some other areas. For example, in the Forest Service there was an additional amount provided for the Berea

laboratory to proceed on research on the reclamation of strip mined lands.

Our committee report was rather blunt last year. We said that we felt that, inasmuch as the fossil fuels were of immense interest and of immense benefit and a tremendous potential source of energy for the future, that it was imperative that the President and those responsible for the development of an energy policy to do it as quickly as possible.

RECLAMATION OF STRIP MINED LANDS

In that directive we reminded everyone that it was necessary to take full cognizance of the reclamation that was needed before strip mining increased to a much larger degree. I think we have reached the point in this country where the destruction of land that has marked the strip mining in the past, is intolerable.

I was wondering why the judgment was made to impound funds for increased research in this area in view of the committee's directive.

Counselor BUTZ. I think they are continuing the research there. They just haven't released their funds for the stepped-up research. I quite agree with you, Madam Chairman, that we do need to proceed on this matter of recovery of the environment after strip mining, because we cannot stop strip mining. We need to have the fossil fuel.

Dr. WHITAKER. The administration's strip mining bill does stipulate that in the leases on public lands that reclamation costs would be covered.

Mrs. HANSEN. In Berea, for example, this was to develop new techniques to reclaim the land. As Secretary Butz is well aware, not all the same type of techniques work in all areas. If I am not in error, I believe your department testified last year and the year before, that over 50 percent of the coal remaining in this country remains on the public lands of the West. Many of them are extremely arid and many have difficult problems of terrain. Therefore it is necessary to have better answers for this problem because not all the reclamation that has been done in the East where it could have been done has been accomplished. Mr. McDade has been very interested for many years in an on-going program relative to deep mining. But you also have to take a hard look at the strip mining problems.

The committee is very anxious that you establish a policy of spending funds for research in advance to find the answers before destruction occurs. I have yet to find many coal owners who are spending money on the reclamation techniques—they don't have the laboratories—unless they are forced into paying for it.

Dr. WHITAKER. But he will be.

Mrs. HANSEN. On public lands, but these techniques are useful for the whole country. He has to have those answers, and the quicker the better. If you are going into strip mining in any sizable measure, the country cannot wait.

PROTECTION OF PUBLIC LANDS LEASED FOR STRIP MINING

Mr. YATES. On that point, I want to clarify Secretary Butz' answer You say that strip mining is essential because of the energy crisis. Do you propose to approve strip mining without reclamation?

Counselor BUTZ. No. As Secretary Whitaker just said, the new act will require reclamation.

Mr. YATES. That is supposed to be done under your leases now.

Dr. WHITAKER. That is right.

Mr. YATES. You don't need a new act, do you?

Dr. WHITAKER. We are talking about two different things, I think. Any coal lease that the Department of Interior grants will have in it adequate provision—you may argue with what adequate is—for reclamation. That includes vegetation and earthmoving, et cetera.

The Federal law which we propose would also have these provisions.

Mr. YATES. Why would you need the Federal law if you can control them in your lease?

Dr. WHITAKER. We can on public lands but not the private lands.

Mr. YATES. The chairman indicated you have over 50 percent of the coal on Government lands now.

Dr. WHITAKER. And the provisions are in those leases. No leasing has taken place for 19 months for coal on public land.

GAO REPORT ON MINING AND RECLAMATION OF PUBLIC AND INDIAN COAL LANDS

Mr. YATES. Here is a report by the General Accounting Office on the administration of regulations of surface exploration, mining, and reclamation of public and Indian coal lands. The GAO says this:

FINDINGS AND CONCLUSIONS

Department's regulations action, if properly implemented, should help in protecting environmental values.

Although the regulations have been established for more than 3 years, they were not being implemented effectively with regard to several significant areas. For the 65 permits and leases covered by its review (53 for BLM and 12 for BIA), GAO found that:

The required technical examinations had not been conducted for 35 of the permits and leases. The purpose of a technical examination is to determine the effects that the proposed exploration or mining would have on the environment and to serve as a basis for formulating appropriate reclamation requirements. Some permittees were operating without approved exploration plans—an essential element of control in protecting the environment—and some plans had been approved without technical examination. Some compliance and performance bonds covering the requirements, including reclamation of leases or permits, had not been obtained from the operators. The amount of some of those that had been obtained were not sufficient to cover the estimated cost of the reclamation requirements.

You have a copy of the report of the GAO. This says that your Department isn't interested in reclamation.

Dr. WHITAKER. Certainly that is not true. We are very interested in reclamation. It's one of our responsibilities. I have not gone into the detailed report you refer to. I am aware of its existence.

Mr. YATES. Mr. Secretary, it's dated August 10, 1972.

Dr. WHITAKER. I know, but the fact is I haven't read it. I don't want to indicate that I have. First of all, the administration presented a strip-mining law last year. It has not passed. We hope it will pass this year.

Secondly, in the absence of that and with regard to the public lands, on February 17, Secretary Morton issued a statement on coal leasing. It had as its short-range objectives the following: One, where coal is

needed now to maintain an existing mining operation, we will go ahead and lease if we have to, if that is the judgment, with strict reclamation provisions.

The second way a lease would be granted is when the coal is needed as a reserve for production in the very near future.

Third, when the land is to be mined, it will in all cases be reclaimed in accordance with the lease stipulations that will provide for environmental protection.

The key point in here is a ban on prospecting for the near future because under the present law you can go right from prospecting into production without another review by the Department of the Interior.

I think the situation is that two basic studies are going on. We are now basically talking about the west, a Southwest energy study where a great deal of coal stripping is required, and a northern Great Plains study which is just beginning where the same will probably be true. We are making every effort to stop leasing for strip mining in the West until we know precisely what we are doing, and when we do lease it, to lease it under stringent conditions. That is my personal attitude.

Whether we justify all the criticism in the GAO report or not I cannot indicate because I wasn't there. I only know what we are doing about it now.

Mrs. HANSEN. We have the pleasure of welcoming the ranking minority member of the full committee, Congressman Cederberg.

Mr. CEDERBERG. I am just delighted to be here for a few minutes.

Mrs. HANSEN. We are delighted to have you.

IMPOUNDMENT OF FUNDS

We are going to go directly to the subject of impoundments while you are both here. We have heard a great deal recently about the impoundment of funds appropriated by Congress. We will place in the record at this point a list of funds, totaling over a half billion dollars, which are now impounded in the Department of the Interior and the Forest Service.

(The information follows:)

DEPARTMENT OF THE INTERIOR

F.Y. 1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE IN CONNECTION WITH CEILING ON OUTLAYS

Bureau and Account	Amount
Bureau of Land Management: Public lands development roads and trails, liquidation of contract authority (not programmed)	$ 12,961,293
Bureau of Indian Affairs: Construction	31,467,000
Bureau of Outdoor Recreation: Land and Water Conservation fund ($158,167,709 not programmed)	269,589,970
Territorial Affairs: Trust Territories of the Pacffic Islands	10,000,000
Geological Survey: Surveys, investigations, and research	3,000,000
Payment from proceeds, sale of water, mineral leasing act of 1920	24,494 1/
Bureau of Mines: Drainage of anthracite mines (not programmed)	3,700,725
Bureau of Sport Fisheries and Wildlife: Migratory bird conservation, receipt limitation	2,981,000
Federal aid in wildlife restoration (not programmed)	7,053,000
National wildlife refuge fund (not programmed)	4,122,545
Federal aid in fish restoration and management (not programmed)	3,234,000
National Park Service: Parkway and road construction ($46,345,623 not programmed)	50,948,618
Construction	39,499,993
Bureau of Reclamation: General investigations	1,850,000
Loan program	930,000
Construction and rehabilitation	18,025,000
Operation, maintenance and replacement of project works, North Platte project	96,518
Lower Colorado River Basin development fund	3,000,000
Upper Colorado River Basin fund	10,450,000

1/ Department has no present plans for the use of these funds which are available only for the development of water wells on public lands.

Bureau and Account	Amount
Office of Water Resources Research: Salaries and expenses	$ 2,040,000
Office of Saline Water: Saline water research	6,675,031
Total	481,649,187

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SUMMARY

TOTAL AMOUNT IN RESERVE	481,649,187
AMOUNT NOT PROGRAMMED FOR F.Y. 1973	-235,584,895
NET AMOUNT IN RESERVE	246,064,292

Office of Budget
February 6, 1973

BUREAU OF INDIAN AFFAIRS
CONSTRUCTION APPROPRIATION
FISCAL YEAR 1973

BUILDINGS AND UTILITIES

	Project	Deferred Project Amount
1.	Ongoing projects (prior year): Sitka, Alaska Dormitory ($2.1 million) Fairbanks, Alaska Dormitory ($1.9 million)	$ 4,023,400
2.	Ft. Yukon Dormitory	1,465,000
3.	Tok Dormitory	1,465,000
4.	Rough Rock School	1,428,000
5.	Dillingham Dormitory	1,970,000
6.	Fairbanks Dormitory (F.Y. 1973)	1,250,000
7.	Casa Blanca Elementary School	1,500,100
8.	Kindergartens (Bureau-wide)	1,135,000
9.	Navajo Community College	2,900,000
10.	Zuni Rehabilitation Center	600,000
11.	Rocky Boy School	450,000
12.	Dunseith Public School	465,000
13.	Public School Planning Assistance	200,000
14.	Phoenix Gym	1,420,000
15.	Chemawa School	750,000
16.	Haskell Jr. College	5,730,000
17.	Deferred Equipment	2,041,500
	TOTAL	28,793,000

BUREAU OF INDIAN AFFAIRS
CONSTRUCTION APPROPRIATION
FISCAL YEAR 1973

Appropriations		Deferred Projects Amount
Buildings and Utilities		$28,793,000
Major Alterations and Improvements		711,000
	Subtotal	29,504,000
Irrigation		1,963,000
Navajo Irrigation Project		(1,500,000)
All Other Projects		(463,000)
	Total	31,467,000

DEPARTMENT OF THE INTERIOR

Outdoor Recreation
Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Land and Water Conservation, 1973
Appropriation

Project, Activity or Program	Amount
1. Assistance to States	$128,167,709
2. Federal Programs	111,422,261
Appropriated	239,589,970
Contract Authority	30,000,000
Total Not Apportioned	$269,589,970*

*Requested 1/17/73 to be reserved.

DEPARTMENT OF THE INTERIOR

Territorial Affairs
Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Trust Territory of the Pacific Islands
Appropriation

Project, Activity or Program	Amount
Grants.....	$10,000,000

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY
Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

1430804 Surveys, Investigations, and Research, Geological Survey
Appropriation

Project, Activity or Program	Amount
Geologic and mineral resource surveys and mapping ----------	$ 3,000,000 */

*/ Reserved funds for research on Earthquake Prediction Program.

DEPARTMENT OF THE INTERIOR 1/26/73

Bureau of Sport Fisheries and Wildlife

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Migratory Bird Conservation Account

Appropriation

Project, Activity or Program	Amount
Estimated amount that will remain unobligated at the close of fiscal year 1973	$2,981,000

Refuges

State & Cong. Dist.		Name	Amount
Washington	3rd	Ridgefield 1/	$1,025,000
Washington	4th	Convoy Lake	750,000
Massachussetts	4th	Great Meadow	250,000
Maine	1st	Rachael Carson	215,000
Montana	1st	Swan River	325,000
North Carolina	8th	Pee Dee	416,000
			2,981,000

1/ The Bureau of Sport Fisheries and Wildlife indicates that they face a long period of negotiations and possible condemnation before they will be able to acquire land for the Ridgefield Refuge. These negotiations will, in all probability, run past the close of fiscal year 1973.

DEPARTMENT OF THE INTERIOR

National Park Service
Bureau or Office

January 24, 1973

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Parkway and Road Construction (Liquidation of Contract Authority)
Appropriation

Project, Activity or Program Roads and Trails — Amount

While a total of $50,948,618 in Parkway and Road Construction funds is currently in reserve, only $4,602,995 represents funds being held for projects under program authority approved by Congress for obligation. The projects currently not apportioned are as follows:

Bighorn Canyon NRA (Wyo. and Mont.)	
Transpark Road, Devil's Canyon Overlook Turnoff to Barry's Landing (Por.)(1973 FY)	$1,853,995
Delaware Water Gap NRA (Pa. and N. J.)	
Pennsylvania	
Park Road - Slateford Creek to Mount Minsi (Por.)(1973 FY)	687,000
Great Smoky Mtns. NP (N. C. and Tenn.)	
North Carolina	
Bryson-Monteith Road-Terminus of 9A3 to Forney Creek (Por.)(1972 FY)	200,000
Cataloochee Access Road (Outside Por.)(Por.)(1972 FY)	1,471,000
National Capital Parks	
Glen Echo (Maryland)	
Pedestrian Bridges and Overpass (1973 FY)	191,000
Yosemite NP (California)	
Sewage System Access Roads, Wawona (2nd Supplemental 1972 FY)	200,000
Total	$4,602,995

DEPARTMENT OF THE INTERIOR

National Park Service
Bureau or Office

January 24, 1973

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Construction
Appropriation

NORTHEAST REGION

Project, Activity or Program	Buildings, Utilities, and Other Facilities	Amount
Acadia NP (Maine)		
Sewage Disposal Facilities, Seawall Campground (72)		$130,000
Castle Clinton NM (New York)		
Completion of Restoration (72)		812,000
Delaware Water Gap NRA (Pa. and New Jersey)		
Bldgs. Improvements, Peters Valley Craft Village		
Flatbrook Peninsula (73)		31,000
Millbrook Village Hotel Restoration (73)		25,000
Crater Lake Day Use Swimming Beach and Picnic Sites (73)		13,000
Edison NHS (New Jersey)		
Incinerator, Glenmont (72)		13,000
Fort Necessity NB (Pa.)		
Water Storage Reservoir (73)		26,000
Incinerator (72)		13,000
George Washington Birthplace NM (Virginia)		
Picnic Area and Log House (73)		46,000
Fire Protection, Water Syst. and Wayside Exhibits (73)		280,000
Sewerage Syst. Renovation, VC (73)		46,000
Gloria Dei (Old Swedes') Church NHS (Pa.)		
Landscaping and Site Development (73)		113,000
Hopewell Village NHS (Pa.)		
Water Syst. Expansion (73)		35,000
Underground Elect. Service Line (73)		11,000
Morristown NHP (New Jersey)		
Stabilize Hut Sites, New Jersey Brigade Site (73)		11,000

Construction
Appropriation

NORTHEAST REGION (CONTINUED)

Project, Activity or Program	Amount
Pipestone NM (Minn.)	
Sewerage Syst. Connections (73)	$55,000
Sewer Syst. Connection (72)	66,000
Salem Maritime NHS (Mass.)	
Restoration of Narbonne House (73)	71,000
Saratoga NHP (New York)	
Expansion of Visitor Center, incl. Exh-AV (73)	132,000
Shenandoah NP (Virginia)	
Incinerators (5) (73)	300,000
Sewage Disposal Plant, Big Meadow (73)	175,000
Sewage Disposal Syst., Skyland (73)	225,000
Subtotal, Northeast Region	2,629,000

onstruction
Appropriation

SOUTHEAST REGION

Project, Activity or Program--Buildings, Utilities, and Other Facilities	Amount
Blue Ridge Parkway (N. C. and Virginia)	
N. C.	
Sewer Syst., Doughton Park (73)	$40,000
Virginia	
Sewer Syst., Peaks of Otter (72)	240,000
Cape Hatteras NS (North Carolina)	
Storm Damage Repairs, 2nd Suppl. (72)	647,000
Dockside Sanitary Pumping Stat., Bodie Is. (72)	38,000
Dockside Sanitary Pumping Stat., Ocracoke (72)	49,000
Everglades NP (Florida)	
Acq. Concession Bldg. for Convers. to VC (70)	200,000
Incinerator, Pine Island (73)	26,000
Incinerator, Tamiami (73)	10,000
Foothills Parkway (Tenn.)	
Look Rock	
Campground Sewer Syst. (73)	135,000
Great Smoky Mountains NP (N. C. and Tenn.)	
N. C.	
Sewage Disposal Syst. Impr., Forney Ridge (73)	206,000
Util. Syst. Impr. (73) Hdqtrs.)	62,000
Tenn.	
Sewage Syst., Twin Creeks	29,000
Virgin Islands NP (V. I.)	
Shoreline Protection, Cinnamon Bay Cpgd. (72)	57,000
Subtotal. Southeast Region	1,739,000

onstruction
Appropriation

SOUTHWEST REGION

Project, Activity or Program--Buildings, Utilities, and Other Facilities	Amount
Chaco Canyon NM (New Mexico)	
Water Syst., w/Treatment Fac. (73)	$97,000
Sewage Disposal Syst. (72)	168,000
Solid Waste Facility (72)	15,000
Hubbell Trading Post NHS (Arizona)	
Upgrade Sewage System (72)	36,000
Upgrade Sewage System (73)	17,000
Big Bend NP (Texas)	
Sewage Treatment Fac., Chisos Basin (73)	255,000
Subtotal, Southwest Region	588,000

Construction
Appropriation

WESTERN REGION

Project, Activity or Program--Buildings, Utilities, and Other Facilities	Amount
Death Valley NM (California)	
Cow Creek	
Sewage Lagoon Addition, Park Village (72)	$16,000
Sewage Lagoon Addition, Park Village, 2nd Suppl. (72)	14,000
Reconst. Leach Field, Trailer Vill (72)	14,000
Reconst. Leach Field, Trailer Vill, 2nd Suppl. (72)	16,000
Sanitary Land Fill, 2nd Suppl. (72)	46,000
Scotty's Castle	
Sewage Syst., 2nd Suppl. (72)	124,000
Grand Canyon NP (Arizona)	
Indian Gardens	
Reconst. Sewage Disposal (72)	193,000
Reconst. Sewage Disposal (Compl.) (73)	532,993
North Rim	
Sewage Treatment Plant (72)	380,000
Sewage Treatment Plant (Compl.) (73)	510,000
Phantom Ranch	
Sewage Syst. and Treatment Plant (Compl.) (73)	607,000
South Rim	
Sewerage System Completion (73)	1,891,000
Solid Waste Disposal (Compl.) (73)	139,000
Lake Mead NRA (Arizona and Nev.)	
Portable Comfort Station, Park Gen. (73)	28,000
Eldorado Canyon	
Sewage Syst. (72)	105,000
Sewage Syst., 2nd Suppl. (72)	16,000
Lassen Volcanic NP (California)	
Manzanita Lake	
Const. Sewage Disposal Syst. (72)	154,000
Const. Sewage Disposal Syst., 2nd Suppl. (72)	216,000
Muir Woods NM (California)	
Sewage Fac., Park General, 2nd Suppl. (72)	392,000

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Appropriation

WESTERN REGION (CONTINUED)

Project, Activity or Program--Buildings, Utilities, and Other Facilities	Amount
Organ Pipe Cactus NM (Arizona)	
Sewage Disposal Syst., Headquarters (73)	$153,000
Petrified Forest NP (Arizona)	
Solid Waste Disposal (Incinerator), Painted Desert, Forest (Rainbow) (72)	96,000
Pinnacles NM (California)	
East Side Incinerator, 2nd Suppl. (72)	21,000
Sequoia-Kings Canyon NPs (California)	
Park General	
Solid Waste Disposal Systems, 2nd Suppl. (72)	315,000
Ash Mountain	
Sewage Fac., 2nd Suppl. (72)	308,000
Cedar Grove	
Sanitary Disposal (72)	22,000
Dorst Creek	
Sanitary Disposal (72)	11,000
Potwisha	
Sanitary Disposal (72)	11,000
Grant Grove	
Sewer System, 2nd Suppl. (72)	750,000
Lodgepole	
Sewer Line and Lift Stat. (Compl.) (72)	556,000
Sewer Line and Lift Stat., 2nd Suppl. (72)	15,000
Giant Forest	
Sewage Fac., 2nd Suppl. (72)	1,032,000
Yosemite NP (California)	
Park General	
Backcountry Sewage Disposal Units, 2nd Suppl. (72)	188,000
Badger Pass	
Reconst. Sewage Disposal Syst. (72)	112,000
Reconst. Sewage Disposal Syst., 2nd Suppl. (72)	1,099,000
El Portal	
Modify Incinerator, 2nd Suppl. (72)	709,000
Sewage Syst., Residences, 2nd Suppl. (72)	5,683,000

nstruction
Appropriation

WESTERN REGION (CONTINUED)

Project, Activity or Program--Buildings, Utilities, and Other Facilities	Amount
Yosemite NP (California)(Continued)	
Glacier Point	
Reconst. Sewage Syst. (71)	$155,000
Reconst. Sewage Syst., 2nd Suppl. (72)	133,000
Tenaya Lake	
Holding Tanks for Restrooms (3) (72)	18,000
Holding Tanks for Restrooms (3), 2nd Suppl. (72)	30,000
Wawona	
Sewage Disposal Syst., 2nd Suppl. (72)	2,045,000
Subtotal, Western Region	18,855,993

Construction
Appropriation

PACIFIC NORTHWEST REGION

Project, Activity or Program	Buildings, Utilities, and Other Facilities	Amount
Crater Lake NP (Oregon)		
Incinerators (73)		$215,000
Lava Beds NM (California)		
Incinerator (72)		48,000
Mount Rainier NP (Washington)		
Ohanapecosh		
Sewage Treatment Plant, 2nd Supple (72) (incl. Commerical Power)		250,000
Paradise		
Sewage System, 2nd Supple (72)		58,000
Sunrise		
Sewage System, 2nd Supple (72)		130,000
North Cascades NP (Washington)		
Stehekin Landing Marine Dump Stat, Water and Sewer, 2nd Supple (72)		401,000
Stehekin Valley Incinerator, 2nd Supple (72)		120,000
Colonial Creek Campground Expansion, Power (73)		120,000
Olympic NP (Washington)		
Heart O the Hills		
Sewage Syst Extension, 2nd Supple (72)		111,000
Kalaloch		
Sewage Disposal Syst, 2nd Supple (72)		40,000
Lake Crescent		
Rehab. Sewage Syst, 2nd Supple (72)		320,000
LaPush		
Sewage Syst, 2nd Supple (72)		111,000
Ozette Lake		
Sewage Treatment Fac, 2nd Supple (72)		60,000
Oregon Caves NM (Oregon)		
Sewage Treatment Fac (73)		81,000
	Subtotal, Pacific Northwest Region	2,065,000

Construction
Appropriation

MIDWEST REGION

Project, Activity or Program - Buildings, Utilities, and Other Facilities	Amount
Big Hole NB (Montana)	
Rehabilitate and Enlarge Sewage Sys (73)	$ 15,000
Bryce Canyon NP (Utah)	
Hdqtrs- Sewage Lagoon Dike (72)	17,000
North Cpgrd - Enlarge Sewer Line to Lagoon (72)	55,000
Rainbow Point - Septic Tank and Leach Field (72)	21,000
Canyonlands NP (Utah)	
French Springs (Maze District)	
Util Syst, Residences, Trailer Rehb, and Maint and Operating Fac (73)	209,000
Colorado NM (Colo)	
Hdqtrs	
Reconst Sewer Syst and Water Treatment Plant (72)	20,000
Reconst Sewer Syst and Water Treatment Plant (73)	72,000
Fort Larned NHS (Kansas)	
Exterior Restor Buildings (Por) (73)	229,000
Glacier NP (Montana)	
Apgar (Fish Creek)	
Sewage Disposal Syst, 2nd Supple (72)	128,000
Headquarters	
Sanitary Landfill (72)	26,000
Replace Incinerator, 2nd Supple (72)	271,000
Sewage Disposal Syst, 2nd Supple (72)	972,000
Lake McDonald	
Sewage Syst Addition, 2nd Supple (72)	330,000
Many Glacier	
Rehab Sewage Collect and Disposal Sys (72)	724,000
Rising Sun	
Sewage Disposal Syst, 2nd Supple (72)	502,000
St. Mary	
Sanitary Landfill (72)	26,000
Replace Incinerator, 2nd Supple (72)	389,000
Sewage Syst, 2nd Supple (72)	389,000
Golden Spike NHS (Utah)	
Two Locomotive Replicas (72)	355,000

Construction
Appropriation

MIDWEST REGION (CONTINUED)

Project, Activity or Program - Buildings, Utilities, and Other Facilities	Amount
Grand Teton NP (Wyoming)	
Jackson Hole Airport	
Extend Runway, 2nd Supple (72)	$2,000,000
Jackson Lake	
Sanitary Landfill (72)	200,000
Sewage Syst (73)	492,000
Moose	
Solid Waste Compactor Station (73)	60,000
Modify Sewage Treatment Plant (72)	79,000
Modify Sewage Treatment Plant (73)	41,000
Jefferson NEM NHS (Missouri)	
Site Development and Utilities (73)	305,000
Mesa Verde NP (Colorado)	
Chapin Mesa - Sewage Disposal Syst (73)	193,000
Ozark NSR (Missouri)	
Park General	
Solid Waste Disposal Fac (73)	208,000
Jwls Bend	
Sewage System (73)	155,000
Rocky Mountain NP (Colorado)	
Modify Sewage Disposal Plant (72) (Hdqtrs)	147,000
Aspenglen - Modify Sewage Disposal Fac (73)	75,000
Fall River - Sewage Treatment Plant (73)	532,000
Glacier Basin - Sewage Lagoon (72)	75,000
Hidden Valley - Modify Sewage Disposal Fac (73)	150,000
Shadow Mountain NRA (Colorado)	
Rehab and Extend Sewage Syst (73)	200,000
Stillwater Cpgd - Sanitary Fac (72)	64,000
Theodore Roosevelt MemP (North Dakota)	
Sewage Lagoon Cell, Hdqtrs (72)	24,000
Yellowstone NP (Wyoming)	
Grant Village - West Thumb	
Sewage System (72)	389,000
Sewage System (73)	50,000
Lake - Fishing Bridge - Bridge Bay	
Solid Waste Compactor (72)	188,000
Solid Waste Compactor (73)	112,000

Construction
Appropriation

MIDWEST REGION (CONTINUED)

Project, Activity or Program - Buildings, Utilities, and Other Facilities	Amount
Yellowstone NP (Wyoming) (Continued)	
Fishing Bridge - Reconst Sewage Treatment Plant (72)	$349,000
Fishing Bridge - Reconst Dewage Treatment Plant (73)	741,000
Madison Junction	
Reconst Sewer Syst (72)	68,000
Reconst Sewer Syst (73)	152,000
Mammoth	
Incinerator and Disposal Improvements (72)	31,000
Incinerator and Disposal Improvements (73)	269,000
Norris Junction	
Reconst Sewer Syst (72)	51,000
Reconst Sewer Syst (73)	64,000
Tower Falls-Roosevelt	
Reconst Sewer Syst (72)	508,000
West Entrance	
Reconst Sewer Syst (72)	68,000
Old Faithful	
Solid Waste Compactor Stat. (73)	277,000
Park General	
Quarters for Sewage Plant Operators (73)	126,000
Subtotal, Midwest Region	13,193,000

NATIONAL CAPITAL PARKS

Project, Activity or Program - Buildings, Utilities, and Other Facilities	Amount
Piscataway	
Boat Dock (73)	$30,000
Subtotal, National Capital Parks	$30,000
Planning, Office Building, Denver, Colorado	400,000
GRAND TOTAL	$39,499,993

DEPARTMENT OF THE INTERIOR

Office of Water Resources Research
Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Salaries and Expenses
Appropriation

Project, Activity or Program	Amount
Assistance to States for Institutes.....	$2,040,000

DEPARTMENT OF THE INTERIOR January 29, 1973

OFFICE OF SALINE WATER
Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Saline Water Conversion
Appropriation

Project, Activity or Program	Amount
Research expense	$2,050,000
Development expense	2,800,094
Testbeds and facilities	1,485,000 *
Modules	--
Administration and Coordination	340,000
	$6,675,094

* This is the net remaining balance of $2,100,000 originally available for construction of two reverse osmosis testbed plants that cannot be constructed at this time.

DEPARTMENT OF THE INTERIOR

RECLAMATION

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

General Investigations--14X0660

Appropriation

Project, Activity or Program	Amount
Plan Formulation Investigations	$ 1,350,000
General Engineering and Research	500,000
Total	$ 1,850,000

DEPARTMENT OF THE INTERIOR

RECLAMATION

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Construction and Rehabilitation--14X5061

Appropriation

Project, Activity or Program		Amount
Central Valley Project		$ 11,660,000
San Luis Unit	$(4,660,000)	
Auburn-Folsom South Unit	(7,000,000)	
Columbia Basin Project		2,115,000
Irrigation and Other	(1,865,000)	
Third Powerplant	(250,000)	
Fryingpan-Arkansas Project		970,000
Tualatin Project		150,000
Washoe Project (DSMC)		100,000
Pick-Sloan Missouri Basin Program		3,030,000
Garrison Diversion Unit	(2,960,000)	
Oahe Unit	(70,000)	
Total		$ 18,025,000

DEPARTMENT OF THE INTERIOR

RECLAMATION

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Loan Program--14X0667

Appropriation

Project, Activity or Program		Amount
Distribution Systems		
San Luis Water District	(270,000)	$ 270,000
Small Projects		660,000
Graham Curtis Project	(360,000)	
Roy Water Conservancy Subdistrict	(300,000)	
Total		$ 930,000

DEPARTMENT OF THE INTERIOR

RECLAMATION

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Upper Colorado River Basin Fund--14X5081

Appropriation

Project, Activity or Program		Amount
Advance Planning		$ 740,000
Animas-La Plata	$(100,000)	
Dallas Creek	(70,000)	
Dolores	(100,000)	
Fruitland Mesa	(10,000)	
San Miguel	(150,000)	
Savery-Pot Hook	(10,000)	
Upalco Unit, Central Utah	(140,000)	
West Divide	(160,000)	
Bonneville Unit, Central Utah Participating Project		7,185,000
Jensen Unit, Central Utah Participating Project		150,000
Dallas Creek Participating Project		250,000
Fruitland Mesa Participating Project		500,000
Lyman Participating Project		1,025,000
San Juan-Chama Participating Project		350,000
Savery-Pot Hook Participating Project		250,000
Vernal Unit, Central Utah (Operation & Maintenance) (Water User Advances)		11,950
Total		$ 10,461,950

DEPARTMENT OF THE INTERIOR

RECLAMATION

Bureau or Office

1973 FUNDS CURRENTLY NOT APPORTIONED FOR USE

Lower Colorado River Basin Development Fund--14X5079

Appropriation

Project, Activity or Program	Amount
Central Arizona Project	$ 3,000,000
Total	$ 3,000,000

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Available Appropriations and Amounts Placed in Reserve
for Fiscal Year 1973

Appropriation Items	Appropriations available	Amounts placed in reserve as of 9/29/72	Additional amts. placed in reserve as of 1/8/73
FOREST PROTECTION AND UTILIZATION:			
FOREST LAND MANAGEMENT:			
National forest protection and management:			
Timber resource management:			
Sales administration and management	$68,274	- -	$415
Reforestation and stand improvement	31,702	$3,045	175
Recreation-public use	41,472	10	253
Wildlife habitat management	7,724	715	43
Range resource management:			
Management	6,987	- -	43
Revegetation	3,525	- -	22
Improvements (includes CRI)	4,749	75	29
Soil and water management	9,734	- -	60
Mineral claims, leases, and special uses	5,657	- -	35
Land classification, adjustments, and surveys	8,038	- -	50
Forest fire protection	36,989	10	195
Maintenance of improvements for fire and general purposes (including communications).	7,795	- -	48
Forest advanced logging and conservation	5,000	5,000	- -
Payments to Employees' Compensation Fund	2,131	- -	- -
Total, National forest protection and management (including Coop. Range Imp.)	239,777	8,855	1,368
Water resource development related activities	4,022	- -	26
Fighting forest fires	4,275	- -	- -
Insect and disease control	10,585	- -	99
Cooperative law enforcement program	4,942	- -	6
TOTAL, FOREST LAND MANAGEMENT	263,601	8,855	1,499
FOREST RESEARCH:			
Forest and range management research:			
Timber management research	12,606	860	78
Watershed management research	6,616	350	42
Range management research	1,585	- -	11
Wildlife habitat research	3,003	1,115	13
Forest recreation research	1,353	250	8
Total, Forest and range management research	25,163	2,575	152
Forest protection research:			
Fire and atmospheric sciences research	7,881	500	50
Forest insect research	6,237	120	41
Forest disease research	4,283	570	25
Total, Forest protection research	18,401	1,190	116

Appropriation Items	Appropriations available	Amounts placed in reserve as of 9/29/72	Additional amts. placed in reserve as of 1/3/73
FOREST RESEARCH (continued):			
Forest products and engineering research:			
Forest products utilization research	9,231	100	61
Forest engineering research	1,478	- -	10
Total, Forest products and engineering research	10,709	100	71
Forest resource economics research:			
Forest survey	3,433	- -	23
Forest products marketing research	2,030	- -	13
Forest economics research	1,407	- -	10
Total, Forest resource economics research	6,870	- -	46
TOTAL, FOREST RESEARCH	61,143	3,865	336
STATE AND PRIVATE FORESTRY COOPERATION:			
Cooperation in forest fire control	25,000	5,000	4,000
Cooperation in forest tree planting	325	- -	- -
Cooperation in forest management and processing	5,000	- -	- -
General forestry assistance	2,435	- -	- -
TOTAL, STATE AND PRIVATE FORESTRY COOPERATION	32,760	5,000	4,000
TOTAL, FOREST PROTECTION AND UTILIZATION (including Cooperative Range Improvements)	357,504	17,720	5,884
CONSTRUCTION AND LAND ACQUISITION:			
Recreation-public use areas	7,719	3,892	704
Water resource development construction	3,682	1,273	452
Fire, administration, and other purposes construction	2,817	294	844
Research construction	6,812	5,143	- -
Pollution abatement	33,275	- -	- -
Land acquisition, Weeks Act	1,542	- -	- -
TOTAL, CONSTRUCTION AND LAND ACQUISITION	55,847	10,602	2,000
FOREST ROADS AND TRAILS--program (includes 10% Fund)	173,134	- -	18,000
ACQUISITION OF LANDS: SPECIAL ACTS	80	- -	- -
ASSISTANCE TO STATES FOR TREE PLANTING	1,134	- -	15
YOUTH CONSERVATION CORPS (includes Interior)	3,500	- -	- -
PERMANENT APPROPRIATIONS:			
EXPENSES, BRUSH DISPOSAL	18,328	- -	- -
FOREST FIRE PREVENTION (SMOKEY BEAR)	261	- -	- -
RESTORATION OF FOREST LANDS AND IMPROVEMENTS	50	- -	- -
PAYMENT TO MINNESOTA	259	- -	- -
PAYMENTS TO COUNTIES, NATIONAL GRASSLANDS	524	- -	- -
PAYMENTS TO SCHOOL FUNDS, ARIZONA AND NEW MEXICO	114	- -	- -
PAYMENTS TO STATES, NATIONAL FORESTS FUND	84,676	- -	- -
TOTAL, PERMANENT APPROPRIATIONS	104,212	- -	- -

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Appropriation Items	Appropriations available	Amounts placed in reserve as of 9/29/72	Additional amts. placed in reserve as of 1/8/73
OTHER GENERAL FUNDS--ACQUISITION OF LANDS:			
Uinta National Forest	97	- -	- -
Wasatch National Forest	52	- -	- -
Superior National Forest	5	- -	- -
Cache National Forest	11	- -	- -
TOTAL, OTHER GENERAL FUNDS	165	- -	- -
SUBTOTAL	695,576	28,322	25,899
COOPERATIVE WORK, FOREST SERVICE (Trust Fund)	47,862	- -	65
GRAND TOTAL	743,438	28,322	25,964

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Amount Placed in Reserve as of 9/29/72

Forest land management:	
Reforestation and stand improvement, Service-wide	$3,000,000
Reforestation and stand improvement, Montana	45,000
Recreation-public use, Montana	10,000
Wildlife habitat management:	
Sierra National Forest	65,000
Clark and Mark Twain National Forests	418,000
Alaska	232,000
Range improvements, Montana	75,000
Forest fire protection, Montana	10,000
FALCON	5,000,000
Total, Forest land management	8,855,000
Forest research:	
Timber management research:	
Orono, Maine	150,000
Bend, Oregon	140,000
Alexandria, Louisiana	420,000
Stoneville, Mississippi	150,000
Watershed management research:	
Berea, Kentucky	150,000
Durham, New Hampshire	100,000
Fairbanks, Alaska	100,000
Wildlife habitat research:	
Reno, Nevada	315,000
Stoneville, Mississippi	200,000
Orono, Maine	100,000
Olympia, Washington	150,000
Fresno, California	50,000
St. Paul, Minnesota	300,000
Forest recreation research:	
Seattle, Washington	150,000
Juneau, Alaska	100,000
Fire and atmospheric sciences research:	
Macon, Georgia	400,000
Fairbanks, Alaska	100,000
Forest disease research:	
Delaware, Ohio	450,000
Carbondale, Illinois	120,000
Forest insect disease: Carbondale, Illinois	120,000
Forest products utilization research: Madison, Wisconsin	100,000
Total, Forest research	3,865,000
State and private forestry cooperation:	
Cooperative Forest Fire Control	5,000,000

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Construction and land acquisition:	
Recreation-public use:	
BWCA, Minnesota	200,000
Okanogan NF, Washington	182,900
Deschutes NF, Oregon	150,000
Kerr Memorial, Oklahoma	250,000
Lava Lands, Oregon	239,500
Charleston Recreation Area, Nevada	525,000
Angel Lake, Nevada	150,000
Corney Lake, Kisatchie NF, Louisiana	250,000
Eagle Lake Dam, West Virginia	815,000
Lake of the Clouds, West Virginia	25,000
Flaming Gorge NRA	404,000
Mt. Rogers NRA	187,000
Council Bluffs, Clark NF, Missouri	514,000
Water resource development construction:	
Allegheny NF, Pennsylvania	300,000
Kincaid, Louisiana	500,000
Laurel Reservoir, Kentucky	473,000
Fire, administration and other purposes:	
Superior NF, Minnesota	293,500
Research:	
Corvallis, Oregon	1,500,000
Madison, Wisconsin	963,000
Arcata, California	800,000
Provo, Utah	760,000
Rhinelander, Wisconsin	335,000
Princeton, West Virginia	660,000
Charleston, South Carolina	125,000
Total	10,601,900
Grand Total	28,321,900

FOREST SERVICE
Additional Amounts Placed in Reserve as of 1/8/73
Construction a: Land Acquisition
Fiscal Year 1973

Unit	Identification	Location	No. Proj.	FA&O	Recreation	WRDRA	Total
1	Water System	Montana, Kootenai	1	48,000			
	Water System	Montana, Custer	1	50,000			
	Water System	Idaho, Coeur d'Alene	1	70,000			
	Dwellings	Montana, Flathead	2	64,000			
	Dwelling	Montana, Beaverhead	1	28,000			
	Low Cost Housing	Montana, Custer (FY '72)	1	20,000			
	Subtotal			280,000			280,000
2	Communications	Colorado, Grand Mesa-Uncompahgre	Partial	8,600			
	Dwelling	Colorado, San Juan	1	35,000			
	Water/Sanitation System	Colorado, Arapaho	1	9,200			
	Low Cost Housing	Colorado, Rio Grande (FY '72)	1	23,000			
	Mixing Facilities	Denver Fire Center (FY '72)	1	51,000			
	Warehouse	Colorado, San Isabel (FY '72)	1	33,000			
	Subtotal			159,800			159,800
3	Boulder P.G.	Arizona, Tonto	1		52,400		
	Low Cost Housing	Arizona, Prescott (FY '72)	1	45,400			
	Oak Creek - VIS	Arizona, Coconino	1		14,900		
	Dipping Vat C.G.	New Mexico, Gila	1		35,800		
	Rose Canyon P.G.	Arizona, Coronado	1		15,400		
	Subtotal			45,400	118,500		163,900
4	Dwelling/Warehouse	Idaho, Targhee	2	76,000			
	White Pine	Nevada, Humboldt	1		121,700		
	Miscellaneous-General Planning Projects				31,200		
	Firehole	Wyoming, Ashley	1			126,000	
	Currant Creek B.R.	Utah, Uinta	1			74.900	
	Boulder Lake C.G.	Wyoming, Bridger			35,300		
	Subtotal			76,000	188,200	200,900	465,100

Unit	Identification	Location	No. Proj.	FA&O	Recreation	WRDRA	Total
5	Princess C.G.	California, Sequoia	1		94,000		
	Dinkey Creek C.G.	California, Sierra	1		31,500		
	Silver Creek C.G.	California, Eldorado	1		5,500		
	Low Cost Housing	California, Sequoia (Cleveland)		16,000			
	Cedar Springs	California, San Bernardino		33,400			
	Subtotal			49,400	131,000		180,400
6	Water System	Oregon, Wallowa-Whitman	1	34,000			
	Bly Water System	Oregon, Fremont	1	35,000			
	Office	Oregon, Willamette	(FY '71)	40,000			
	Subtotal			109,000			109,000
8	Cave Run	Kentucky, Daniel Boone				126,500	
	Quality Improvement			10,000	152,500		
	*Kerr Arboretum-VIS	Oklahoma, LeFlore County	1		35,000		
	Subtotal			10,000	187,500	126,500	324,000
9	Council Bluff-Lake Huzzah	Missouri, Clark	1			125,000	
	Rochester Complex (W&S, Warehouse, Office)	Vermont, Green Mountain	3	114,000			
	Burr Oak C.G.	Ohio, Wayne			14,000		
	Miscellaneous (Project Mains)	Indiana, Wayne			11,900		
	Subtotal			114,000	25,900	125,000	264,900
WO	Miscellaneous Recreation				52,900		
	Grand Totals			843,600	704,000	452,400	2,000,000

* Recreation includes $49,900 for VIS.

Mrs. HANSEN. Perhaps some impoundments are necessary in the interests of overall fiscal policy, but why, Mr. Butz and Dr. Whitaker, does the executive branch always start with those items that Congress in its wisdom has added to the budget? Does the executive really believe it has greater wisdom than the Congress in deciding what the budget priorities should be, particularly when we did not exceed the overall budgetary ceiling in any such relevant amount?

Dr. WHITAKER. I cannot speak to the specifics of the impoundment in the Department like my colleague, Mr. Wiles, can. I can only address the only general question of the difficulty the President had. Essentially here was his problem. He sent down a budget of $246 billion, and he got back a budget of $260 billion. That is like going down to the cafeteria line and taking everything you want, and when you get to the cash register you cannot pay for it. So someone has to take that responsibility. He has taken it.

He made a pledge to the American people that in fiscal year 1973 he would keep that budget to $250 billion. I think we can argue, and with great merit on both sides, about where those cuts should be made. That is certainly an area of dispute, but he had virtually no choice but to cut. You can argue about where.

Mrs. HANSEN. But the budget handled by this committee, when it left Congress, was not a half-billion dollars over the President's budget.

Dr. WHITAKER. There are nickels and dimes everywhere to arrive at that figure.

IMPOUNDMENT OF INDIAN AFFAIRS FUNDS

Mrs. HANSEN. You have $28,793,000 impounded for buildings and utilities in the BIA. I can understand the projects impounded dealing with the dormitories in Alaska because Alaska has changed its mind about the system.

But you have impounded such items as the Rough Rock School, the Dillingham Dormitory, Casa Blanca Elementary School and funds for kindergartens. This in spite of the fact that you still have several thousand youngsters that are not attending kindergarten. This is an integral part of their basic education, to help reduce that cultural lag particularly in the language field.

You have funds impounded for the Navajo Community College. One Bicentennial goal was to complete this facility. Funds are impounded for the Rocky Boy School, the Dunstan Public School, and Public School Planning Assistance. I cannot understand why this last item has been impounded.

Mr. Secretary, the problem we have had in the committee is deciding what proportion of money should be spent by the local school districts and what proportion should be spent by the Bureau of Indian Affairs in the construction of nonbureau schools because of the underfunding of 815. It has been necessary for several years to place in the appropriations bill funds supposedly to meet the Indians' share at schools which are beyond repairing.

The problem was perplexing to the committee because of these various factors and the great need. In order to use public funds wisely and to make sure that the BIA had basic facts to determine the needs of these school districts the committee provided additional funds. Many school districts, for example, were merely asking the BIA for

funds as an excuse to shift the burden from their own taxpayers to BIA.

The committee added $200,000 to provide us with some answers. This isn't good fiscal sense, because this is necessary to provide us with those answers.

Mr. WILES. If my memory is right, the committee did include in the education appropriation some money for seeing what part of the total cost of a public school should be paid by the public school district and by the Federal Government. This money in a construction account is actually money to be given out for design of buildings. The other money that is in the education account is for making a study——

Mrs. HANSEN. Is that being used?

Mr. WILES. That money is apportioned for use. I don't know where they stand on this.

Mrs. HANSEN. The funds for planning assistance is to assist in developing a better type of construction for your dollar?

Mr. WILES. This would be really designing schools.

Mrs. HANSEN. To develop a design to save money, hopefully.

Mr. WILES. I would think that is right.

Mrs. HANSEN. Funds for the Chemawa School and the Haskell Junior College have been deferred. I understand those are equipment items belonging to those schools which are not completed. Is that right?

Mr. WILES. That is right.

Mrs. HANSEN. For what reason did you impound kindergarten funds? I am not about to rebuild North Vietnam out of the kindergarten money.

Mr. WILES. When we talked to the Bureau people about this, as you say, Madam Chairman, of this total here of $28 million for building and construction, approximately something over $10 million is for those dormitories.

Mrs. HANSEN. I am not objecting to that.

I still cannot understand the impoundment of kindergartens funds.

Mr. WILES. The balance of this the Bureau tells us are projects that are slipping so—some in their design, and so forth, before awarding the contracts. They probably won't have the designs ready until late in the fiscal year.

Mrs. HANSEN. Then why did you request funds in the first place?

Mr. WILES. They are working on them.

Mr. HITE. At that time they thought they would be ready for construction.

Dr. WHITAKER. The slippage must have obviously occurred. But that wasn't our intention, Madam Chairman.

NAVAJO IRRIGATION PROJECT

Mrs. HANSEN. Funds for the Navajo irrigation project are impounded. We are very interested in the Indian economy. Is that all slippage, too?

Mr. WILES. For the Navajo, there is a $1½ million in reserve. That money will be carried over to 1974. We have $10.5 million, the same as last year.

Mrs. HANSEN. We are devoted to trying to help the Indian economy. You are not going to help the Indian economy if you don't get some

of those irrigation projects completed, because they have to have water before they raise crops.

Mr. WILES. The 1973 appropriation included $10.5 million of which $9 million will be obligated this year. The remaining $1.5 million will be obligated in fiscal year 1974 along with the proposed $10.5 million request for this project.

Mrs. HANSEN. Will your prior specified goals be met in this time frame?

Mr. WILES. I am not sure, Madam Chairman. I can find that out for you.

(The information follows:)

The time frame set in the spring of 1972 indicated that the first water would be available to the project by 1976. The Navajo Tribe is aware of this revised time frame. Obligational authority programed for fiscal year 1973 and 1974 will keep this project on schedule.

IMPOUNDMENTS IN LAND AND WATER CONSERVATION FUND

Mrs. HANSEN. You have impounded $269,589,970 of the Land and Water Conservation Funds. Has the purchase of lands slowed to such an extent that this was necessary?

Mr. WILES. There is a combination of things here. Of that total, $128 million was for States that we got appropriated in 1973, but it was not programed for obligation in 1973. It was programed to be carried over anyway into 1974. Also included in that figure is $30 million of contract authority that we didn't plan to use in 1973. The total then, $158 million, was not planned for use in 1973 when the 1973 budget came up. So this leaves, roughly, $111 million which was planned for use, that is, in budgetary reserve for Federal land acquisition.

Mrs. HANSEN. Have you prepared the citation that will substantiate your right to impound Migratory Bird Conservation funds?

Mr. WILES. They are going to get you a citation on that.

IMPOUNDMENT OF FUNDS FOR POLLUTION ABATEMENT PROJECTS

Mrs. HANSEN. The greatest share of the construction budget for the last 2 years, Dr. Whitaker, has been for those items necessary to meet the Presidential order on pollution. Yet, I find all through the National Park Service impoundments involving this type of project. Yosemite, sewage system access roads, $200,000; Arcadia sewage disposal facilities, $130,000, et cetera. You have listed these items which involve every region in the United States—incinerators, sanitary pumping stations, sewage systems, sewer systems, sewage disposal systems, solid waste disposal. These were not items that Congress added. These were your own requests. We honored them in spite of the fact that we had some misgivings about levels of funding in other programs. We were told very vigorously, that these projects were necessary, in fact you requested a supplemental in this regard. You stated absolutely the money had to be spent to comply with the administrative order.

Why are you here with impoundment of funds to comply with your own Presidential orders?

Dr. WHITAKER. We are up here with impoundments involving many areas.

Mrs. HANSEN. But if this pollution problem was so important, so that you could comply with the order in a specific time frame, why on earth are these funds impounded?

Dr. WHITAKER. These are all hard choices that had to be made.

Mrs. HANSEN. You mean to say you are going to let the sewage go into these areas?

Dr. WHITAKER. No.

Mr. WILES. I believe the Park Service will tell you when they come up that most of these projects are waiting environmental statements and they are having a good deal of difficulty with getting those statements.

Dr. WHITAKER. NEPA works two ways. It can slow up an environmental project, too.

Mrs. HANSEN. But supposing as a direct result of some of this slowdown, you had some epidemics directly traceable to the Department's lack of sewage treatment? I find a lot of them in my own district. I know something about them.

Mr. WILES. I believe even after these moneys that are not apportioned, the Park Service still has a construction program of roughly $75 million for 1973.

Mrs. HANSEN. Are you reprograming these funds?

Mr. WILES. No, ma'am. They will go over into 1974.

Mrs. HANSEN. That is what I mean, they are programed for 1974?

Mr. WILES. Yes. But there is a portion for use in 1973 for the Park Service construction program, $75 million, which is a sizable program.

Mrs. HANSEN. The committee is not going to appropriate new money if you don't release some of these items. You don't expect us to go along with this arrangement. If these things were of high priority and had to be built to solve the situation of pollution and water supply, then the committee is not going to give you more funds to impound. That would be ridiculous.

Mr. WILES. These will be built. They are programed for fiscal 1974.

Mr. YATES. They were programed for 1973, weren't they?

Mr. WILES. That is right.

Mr. YATES. Now they are programed for 1974?

Mr. WILES. That is right.

Mr. YATES. What if you have a deficit in the budget?

Mrs. HANSEN. Then they will be reprogramed for 1975.

IMPOUNDMENT OF WATER RESOURCES RESEARCH FUNDS

You have $2 million impounded in the Office of Water Resources Research for assistance to States for institutes. Do you consider that revenue sharing will provide for this research?

Mr. WILES. I don't believe that was the premise that this was based on.

Mrs. HANSEN. What was the premise?

Mr. WILES. What we are doing keeps the State institutes at the same levels they were previously and it is just a reduction in expenditures basically of $2 million.

AMOUNT OF FUNDING PER ACRE OF PUBLIC LANDS MANAGED

Mrs. HANSEN. When you return this afternoon, Mr. Whitaker, I want you to have broken out the number of acres of offshore and onshore land that are under the jurisdiction of the Department of the Interior and those funds in your budget which you are requesting for management of these lands. You estimate in this budget receipts totaling $4.7 billion for the 1973 fiscal year and $2.6 billion for 1974 fiscal year.

A great portion of this comes from the Outer Continental Shelf and from sales on various kinds of lands.

I am trying to discover what amount of money per acre per year the Government is spending on its protection and management of its natural resources.

Dr. WHITAKER. Are you referring then to all OCS plus the onshore public lands?

Mrs. HANSEN. That is correct.

Dr. WHITAKER. The cost per acre?

Mrs. HANSEN. The amount of money spent. I want the total number of acres, offshore and on shore. This does not include such things as Indian schools, and so forth. This is purely the natural resources itself. What you spend per year per acre for the management and protection and development of this American land of ours.

Dr. WHITAKER. Before I commit to that, Madam Chairman, I am not sure we can actually honor that by this afternoon.

Mr. WILES. We certainly will try.

Mr. HANSEN. I figured it out. It's about $1.09 per acre that you are spending.

Dr. WHITAKER. We can supply that answer this afternoon.

Mrs. HANSEN. I want the figures because I think it's a very startlingly small amount of money that you are spending in the management of what turns out to be billions of dollars of receipts. We are prone to think, Mr. Secretary, that the defense of the country is merely rockets and missiles, and so on.

I am one of those people who happens to believe that the greatest defense of this country is in the management of our resources, human and natural. I just think in order to have an earth left we have to take some managerial steps. This is the reason, Secretary Butz, additional money is added to your budget each for reforestation, because we have 5 million acres of unforested lands that need reforesting.

I look at the Bureau of Land Management justifications in regard to their mapping and resource studies of land. I believe it will be until the year 2000 and beyond before they have completed their own exploration program.

In looking at this, I cannot help but be a little disconcerted that you plan saving money in what looks like luxury programs, the luxury programs of maintaining our forests, maintaining our natural resources. I don't believe, when you total the value of this 754 million acres of land in the domain of the United States, which we value so much, that we want to acquire more of it, if you please, to mismanage. I think you give it the priority in the budgetary design to which it is entitled.

I would certainly question a budget that says you shall spend more for foreign assistance than you spend upon the management of our own American land. This is all the land we have. When we are through with it, wear it out, use it up, destroy it, we have nothing. This is what disturbs me. I wish the budgeteers down at the Office of Management and Budget would take a look at something beyond the dollar sign in any one fiscal year.

The committee does not recklessly add programs just to torment the White House. We add programs to make sure our wildlife habitat is in context. We are trying to step up the research that tells us how to use the residue from forests so that we may not have to cut as many trees. These are the things that bother me. The committee will adjourn until 1 p.m.

Dr. WHITAKER. We will come with the requested information.

Mrs. HANSEN. I do want to express the committee's appreciation to Mr. Butz who will not be with us this afternoon.

AFTERNOON SESSION

ENERGY POLICY

Mrs. HANSEN. The committee will come to order.

The energy crisis has received a great deal of public attention recently. One of the problems seems to be that no one is in charge of energy policy.

The Interior now has a Deputy Under Secretary for Energy Policy. Counselor Butz says he is going to look into ways of solving energy problems.

Dr. Kissinger is rumored to be establishing a staff to study energy problems. Deputy Treasury Assistant Secretary Simon is Chairman of the Oil Policy Committee and says he will be directly, emphatically involved in energy policymaking and implementation.

The committee wonders who is in charge?

Dr. WHITAKER. Well, the direct answer, Madam Chairman, is the President is in charge. Obviously one of the things we hope to get this year is a Department of Natural Resources so that nuclear and fossil fuel can be put under one roof, and one man can report to the President with the major responsibility.

Mrs. HANSEN. That would also include your hydro and your thermal power, is that correct?

Dr. WHITAKER. No; not precisely. There could be exotic forms of energy in the future that would not necessarily be included in whatever the President decides to make his proposed energy agency. By that, I mean NASA could stay in that business, for example, the National Academy of Sciences, the National Science Foundation, could all have research. But the two big basic pieces——

Mrs. HANSEN. If they were conducting research, would they be responsive to whoever the President designated as the Director of Energy?

Dr. WHITAKER. Yes; but I do not know that they would be responsive directly in the sense that all energy programs would be under one roof, Madam Chairman. I did not mean to imply that, no, because there would still be other people involved. It is just like when the

environment agency, EPA, was put together. I do not think we could say that every activity of the environmental programs could be considered under EPA, but it would be a great stride forward if we could get most of it, or all of it, under one roof and one management.

Mrs. HANSEN. I think the committee would agree.

Dr. WHITAKER. The President just this weekend announced an arrangement whereby Dr. Kissinger, Dr. Shultz, and Mr. Ehrlichman would take over some of this responsibility, and appointed a staff man, Mr. Charles DiBona, under him to work on energy affairs. The thrust of the President's intentions here are to centralize in the White House in order to get this problem solved, but a companion intention is not to necessarily create a continuing body such as the Council of Environmental Quality or the Council of Economic Advisers for the long term.

Solve the problem and then get it out of the White House. That is his general way of working.

Mrs. HANSEN. Wouldn't some of the thrust require legislative authority?

Dr. WHITAKER. Yes; a Department of Natural Resources would.

ORGANIZATION OF ENERGY PROGRAMS

Mrs. HANSEN. Beyond that, where you have duplications aren't some transfers necessary? You might summarize for the committee what natural resources would embody.

Dr. WHITAKER. I will do that to the best of my ability right now.

Let me first talk about the intentions within the Department of Interior which would not require legislative action. They would be to create an Assistant Secretary for Energy and Minerals as you can see on this chart that you have before you the various boxes that are under it; Bureau of Mines, Geological Survey, Office of Oil and Gas and an Office of Research and Development.

I think probably the most important thing that the Secretary of Interior is trying to do here, besides putting all the boxes under one man, is to build a little capability within the Department. I could speak personally to that problem just from my short experience.

I talk to people in the Office of Coal Research and they tell me that some of the Bureau of Mines coal gasification projects may not be very good.

Mrs. HANSEN. We could have told them that.

Dr. WHITAKER. Obviously we need an analytical capability in there to help the management. That refers to the specific things within the Department.

Now, outside of our Department the President has three broad options before him. I do not know how he is going to decide it and there may be more options than I cite here. These would include at least taking the various fossil fuel pieces of Interior and putting them in AEC, or taking much of the nuclear parts of AEC, civilian nuclear parts of AEC and putting them in Interior, or an option to strip out the energy pieces from both Departments and, so to speak, start over in a new organization for energy.

Obviously legislation of this sort, when it hit the committee, could run into severe jurisdictional problems between your Committee and the Atomic Energy Committees.

LEGISLATIVE AUTHORITY FOR ENERGY RESEARCH FUND

Mr. McDade. Would you yield?

Mrs. Hansen. Yes.

Mr. McDade. Mr. Secretary, the new $25 million that you are requesting, in the Office of the Secretary, what is the authority that permits you to request that appropriation, $25 million, at this time?

Dr. Whitaker. I am not sure I know the answer to that, the legal authority. Do you know the answer to that?

Dr. Lay. OMB was the one that originated it.

Mr. Wiles. All of the authority of all of the bureaus under Reorganization Plan 3 runs to the Secretary. So if any of the bureaus have authority to do energy research, the Secretary has authority to do energy research.

Mr. McDade. I see.

You do not require new legislation. This stems from the Reorganization Act which vests within the Secretary the powers of the various bureaus he has established.

Mr. Whitaker. That is right, under Reorganization Plan 3 of 1950, I believe it is.

Mr. McDade. I am sure you know; thank you.

OIL SHALE LEASING PROGRAM

Mrs. Hansen. Can you give us the status of the oil shale leasing program?

Dr. Whitaker. Yes, Madam Chairman.

There are six tracts in three States, two each in Colorado, Wyoming, and Utah, that potentially could come up for sales, competitive lease sales this spring.

Again the President urged that the leasing be done subject to environmental safeguards in his energy message of June 1971, the NEPA 102 environmental final impact statement has not been completed yet. Once that is completed, the Secretary has 30 days to review that under the CEQ guidelines. Then he makes the decision as to whether he feels the environment has been adequately safeguarded.

I personally got somewhat involved in that, with the Secretary's concurrence I am back to the drawing board, so to speak, on parts of that because I still have concerns about protection of the environment in that program.

Mrs. Hansen. It is a very difficult part of the country relative to environment; is this not correct?

Dr. Whitaker. It certainly is. Just take the gross problem of water availability we can say sure, there is enough water in the Colorado Basin for oil shale then we can say sure, there is enough for the Southwestern energy study projects and the Great Plains, but to integrate that into a whole package and really know what you are talking about is something else.

Mrs. Hansen. The disposition of the spoils is another problem?

Dr. Whitaker. It certainly is.

Mrs. Hansen. You have not to date had good answers on what will happen to the spoils on that land.

Dr. Whitaker. I think we have answers as to how they would be treated.

They would dam up at the end of the canyon, there would be a physical dam to purify the water. I have problems with the vegetation connected with that—the revegetation of that area.

Mrs. HANSEN. I think you have more problems than that. I cannot see damming of the canyons having the approval of environmental groups.

Dr. WHITAKER. Well, approval is going to be a matter for the courts if the Secretary decides to go with it, but yes, I agree with you.

Mrs. HANSEN. To some extent.

Dr. WHITAKER. There is no question. Any time we balance any of these energy matters off, we cannot get approval around the table.

COAL GASIFICATION PROGRAM

Mrs. HANSEN. Can you give us the status of the coal gasification program?

Dr. WHITAKER. I am aware that coal research will be up from, I believe, $90-some million to ——

Mr. WILES. The total R. & D. energy research for coal that we are estimating is from $94.5 million in 1973 to $119.9 million in 1974.

Mrs. HANSEN. Are these followups to the same programs that you started in 1973?

Dr. WHITAKER. Madam Chairman, this is total coal research within the Department.

Mrs. HANSEN. I understand.

Dr. WHITAKER. The part you are referring to, I believe, is $43.5 million in 1973, and $52.5 million in 1974. This will include followups to the Federal industry coal gasification program. That is the one that is one-third financed by the American Gas Association and two-thirds by the Federal Government.

Mr. WILES. That is being stepped up.

Mrs. HANSEN. The committee will certainly want to hear a very careful review of the program in these areas at the time of the Office of Coal Research hearing.

OUTER CONTINENTAL SHELF LEASING

What is the status of the OCS leasing, including the Atlantic?

I understand you have problems with oil explorations off the eastern coast.

Dr. WHITAKER. We are not ready this year to begin leasing in the Atlantic area.

Mrs. HANSEN. Why?

Dr. WHITAKER. Because we do not know enough yet to do it and be environmentally sound about it, I think. That is going to take another year of study, I think, before we could even begin to consider the possibility of a sale. Our sales, our priorities in the near future, this year, would be the sales in the Gulf Coast that I referred to.

The second priority would be the Mid-Atlantic area, and the Gulf of Alaska area, as far as our priorities.

Mrs. HANSEN. How about Santa Barbara leasing?

Dr. WHITAKER. On Santa Barbara, that is one I would like to reserve an answer on. The Secretary is wrestling with that problem right now, as your authorization committees have wrestled with it for the

last 2 years. We have in the past sent down legislation twice which would take the 35 leases of the Santa Barbara Channel and, in effect, pay back the oil companies for those leases. This would make those contracts null and void, and pay for the cost of those leases, the payment to be cited by a judge in court, and the money to pay for those leases coming from sale of Elk Hills oil in petroleum research No. 1.

The issue which I would appreciate not addressing until the Secretary has firmed up on this point is, do we go back to that legislation again this year?

Mrs. HANSEN. Do you have any court cases pending?

Dr. WHITAKER. Yes. That matter is in court for one thing.

Mr YATES Why Santa Barbara and none of the other places?

Why do you want to rescind Santa Barbara's leases and no other?

Dr. WHITAKER. First of all, I am not sure we propose to again rescind Santa Barbara's leases. We have not come to that decision. The reason the Santa Barbara thing was so important is because there we had a bad fracturing of the geologic skin, and the blowout problem at Santa Barbara. That is what brought the whole issue to a head.

In the last 2 years, Dr. DuBridge, the President's previous science adviser, chaired a report on that subject. The conclusion of that basically was that it was probably safer to continue drilling on the damaged structure to keep the pressure from the oil and gas of that structure. That drilling is continuing.

The issue is: Do we know enough to continue drilling in the 35-lease area, and be environmentally sound?

Mr. YATES. Is not the same likely to happen at any place where you give leases?

Dr. WHITAKER. No one can give, Congressman, 100 percent assurance that it will not.

Mr. YATES. It might happen.

Dr. WHITAKER. Surely it could happen again, yes.

Mr. YATES. If that happens, would you be required to pay the oil companies whatever their costs were, whatever costs they incurred in undertaking that lease? Why should the Government be responsible for that?

Dr. WHITAKER. Well, if—to choose my words carefully, this matter is in court——

Mr. YATES. Do you want to go off the record—if you want you can go off the record.

Dr. WHITAKER. All right, I appreciate it.

(Discussion off the record.)

SUPERTANKERS AND SUPERPORTS

Mrs. HANSEN. What is your policy on supertankers? I think Mr. Whitaker, you realize that increasingly, certain countries are building large tankers. These envision a different kind of port in the future, which poses a different kind of problem, not only for the environment, but for the adequacy of refineries, et cetera. What are you doing on this matter?

Dr. WHITAKER. Under discussion right now is the possibility of superport or supertankers-support legislation. We have not come to any

final conclusions on that. It is not the intention of this administration to get, so to speak, in the Federal port authority business. It is not the intention of this administration to pay for a superport. However, it is the intention of the administration to clear away legal impediments, and I refer to the many-windowed sort of permits that might be required, through EPA, the Geological Survey, the Department of Interior, where, for example, the question of a monobuoy more than 3 miles offshore occasions. What legal rights are involved there?

Then you go down through a pipeline to shore, you cross that and come into State jurisdiction. There is a lot of legal problems connected with that that I am not prepared to give any detailed discussion on. But we are preparing and thinking about the possibility of legislation, again not to say what kind of buoy or what kind of dock or where it should be, but to clear the legal impediments for this type of development to take place.

Mrs. HANSEN. Will not this problem of supertankers require a great many public hearings so that there is a common understanding of what the total problem is in this area?

Dr. WHITAKER. I think it will require a great deal of public hearings like that. It will probably also require impact statements, environmental impact statements vis-a-vis a site location.

We had, for example, but I do not think we are going to go forward with it, we had thought about the possibility of having refinery-siting legislation very much like we are proposing environmental powerplant legislation. However, I think we are going to back off of that position. We find that local responsibility could handle that at least up to the shoreline area.

Mrs. HANSEN. Where are the superport sites?

Dr. WHITAKER. Two that I have heard of are off of Cape Henlopen, off of Delaware, another one off of Louisiana.

Dr. Lay?

Dr. LAY. There are two. There have been two specific proposals from industry, both of those in the Gulf of Mexico, one of them kind of southwest of New Orleans, the other southeast, maybe in the Pascagoula, Miss., area. There are potential sites up and down the east coast, but no firm selection of sites.

Mrs. HANSEN. What about the proposal that has been discussed on the west coast in the Point Roberts area in Canada?

Dr. LAY. On the west coast?

I am not familiar with that. I know there is one also in Nova Scotia on the east coast and two or three in the Bahamas that have been discussed.

Mrs. HANSEN. From time to time there is newspaper conversation about a superport proposed in the Point Roberts area on the Pacific at Puget Sound.

Dr. LAY. I would be happy to look into it.

Mrs. HANSEN. I think the committee would appreciate having a report on it.

Mr. CARTER. Is not the discussion there of a port facility that will accommodate large tankers?

Mrs. HANSEN. That is right.

Mr. CARTER. But not one that would be out a great distance from shore?

Mrs. HANSEN. It is not out a great distance. This is the intriguing thing, because as you evaluate the Canadian opposition to oil spills, at the same time I find them very much interested in a facility that can have oil spills.

Dr. WHITAKER. That is of course one of the dilemmas.

(The information follows:)

The Corps of Engineers is currently studying many possible sites for superports on the east coast, gulf coast and west coast. Also, many private proposals have been made. These include one near Freeport, Tex., one near Grand Isle, La., and one in Delaware Bay. There have been announcements of studies for superports in the Alabama-Mississippi area, off the southeast Atlantic area and on Mona Island in Puerto Rico.

We do not have any information in regard to a proposed superport for Point Roberts in the Canadian Puget Sound area.

Mrs. HANSEN. They have deep enough water to accommodate the ships of that size in that area.

Dr. LAY. I think that is also true in Nova Scotia.

Mrs. HANSEN. Insert in the record a list of the current ports deep enough to accommodate the supertankers.

Dr. LAY. Without dredging, there are none. You have two on the west coast now that will accommodate the 100,000 d.w.t. tanker size.

Mrs. HANSEN. Which ones?

Dr. LAY. One of them is Long Beach, the other is Seattle, I think.

On the east coast the largest tankers we can handle is the 80,000-ton sizes. That is a far cry from 500,000 tons.

SAFEGUARD FOR TANKER SHIPPING

Mrs. HANSEN. Last year we had a discussion with practically all the agencies dealing with this problem.

What are you doing internationally on the subject of making sure that the shipping industry itself is more responsible about the kind of ship that they are using for tankers over the world? Country after country has had this same problem with oil spills from the tankers.

Dr. WHITAKER. On the Valdez to Seattle run, which would come into the Alaska pipeline problem, we are talking about double-hulled ships and we are talking about compartmentalizing them so if there is a spill, it would only be in one section.

Dr. LAY. All of the discussion thus far on the supertankers would be that we would require the double hulls.

Mrs. HANSEN. I am talking about the tankers.

Dr. LAY. Where they have broken up? Mrs. Hansen, some of these shipping lines that are shipping under foreign flags, do it to circumvent our maritime laws and rules.

Mr. CARTER. There will be a conference this year by the Intergovernmental Maritime Consultative Organization; it will host a conference to deal with tanker design and operating standards, to kind of update the 1954 regulations.

Mrs. HANSEN. Do you expect that some of these old ships will be replaced?

Mr. CARTER. As a practical matter, whether you are going to put any ships out of service until they run out normally, is going to be an extremely difficult problem.

Mrs. HANSEN. As you are well aware, they are flying under Liberian and Greek flags.

Mr. CARTER. A lot was done by your legislation, I think, and by the 1969 conference to where each nation now can keep out of its ports and has a duty to keep out of its ports any ships that cannot get insurance up to a limit of say $14 million damage. That will go a long way toward keeping ships that are inefficient and dangerous out of the trade.

Mrs. HANSEN. Mr. Long?

Mr. LONG. We also have a great plan now to deepen the Baltimore Harbor another 10 feet.

DEEPENING BALTIMORE HARBOR

Mrs. HANSEN. Where are you going to put your spoils?

Mr. LONG. That, of course, is the reddest, hottest issue that we probably have anywhere around. That means dumping 100 million cubic yards of the most poisonous crud onto the shores or in so-called diked areas, right off my district. The State is behind it. They want to create an island that can later be industrialized. The people are furious about it, from every point of view; environmental, it will ruin the fishing, everything else.

Now, I gather every time you add another 50,000 or 100,000 tons or so, you have to dredge another 10 feet. We cannot find a place to dump the spoil. I am a little bit puzzled because I do not know what you all are trying to do. Are they trying to build big tankers to come into port, because when we lower it 10 feet, every other port in the United States is going to be under the same pressure to lower it another 10 feet. They are all at the same depth, all except two major ports. Once we deepen our port 10 feet, every one of the other ports are going to have to do the same thing, to stay competitive.

Dr. WHITAKER. OMB recognizes the dog race we are getting in and is not encouraging it either.

Mr. LONG. What is that?

Dr. WHITAKER. I think you are right, Congressman, I happen to be from Baltimore myself, via the West. But I think you are right, that that is probably a blind box canyon to go up, in the long run, because I do not think in the Bay, if you deepen it 10 feet you would even then be talking about the supertanker capacities we need.

Mr. LONG. Exactly.

Are they going to bring the oil up the Chesapeake or anchor it in the superports up the coast? I want to find out what they are doing.

Dr. WHITAKER. "They" is not the Federal Government, it is industry, for one thing. Industry favors the monobuoy, where you are a considerable distance offshore, you pipe the oil or slurry materials, iron ore, coal, things like that, through a pipeline to shore and that is more economical than trying to dig.

Mr. LONG. Then why do they need to deepen Baltimore Harbor at all?

Dr. WHITAKER. I am not sure they do.

Mr. LONG. Wait a minute now. It is now up before the U.S. Army Corps of Engineers, the Environmental Protection Agency, who are all playing cozy with them. We are not getting any help from them. I have every indication that they will approve the permit on this diked

area which will then dump 100 million yards of poisonous sludge into a beautiful recreational, fishing, crabbing, and oyster area. The State is determined to go through with it.

No question in my mind the State is going to get away with it. The real estate thing is part of the whole deal. The Federal Government will be putting up most of the money.

Dr. WHITAKER. We will?

CORPS OF ENGINEERS DREDGING ACTIVITIES

Mr. LONG. The dredging of course will be done by the Army Corps of Engineers.

Dr. WHITAKER. I am not familiar with that, I am sorry.

Mr. LONG. Army Corps of Engineers is paying for the maintenance dreging. They have run out of places to put the dredging, the Pooles Island area is filled. Now they want to put up a "diked" area. "Dike" is a phony term because it will not contain the poison. The Federal Government, the Corps of Engineers under its annual budget is continuing to do maintenance dredging, but as soon as the deepening comes along, the U.S. Government will pay for it.

Dr. WHITAKER. You made a distinction between the maintenance dredging and deepening the port. I am surprised by your comment.

Mr. LONG. They are calling for a deepening of another 10 feet.

Mr. YATES. Is this for tanker access?

Mrs. HANSEN. Oil shipping.

Mr. LONG. They are building supertankers in Bethlehem Steel right now. The harbor is deep enough for conventional ships, 40, 45 feet, the same as any other harbor.

Mrs. HANSEN. What we are talking about involves the supertankers being built by Japan, which are proposed to use the offshore superport facilities.

Mr. LONG. I understand that. But once you build these superports way out to handle those real super super supertankers, then why do you have to have 65,000- or 80,000-ton tankers which come right into the Chesapeake and require all this dredging?

Why not have all of it diked or ported way out there in the sea? That is the question I ask.

Dr. WHITAKER. I do not know all the details of that. There is a difference in the economics. When we are talking about supertankers and slurrying material ashore through pipelines as opposed to other weight materials which could conceivably be most economically handled on ships which are deeper than 40 feet but nowhere near drawing the drafts of supertankers. That is a whole other issue.

I was frankly not aware that the Federal Government was financing deepening of the Chesapeake Bay beyond just maintenance of the depth of the present channel.

Mr. LONG. Let me assure you that that is under contemplation.

Dr. WHITAKER. I know it has been contemplated, yes.

Mr. LONG. This is the big picture, this is what all the battle is about.

I have some other questions on drilling in the so-called Baltimore canyon off the coast, but that would not fit in right now.

Mrs. HANSEN. The policy on imports is directly related to the Alaska pipeline, please give us your proposals on oil imports. We will then discuss the Alaska pipeline.

Mr. LONG. Before we leave that, could I get in the record a specific answer to my question of: If we are going to have superports out in the ocean to handle these great supertankers, then why do we need any more dredging of any of our harbors to get in somewhat larger and somewhat deeper tankers than we have now?

Why not save the whole thing for when you have your superport?

Mrs. HANSEN. Will the gentleman yield?

Mr. LONG. Yes.

Mrs. HANSEN. As I understand, at least in the Columbia River, our channel has been deepened not necessarily to accommodate tankers, but to accommodate the general shipping that comes in which is part of the entire economy of the West.

Dr. WHITAKER. To answer your question, sir, I see no reason to deepen the Chesapeake Bay to accommodate supertankers. I can see an argument to deepen it to some extent to accommodate other forms of marine traffic, but I am not familiar with the benefits.

Mr. LONG. Perhaps you can look into this and give us a statement for the record which would reflect somewhat more investigation.

Dr. WHITAKER. I can if you—I have answered your question with regard to supertankers. With regard to tankers of less depth, I am sure I cannot answer your question for the record later even.

Mr. LONG. We will see you get a more precisely formulated question than I have given you and then I hope you will give us an answer for the record.

Dr. WHITAKER. All right.

(The information follows:)

The purpose of superports in the United States is to serve the rapidly growing imports of crude oil, most of which will come from long distance sources in the Middle East. Some additional dredging and other harbor improvements may be necessary to serve shipping of commodities other than crude oil. Some tankers will continue to us existing ports in delivering residual fuel oil and other petroleum products. More specific information on the purpose of dredging and harbor improvements may be available from the Corps of Engineers, U.S. Army.

OIL IMPORT POLICY

Mrs. HANSEN. What is the status of oil imports?

Dr. WHITAKER. Dr. Lay, do you want to start on that?

Dr. LAY. They are increasing, that is kind of the general status.

Last year, east of the Rockies we allowed about 1.8 million barrels a day, this year it will be 2.8 million barrels a day, a fairly sharp increase. Last year we received almost 30 percent of our oil requirements from overseas. That is up sharply; it will probably exceed 50 percent sometime by the early 1980's.

Mrs. HANSEN. Does this include liquefied natural gas.

Dr. LAY. No, it does not.

Mr. YATES. Is that in addition?

Dr. LAY. That would be in addition.

Mr. YATES. What is the total.

Dr. LAY. Liquefied natural gas would be very small now. There is only one major project approved up in Boston, probably on the order of just a few hundred billion cubic feet a year.

Mr. YATES. Million or billion?

Dr. LAY. Billion cubic feet. There is only big project approved at Cove Point as you are aware, that has had a hard time getting off the

ground. That is somewhat larger. Even if all of the LNG projects move ahead as rapidly as proposed here, we are still talking in terms of two to four trillion cubic feet annually by the early 1980's. That would be a small part, 5 percent or less, of four total requirements So LNG is not a big part of our total energy requirements.

The oil imports are certainly a very large part of our energy requirements.

Mrs. HANSEN. Where are your major imports coming from?

Dr. LAY. They are shifting. Until recent years, the vast majority came from the Western hemisphere, either Canada or Venezuela. This past year we received about 28 percent of our imports, from the Eastern hemisphere and this dependence will continue to increase rapidly in the years ahead.

Mr. MCKAY. Eastern hemisphere meaning what?

Dr. LAY. Mainly Saudi Arabia, Iran——

Mr. YATES. Why the shift?

Dr. LAY. Because we cannot get increased imports from Canada and Venezuela.

Mrs. HANSEN. Why?

Dr. LAY. As of 2 or 3 weeks ago, Canada imposed export restrictions on oil exported out of Canada.

Mrs. HANSEN. Why?

Dr. LAY. To preserve her own self-sufficiency. The Canadian Energy Board has decided that it needs to keep oil in Canada for its own domestic security.

Mrs. HANSEN. Why the shift from Venezuela?

Dr. LAY. Venezuela has also been holding down some of its exports. Of course, Venezuela has had—I am getting into an area that is kind of sensitive—but they have taken some policy measures over the past 2 or 3 years which have discouraged American investment in Venezuela. This has also led to some reduction in exports.

Mrs. HANSEN. How much Venezuelan capital is in their oil production?

Dr. LAY. I cannot answer that. We can provide the information.

Mrs. HANSEN. Will you please.

(The information follows:)

In 1971, the latest year for which we have data, the Corporacion Venezolana del Petroleo (CVP), wholly-owned by the Venezuelan government, accounted for just slightly more than 1.3 percent of total production of crude oil in the country. The bulk of the production is controlled by such internationals as Exxon, Gulf, Mobil, Shell and Texaco. CVP was established in 1960 and was to engage in all phases of production, refining and distribution. In addition to the limited production activity noted above, it now controls 33 percent of the internal marketing operations.

ENERGY CRISIS

Mr. YATES. May I ask a question?

Mrs. HANSEN. Yes.

Mr. YATES. How long have we known about the energy crisis?

Dr. WHITAKER. Well——

Mrs. HANSEN. We have discussed it for at least 4 years.

Dr. WHITAKER. I have known about it for 4 years.

Mr. YATES. Do you think the Department of Interior has been derelict in not taking steps to meet the crisis?

Dr. WHITAKER. If I can——

Mr. YATES. You say you do or do not think so?

Dr. WHITAKER. I do not think we have been derelict. There has been a lot accomplished, there could be more. I can get into a specific recitation of those accomplishments.

Mrs. HANSEN. Please do.

Dr. WHITAKER. I am referring particularly to the President's energy message of 2 years ago, where he moved on oil shale, geothermal, he moved on an increased R. & D. budget. We have strongly backed—probably the nut of the real problem—a market-freeing mechanism for a higher price for natural gas.

Mr. YATES. When you say "we," I thought the Federal Power Commission was an independent agency.

Dr. WHITAKER. They are. We, the administration, if I may finish, very strongly backed what is known as the Murphy bill, which would give sanctity of contract, and that has not passed. Sanctity of contract would in effect mean that once a rate for gas was set through interstate pipelines, and the FPC approved it, that it would not retroactively be changed, which would give them a better economic basis to proceed.

I would like you to amplify on the Murphy bill if you will.

MAJOR PROVISIONS OF MURPHY BILL

Dr. LAY. That bill had two or three main features. One was that once a contract was approved by the FPC, then the Federal Power Commission at some future date could not retroactively reduce the rate on that contract. In other words, it removed the uncertainty, that even though you had a contract price approved today, 5 years from now a different Commission might lower the price, which does tend to discourage investment in this particular kind of business.

Second, it allowed the Federal Power Commission to use different standards and criteria in setting rates.

As you probably know, currently most of the producer rates are set on what is referred to as the public utility cost-of-service rate base method, which means that you use historical costs, you use rate base, the types of things that you can compute fairly accurately for a public utility, but you cannot compute hardly at all for a producer who produces joint products and has multiple investments, multiple sizes, and so on.

Under the Murphy bill, the Commission would be allowed to also look at market criteria, supply-demand factors—for instance, intrastate prices—and make a determination on the basis of economic and market variables as well as the cost data, making for more flexibility and less rigidity and thus help stimulate development.

Mr. YATES. Under the criteria employed by the Federal Power Commission prior to its recent decision, what was the return allowed to the wellhead producers?

Dr. LAY. They allowed 12 percent and then went to 15 percent, but that is a bogey number, for two or three reasons.

One is, they use historical costs. In many cases, by the time you set the rates, you are using data from 3 to 5 or 7 years old. So you are allowing 15 percent on costs that might be 5 or 7 years old. By the time they get the rate into effect, it might be substantially less than that.

Secondly, to get the cost data—you cannot get accurate cost data from any source. So what the Commission did during the 1960's was to send out questionnaires to the different producers asking them what it cost to produce natural gas. One interesting thing is that the questionnaires were sent to the producers that were still in the producing business. They never got responses back from producers who lost so much money they went out of business.

So it is kind of a natural bias to give you the most optimistic results.

ENERGY RESOURCE RESERVES

Mr. YATES. Does Interior know what our known reserves are for oil and gas, and what our potentials are?

Dr. WHITAKER. Yes, as much as any geologist can know, they do. Our reserves, through the U.S. Geological Survey and BLM estimates combined, are that our proven reserves are of the order of 45 billion barrels of oil. That is about nine times our 1971 production. And our proven reserves of natural gas are of the order of 270 trillion cubic feet. Unproven reserves are much higher; in the case of oil, 450 billion barrels. In the case of gas, 2,100 trillion cubic feet, or, in more comprehensive terms, about 100 times our 1971 production of gas.

Mr. YATES. The House Committee on Small Business has made the assertion that Interior has never made a survey of its own of our gas and oil reserves, but relies on industry surveys. Is this a correct statement?

Dr. LAY. That is virtually correct. The Geological Survey estimates resources, which are the potential reserves. I said it is virtually correct. There are a lot of exceptions. The reserve data do basically come through industry sources. Our geologists in Geological Survey and elsewhere dissect those, given the information we have, and revise or interpret them.

There are specific audits not necessarily by Interior, but FPC has done audits on natural gas reserves. Right now there is an elaborate natural gas study trying to collect the total reserves of the United States.

Mr. YATES. By whom?

Dr. LAY. By the FPC, using their own and our geologists. We are working with them on this, using all of the data available in the public domain.

Mr. YATES. In other words, this will be a Government survey?

Dr. LAY. This will be a Government estimate. This is probably an area where we need to do more work.

Mr. YATES. When you say "we," you are talking about the Government. We probably need a better reserve estimating capability in the U.S. Government.

We should have done this years ago in Interior, should we not?

Dr. LAY. Probably so, but as you know, there was not the same urgency attached to the energy problem as there is today.

Mr. YATES. Perhaps if we had done it years ago, there would not be the urgency now.

Dr. LAY. That is right.

Mrs. HANSEN. We tried to help.

Mr. LONG. I am intrigued by the statement that the Canadians are now keeping oil from going out of Canada in order to conserve their natural resources.

For a long, long time we here kept oil from coming into the United States, and we have been told that this was a decision for conserving American oil, encouraging us to drill and all that, which always puzzled me because I always thought a good conservation program would mean using foreign oil and keeping your own.

What role has the Interior Department taken in putting us on the right track which we finally have gotten onto, I believe, by letting oil into the country and abolishing these quotas? Have we abolished all these quotas?

Dr. LAY. No.

Mr. YATES. We still have quotas?

Dr. LAY. Yes.

Mr. YATES. Why do we have any quotas? Why do we not use the Canadian system, not let the oil out, but let it in?

Dr. LAY. That is not our problem. What is the problem is that although there is a certain intuitive attractiveness to using foreign oil, there are two or three hard considerations.

One is the national security consideration. If the foreign folks decided to cut off our supply, in our economic system then you have a problem.

Second, the problem that is increasing in importance, is the economic security problem. Last year the negative trade balance resulting from energy imports was about $4 billion.

As you know, the total balance-of-trade deficit last year was about $6 billion. We are estimating if current trends continue by the middle 1980's we will be sending $25 billion to $30 billion per year into the OPEC countries; in other words, an order of magnitude of four to six times our total balance-of-trade deficit last year.

Mr. YATES. You do not think we have any shortage of oil, in the United States?

Dr. LAY. Temporarily, yes, but not as far as resources.

Dr. WHITAKER. In the pipeline, not in the ground.

Mr. LONG. Not in the ground. It is not a real problem, it is just temporary?

Dr. WHITAKER. Yes, it is a real problem because the economics do not seem to be there to have the oil companies do most of their drilling in this country primarily with the price of gas very low.

Mrs. HANSEN. Mr. Secretary, in your own statement on domestic oil and gas, which you prepared very courteously, you say approximately two barrels of oil remain in the ground for every barrel produced, and the percentage of oil in place that can be produced has been increasing slowly, with the application of techniques to increase recovery. This is one of your major problems.

We will get into this subject at greater depth with the Geological Survey and some of the other agencies. But it is true that we have not developed the techniques to get all the oil out.

Dr. WHITAKER. That is perfectly true, if you refer to secondary and tertiary recovery.

Mrs. HANSEN. That is right.

Dr. WHITAKER. I personally have some reluctance to get into the financing of that when I feel it is very much in the private area, and if the price of oil were higher, the technology would be there.

Mrs. HANSEN. You mean, in other words, nothing could be done about it until then?

Dr. WHITAKER. Yes, something could be done about it. There could be more R. & D. than there is, but I am suspect that the Federal R. & D. would make the oil companies get any more secondary or tertiary recovery because the price is not right.

Mrs. HANSEN. Because the economics is not there?

Dr. WHITAKER. That is right.

DOMESTIC REFINERIES

Mr. YATES. I had one more question.

I read from a statement made by Steven Wakefield, Deputy Assistant Secretary for energy programs—is he still with the Department?

Dr. WHITAKER. Yes.

Mr. YATES. This is a statement he made on November 16 of 1972. He said domestic refining capacity is a rapidly increasing problem. We are now operating around 90 percent of present capacity and no refineries are scheduled to be constructed after this year.

Suppose we do make some new oil finds, what are we going to do without refineries?

Dr. LAY. We are importing about a third of our crude into those refineries. What Mr. Wakefield is saying is this year we cross over the point where we can in fact refine most of our petroleum products. A third of that is imported crude and if you get the domestic industry to produce more, you can then back out the foreign crude. That is the short-term answer.

A longer term answer is to build more capacity.

Mr. YATES. Why does not industry build more refineries?

Dr. WHITAKER. Because the environmental problem is one of our——

Mr. YATES. That is too easy a statement. How long ago were refineries built?

Dr. LAY. There is a new one that came onstream within the last month or two.

Mr. YATES. That is all.

Mrs. HANSEN. Where is that located?

Dr. LAY. Joliet, Ill.

Mrs. HANSEN. How about your refineries in the coastal regions? You have had some considered in Maine and in other areas along the Atlantic coast. What happened to these facilities?

Dr. LAY. They have siting problems and environmental problems. There are a number of major refineries proposed, but the siting has been a problem.

Dr. WHITAKER. No one wants a refinery next to where they live; same with the airport, same problem.

Mrs. HANSEN. Do you have the same problems on the west coast?

Dr. LAY. Yes, Madam Chairman, increasingly. Of course, proposition 20 in California means you cannot site anything within a thousand yards from the coast without going through these regional siting boards which have not been set up. It is going to be a slow process.

Mrs. HANSEN. I read in the Washington papers you have had some difficulty in the Anacortes refinery.

Dr. LAY. I am not familiar with that. I understand there is one very clean refinery in that area. That is my understanding, but I am not familiar with the problem.

Mr. YATES. How many applications for refineries are made that have been held up by environmental statements?

Mr. CARTER. There is not much Federal approval required.

Dr. WHITAKER. It is a State approval. I do not know that we would know.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

The Federal Government is not involved in issuing permits for the construction of oil refineries. This matter is handled either through State or local governments depending on the location. In some cases the matter has been handled by local city councils exclusively. In other cases the permission must be obtained from certain State bodies. For example, in the State of Maine all such applications are reviewed by the Maine Environmental Improvement Commission.

SHORTAGE OF OIL REFINERIES

Dr. LAY. There are other reasons they are not being built. One of them is the uncertainty concerning the import program. A refiner needs to know what our policy might be vis-a-vis product imports. If you have to use a large percentage of domestic crude while somebody else is going to sit offshore with a superports and with foreign crude he can compete much better in some markets than you can.

Mr. YATES. But the lack of refineries is a definite bottleneck.

Dr. LAY. Very definitely. It gives us a lot less flexibility even using the crude we have. From the standpoint of national security, it makes the problem more severe when you rely on foreign products.

Mr. YATES. Would it serve the purpose if the Government were to build a refinery?

Dr. LAY. No, sir; I do not think so. It is our position that the refineries are not being built because of present policies. If you could find the site to build it and if the policies were conducive to building it, private industry would be happy to do it.

Mr. YATES. What are the policies that have to be changed?

Dr. LAY. The import policy. This question will be resolved within the next month or two.

Mr. YATES. That is always fluctuating on the basis of what your administration does. I was under the impression that the oil industry has wanted this type of control against imports.

Dr. LAY. You are talking about the quota system.

Mr. YATES. That is right.

Dr. LAY. But the main problem that the refinery industry faces is one that there are exemptions on products. That creates a disincentive to build a U.S. refinery.

The second one, of course, is the availability of crude. Under the quota system you could in fact build a refinery and then not be able to get enough crude to keep it running. Those are two problems which need to be handled. Once those are handled, the economies at least will not necessarily dictate foreign refineries.

The third would be the environmental problem, which is one we have to work out, we will have to balance this out. If there are going to be refineries, you have to have areas to build them in.

Mr. YATES. You have to have refineries?

Dr. LAY. If you want to refine petroleum products.

Mr. YATES. And you want petroleum products, therefore we need refineries?

Dr. LAY. Yes.

Mr. YATES. Thank you. That is all.

Mrs. HANSEN. Mr. McDade?

SHORTAGE OF HOME-HEATING FUEL

Mr. MCDADE. We recently experienced, as you know, a shortage in the United States particularly of No. 2 home-heating fuel. Why in your judgment did that shortage occur?

Dr. LAY. I can give you about six or seven reasons. It is really a combination of all of these.

One is, we undoubtedly had a colder winter than we have had recently, both colder, earlier, and very wet crops to go with it in the Midwest. That made it very difficult.

Second, the gas curtailments were much more severe than had been anticipated. Throughout that area the natural gas companies had to curtail their service, so then the people that were getting natural gas tried to shift to No. 2 oil, putting additional pressure there.

Mr. MCDADE. Was that curtailment because of lack of supply?

Dr. LAY. Lack of supply?

Mr. MCDADE. Your comments before on the amount of crude imported vis-a-vis liquefied natural gas were in sharp contrast. You indicated we were importing 5 percent of our requirements.

Dr. LAY. Less than 5 percent of liquefied natural gas right now.

Mr. MCDADE. That is an available substitute?

Dr. LAY. It would be an available substitute, but the liquefied natural gas industry just developed recently.

Mr. MCDADE. Go back to your narrative and educate me a bit. You indicated why there was a dislocation in the Midwest because of the severe winter and the requirement to heat the crops.

Dr. LAY. Yes; you had the natural gas shortages, you had another problem which cannot be quantified, but when the Price Commission froze prices in August of 1971, they froze heating oil at its summer low and the gasoline prices at summer high levels. That did two things to us; there was an incentive to produce gasoline instead of heating oil.

Mr. MCDADE. When you say that, do you mean automobile gas or for heating?

Dr. LAY. For automobiles.

Second, the thing that is hardest to quantify is the inventory problem because once the price of fuel oil was frozen at summer levels, there was no incentive for anybody to buy it up early and store it, like

they had traditionally. So everybody expected they would buy their fuel oil in autumn, instead of July.

So while the inventories were down a bit, they were down much more than we thought if you had taken this into account. The transportation system did not allow the industry to adjust to these situations fast enough to eliminate some hardships.

Mr. McDade. Did the Department of Interior have anything other than an advisory role in this emergency? I know OEP was the lead governmental agency.

Dr. Lay. Yes, sir. Ours was mainly advisory.

Mr. McDade. To OEP?

Dr. Lay. To OEP. Our Office of Oil and Gas among its other functions was trying to track the problem and help relocate or locate problems as best they could, but this was plainly an advisory type role.

Mr. McDade. Were there any conclusions that you have been able to arrive at in the Department as to how we might avoid this occurrence again? I realize you factored in about six different variables.

Dr. Lay. One thing I did not mention, which makes it hard to say it is not going to happen again, was at the same time there was a worldwide shortage of low sulfur crude oil and products, which meant there was no possibility of getting more product real fast to move into that area. That is a situation that may remain tight for several months. Once we can get over the hump, make the adjustments to the low gas supply in the Midwest, it should not be so bad. That does not mean we will not have some problems this summer or next winter before we get into that point. We are looking for ways of getting there, for ways of helping out the distribution system.

We are looking at several things, but I cannot tell you if we solve the problem it is not going to happen again, because it still looks tight for several months.

Mr. McDade. Thank you, Doctor.

Mrs. Hansen. Mr. Wyatt, do you have any questions?

Mr. Wyatt. I have no questions.

Mrs. Hansen. Mr. Veysey?

Mr. Veysey. No questions.

Mr. McKay. Madam Chairman, one quick question.

Mrs. Hansen. Yes.

CAPPING GAS WELLS

Mr. McKay. We are talking about all these shortages, yet during the crisis, on television they indicated there are a number of wells not even being capped, the gas is escaping without any attempt to cap them. Is there any reason why the Interior Department should not make a regulation requiring them to at least be capped, if not brought on line?

Dr. Lay. This is the problem and Dr. Whitaker has taken some action here, I think.

Dr. Whitaker. I asked the same question, and I am looking into the answer, as soon as I got aboard.

Dr. Lay. Keep in mind that although that makes a good lead story, it is a very small percentage of the total gas being produced.

Mr. McKay. But if we are running short, if you have even a few thousand feet running up out of one well——

Dr. LAY. Yes, and from the conservation angle you have a problem. But at the same time you cap the gas, you cap the oil. In some cases the gas is not being saved, because either the pipeline to the well is not completed, or maybe the gas is not in economic quantities to warrant bringing out a pipeline from shore to pick it up.

If you decide to cap it today, then you also have to close down the oil production until you find something to do with that gas, other than spew it out in the air. So in capping the gas, we may reduce our oil supply temporarily.

As I indicated, we are in a very tight situation on crude oil. So in the process of conserving or trying to save the gas, we give up quite a bit of oil.

Mr. MCKAY. You are tight on gas too, are you not?

Dr. LAY. On both.

Mr. MCKAY. You had better not lose any of either.

Dr. LAY. We hope not. We have initiated a study a few days ago to try to find out the solution.

DEPARTMENTAL REORGANIZATION

Mrs. HANSEN. We will return to this oil matter in a few minutes. You have touched briefly on Department of the Interior reorganization. What further reorganizations do you expect in the near future?

Dr. WHITAKER. Madam Chairman, under Assistant Secretary Reed, we will have Park Service, BOR, and Bureau of Sports Fishery. I have outlined briefly for you already in my statement the energy situation. Under "Land and Water Resources" and Assistant Secretary Horton, we will have an Office of Land Use and Water Planning. That would be organized, particularly, to be ready for implementation of the land use law, if it is passed this year. Then we would have the Bureau of Reclamation and the Office of Water Resources Research.

Mrs. HANSEN. What is the status of the land use legislation?

Dr. WHITAKER. It almost passed the Senate last year. It didn't have much luck in the House, as I recall. We hope to get it passed this year. I would make an optimistic estimate that sometime late this year we will have a land use bill.

There is only one other box there. Under Mr. Horton's domain would be the Office of Water Resources, which would include the Office of Saline Water and the Office of Water Resources Research. I think I mentioned the main change up above on that next line, which is to go back to a system where the Assistant Secretary will have the program development and budget preparation functions. It used to be under the management function. The Secretary has experimented for 2 years with it under the Assistant Secretary for Management and Budget and has decided on this change, and I think he is right.

Mrs. HANSEN. Hasn't he left the Department?

Mr. HITE. Yes, ma'am. He has left the Department.

Dr. WHITAKER. The nut of the problem is how do you get policy?

If you get policy too far away from money you are in an ivory-tower-oriented-unreal world. He very much wants to get policy and budget under one man. I think that is the right thing to do.

Mrs. HANSEN. What cost savings have you realized or will you realize because of your reorganization?

Dr. WHITAKER. I am sorry, I don't know the answer to that.

Mrs. HANSEN. You say, "Substantial cost savings." What do you call substantial?

Mr. HITE. This reorganization is not designed to create any additional costs in personnel.

Mrs. HANSEN. That isn't what you say. You say:

> The reorganization can be expected to have several important benefits; increased efficiencies in the administration of Department programs, overall decreases in total personnel ceiling and grade levels, and substantial cost savings in Department operations.

Mr. HITE. Madam Chairman, our employment ceiling for fiscal 1973 in terms of permanent personnel is 56,956, I believe. We will go down by 56 positions, and a modest decrease in 1974 to the level of 56,900.

We also have ongoing, and have had for the last 2 fiscal years, a grade deescalation policy which is prevalent throughout the executive branch. We hope to continue that and pursue that in conjunction with the reorganization.

Mrs. HANSEN. I bet that is popular.

EXPENDITURES FOR REDECORATING OFFICE SPACE

How much redecorating in the executive suites will be required as a result of this reorganization?

Mr. HITE. I would hope, Mrs. Hansen, that we would have no redecorating costs over and above the maintenance cost.

Mrs. HANSEN. That is what I have been listening to for some time.

Mr. HITE. Madam Chairman, I have never come to you and represented that we were not redecorating when we were.

Mrs. HANSEN. I know you haven't.

Mr. HITE. About 2 years ago we had a hearing at which time I emerged as the principal witness and tried to pick up the pieces.

Mrs. HANSEN. Let's hear about the pieces before you embark on another one of these adventures.

Mr. HITE. We hear those words loud and clear.

Mrs. HANSEN. When you repair your gym, we would like to know the costs that are involved.

Mr. HITE. I understand, Mrs. Hansen.

ORGANIZATION FOR ENERGY AND MINERALS

Mrs. HANSEN. Your new chart shows new offices for energy and mineral data analysis, energy conservation, and land use and water planning. Are these activities to be transferred from existing bureaus?

Mr. LAY. On the first one, most of the energy activities will be transferred.

Mrs. HANSEN. How about land use and water planning?

Dr. WHITAKER. I don't think there is any new personnel. I know there is no new personnel involved in that. It will be transfers.

SAVINGS FROM REDUCTIONS IN TRAVEL

Mrs. HANSEN. Please provide for the record a detailed listing, by Bureau, of savings realized from the President's travel reduction program.

(The information follows:)

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DEPARTMENT OF THE INTERIOR

Special Analysis of Travel by Bureau or Office
F. Y. 1973
(Dollars in thousands)

Bureau or Office	F.Y. 1973 Budget Document	Planned Reductions	F.Y. 1973 Reduced Level
Bureau of Land Management	5,398.0	-833.0	4,565.0
Bureau of Indian Affairs	13,017.0	-1,675.3	11,341.7
Bureau of Outdoor Recreation	965.0	-251.3	713.7
Territorial Affairs	234.0	-46.6	187.4
Geological Survey	7,581.0	-535.0	7,046.0
Bureau of Mines	5,799.0	-578.7	5,220.3
Office of Coal Research	62.0	--	62.0
Office of Oil and Gas	64.0	--	64.0
Bureau of Sport Fisheries & Wildlife	3,806.0	-704.7	3,101.3
National Park Service	5,565.0	-965.0	4,600.0
Bureau of Reclamation	4,389.0	-1,123.4	3,265.6
Alaska Power Administration	40.0	-2.0	38.0
Bonneville Power Administration	3,100.0	-200.0	2,900.0
Southeastern Power Administration	21.0	-2.0	19.0
Southwestern Power Administration	236.0	-36.9	199.1
Office of Saline Water	192.0	-44.1	147.9
Office of Water Resources Research	27.0	-2.0	25.0
Office of the Solicitor	213.0	--	213.0
Office of the Secretary	1,615.0	--	1,615.0
Total	52,324.0	-7,000.0	45,324.0

Mrs. HANSEN. What kinds of travel did you curtail?

Mr. HITE. Primarily it was administrative travel, those types of travel which include conferences, and so forth.

Mrs. HANSEN. The committee has a very dismal view of your cutting travel to curtail, for example, inspectors in the mine safety field. We have a dismal view of cutting costs to inspect the activities of your forest operations, your operations that are mainly health and safety and well-being of either the land or the people. We have a dismal view of cuts that will hurt management.

Mr. HITE. I understand. Mr. Wiles came up with a really brilliant category for savings of travel in the department and we have maintained the funding for this mission travel, if you will, to meet the operation and maintenance requirements.

Mrs. HANSEN. Has every bureau in this Government decided to go on a mission spree? I hear about missions in defense and missions in foreign aid.

You are going to get so you sound just like the Department of Defense.

INCREASED PAY COSTS

On January 26, 1973, OMB issued a bulletin (No. 73–4) which stated that "agencies will absorb the full 1973 costs of 1973 pay raises, with the exception of those already transmitted with the 1974 budget." We have already held hearings on those pay cost supplementals transmitted with the budget.

Can you tell the committee what the total fiscal year 1973 and 1974 costs are, by agency, for the pay raises which became effective in January? Insert the information in the record.

Mr. WILES. For both years we will do it.

(The information follows:)

DEPARTMENT OF THE INTERIOR
SUMMARY

Analysis of 1973 and 1974 Increased Pay Costs
(Executive Order 11691 unless Otherwise Identified)

Organizational Unit And Account Title	Fiscal Year 1973 Direct Pay	Related Cost	Total	Fiscal Year 1974 Direct Pay	Related Cost	Total
Bureau of Land Management	$1,533,000	$ 160,000	$1,693,000	$3,243,000	$ 387,000	$3,630,000
Bureau of Indian Affairs	6,517,431	651,743	7,169,174	10,656,829	1,065,683	11,722,512
E.O. 11691	(4,077,133)	(407,713)	(4,484,846)	(6,512,809)	(651,281)	(7,164,090)
Wage Board	(2,440,298)	(244,030)	(2,684,328)	(4,144,020)	(414,402)	(4,558,422)
Territorial Affairs	123,000	11,000	134,000	250,000	20,000	270,000
Bureau of Outdoor Recreation	368,300	29,900	398,200	757,800	53,500	811,300
Geological Survey	3,237,000	291,000	3,528,000	4,890,000	442,000	5,332,000
E.O. 11691	(3,037,000)	(284,000)	(3,321,000)	(4,651,000)	(433,000)	(5,084,000)
Wage Board	(101,000)	(4,000)	(105,000)	(122,000)	(5,000)	(127,000)
Adm. Action	(99,000)	(3,000)	(102,000)	(117,000)	(4,000)	(121,000)
Bureau of Mines	2,136,300	170,840	2,307,140	4,443,000	356,000	4,799,000
E.O. 11691	(1,969,375)	(157,495)	(2,126,870)	(4,096,000)	(328,000)	(4,424,000)
Wage Board	(166,925)	(13,345)	(180,270)	(347,000)	(28,000)	(375,000)
Office of Coal Research	21,382	1,539	22,921	46,300	3,700	50,000
Office of Oil and Gas	30,172	2,172	32,344	55,500	4,500	60,000
Bureau of Sport Fisheries and Wildlife	2,133,700	191,900	2,325,600	3,597,200	335,600	3,932,800[1]
E.O. 11691	(1,308,000)	(117,600)	(1,425,600)	(2,771,500)	(261,300)	(3,032,800)
Wage Board	(825,700)	(74,300)	(900,000)	(825,700)	(74,300)	(900,000)[1]
National Park Service	7,020,270	521,230	7,541,500	6,118,900	429,100	6,558,000[2][3]
E.O. 11691	(2,289,270	(164,830)	(2,454,100)	(5,128,700)	(369,300)	(5,498,000)
Wage Board	(1,564,600)	(100,400)	(1,665,000)	(779,800)	(56,200)	(836,000)[3]
Park Police	(3,166,400)	(256,000)	(3,422,400)	(210,400)	(13,600)	(224,000)[2]
Bureau of Reclamation	2,986,500	293,500	3,280,000	5,575,000	550,000	6,125,000
E.O. 11691	(2,374,300)	(233,600)	(2,607,900)	(4,825,000)	(475,000)	(5,300,000)
Wage Board	(612,200)	(59,900)	(672,100)	(750,000)	(75,000)	(825,000)
Alaska Power Administration	10,676	776	11,452	15,107	967	16,074
Bonneville Power Administration	1,080,000	280,000	1,360,000	2,745,000	195,000	2,940,000
E.O. 11691	(800,000)	(190,000)	(990,000)	(1,635,000)	(115,000)	(1,750,000)
Wage Board	(280,000)	(90,000)	(370,000)	(1,110,000)	(80,000)	(1,190,000)
Southeastern Power Administration	12,000	1,000	13,000	26,000	3,000	29,000
Southwestern Power Administration	71,500	6,300	77,800	136,100	10,800	146,900
E.O. 11691	(48,500)	(4,300)	(52,800)	(95,350)	(8,550)	(103,900)
Wage Board	(23,000)	(2,000)	(25,000)	(40,750)	(2,250)	(43,000)

DEPARTMENT OF THE INTERIOR
SUMMARY

Analysis of 1073 and 1974 Increased Pay Costs
(Executive Order 11691 unless Otherwise Identified)

Organizational Unit and Account Title	Fiscal Year 1973 Direct Pay	Related Cost	Total	Fiscal Year 1974 Direct Pay	Related Cost	Total
Office of Water Resources Research	20,509	1,477	21,986	42,500	3,500	46,000
Office of Saline Water	62,281	4,594	66,875	50,000	4,000	54,000
Office of the Solicitor	148,832	13,369	162,201	321,000	29,000	350,000
Office of the Secretary	474,000	33,500	507,500	1,054,000	84,000	1,138,000
Total All Pay Increases	27,986,853	2,665,840	30,652,693	44,023,236	3,987,350	48,010,586
E.O. 11691	(18,707,730)	(1,818,865)	(20,526,595)	(35,576,566)	(3,234,598)	(38,811,164)
Wage Board	(6,013,723)	(587,975)	(6,601,698)	(8,119,270)	(735,152)	(8,854,422)
Park Police	(3,166,400)	(256,000)	(3,422,400)	(210,400)	(13,600)	(224,000)
Adm. Action	(99,000)	(3,000)	(102,000)	(117,000)	(4,000)	(121,000)

1/ Excludes $900,000 (1973 Supplemental) wage board increased pay costs included in the 1974 budget.

2/ Excludes $1,442,000 to U.S. Park Police increased pay costs (1973 Supplemental) included in the 1974 budget.

3/ Excludes $2,598,000 (1973 Supplemental) and $1,803,000 (F.Y. 1974) wage board increased pay costs included in the 1974 budget.

DEPARTMENT OF THE INTERIOR
SUMMARY

Analysis of 1973 and 1974 Increased Pay Costs

	Fiscal Year 1973			Fiscal Year 1974		
	Direct Pay	Related Cost	Total	Direct Pay	Related Cost	Total
Interior Bill and Related Agencies	$23,824,377	$2,084,134	$25,908,511	$35,521,429	$3,227,183	$38,748,612
Public Works Bill	4,162,476	581,706	4,744,182	8,501,807	760,167	9,261,974
GRAND TOTAL	27,986,853	2,665,840	30,652,693	44,023,236	3,987,350	48,010,586

PAY COST ABSORPTION

Mrs. HANSEN. What policy are you following in absorbing these costs. What programs are being cut in order to provide for these costs?

Mr. WILES. Basically the policy we are following is the utilization of savings from the personnel freeze. The bureaus are making every attempt to fully absorb their increased pay costs. We have made a proposal where we would absorb all of our pay costs and then be in a position where we can lift the personnel freeze. The bureaus have their own discretion as to where they will absorb these costs. Historically we have most always absorbed pay costs in our no-year construction, and also we have always absorbed costs in our permanent appropriations. What we are really talking to now is absorbing pay costs in the annual appropriations. If we applied the $7 million savings in travel and we are proposing to apply the $3 million in earthquake money, this would help with the absorption pay costs.

Mrs. HANSEN. That will be helpful.

EARTHQUAKE HAZARD PREDICTION RESEARCH

Mr. WILES. The earthquake prediction program was studied by Geological Survey and NOAA and the Office of Management and Budget as to who really should have this responsibility. That study was not completed until January, I believe, when the budget came up. At that late date they said they had no prejudice against the program but rather than start this year let it go over until the next year.

Mrs. HANSEN. Then why did you request funds last year in the budget? Don't you think OMB was lax in going through with the request when a final decision hadn't been made?

Mr. WILES. I don't know exactly where the problem arose between NOAA and Geological Survey at that point in time.

Mrs. HANSEN. Last year we honored many of your budget requests because we realize the earthquake problem has a major impact on many of our major cities, also on major resources. We are not going to consider this budget as if it were a holy writ.

Mr. WILES. We asked for an increase in earthquake work of $7 million: $4 million of that is apportioned in fiscal year 1973 to the Geological Survey. The $3 million they are not using is only that part that runs to the earthquake prediction program. It does not prejudice our requirement for getting started in fiscal year 1974.

BUDGET AMENDMENTS FOR FISCAL YEAR 1974 PAY COSTS

Mrs. HANSEN. The OMB bulletin also states that:

> It is not planned at this time to transmit amendments to the 1974 budget to cover the increased 1974 costs resulting from these pay raises.

Does your Department's 1974 budget provide for these pay cost increases?

Mr. WILES. We have made a pay cost study for 1973. We have not yet made a pay cost study for 1974. This we will have to do.

Mrs. HANSEN. So your budget does not reflect 1974 pay raises?

Mr. WILES. Our budget does not reflect the new pay raise. In other words, the budget was put together on the basis of the old pay rates.

Mrs. HANSEN. But you knew the pay raise was pending.

Mr. WILES. The budget was put together starting back last September. The pay raise didn't come in until January, so the budget doesn't carry the new pay raise.

Mrs. HANSEN. I think you knew it was coming.

Mr. WILES. I believe that the President had an option in January as to whether or not to approve that pay raise. He exercised his option to approve it.

Mrs. HANSEN. But he had originally delayed it to take effect at a later date.

Mr. WILES. This pay raise, if I am correct, is not from legislation.

Mrs. HANSEN. No.

Mr. WILES. Back some time ago—I think two pay raises ago—we changed the system whereby the President has an option every year, I believe, to allow it or not.

Mrs. HANSEN. He didn't exercise any option on Congressmen, I may assure you of that. You better give us the details on this as we hear the Bureaus.

Mr. WILES. All right.

BUREAU OF MINES

Mr. MCDADE. As long as we are into the discussion of some of the items in the budget, I have noticed the cut in the budget estimates for 1974 in the Bureau of Mines, and the running together of the various accounts that have previously been separate, such as Health and Safety, and the other accounts. What does that $20 million cut reflect in the Bureau of Mines?

Mr. WILES. Basically, it's a nonrecurring item of $13 million for the construction of the Beckley Health and Safety Academy.

Mr. MCDADE. I have heard of that.

Mr. WILES. Yes, sir.

Mr. MCDADE. That is $13 million of it.

Mr. WILES. Yes.

Mrs. HANSEN. By the way, what have you done with the laboratory in West Virginia?

Mr. WILES. We haven't done anything with it yet. There are some letters that came up suggesting how it might be used. There has been no approval yet.

Mrs. HANSEN. Would you cut that project in exchange for some of your economies?

Mr. WILES. The proposal that has been sent up suggests other uses than the original use.

Mrs. HANSEN. We can suggest other uses.

Mr. MCDADE. Where is the $7 million over and above that?

Mr. WILES. Research and subsurface disposal of industrial wastes, $300,000; conversion of wood and organic waste oil, $899,000; oil shale research in the Bureau of Mines, $526,000.

Metallurgy, $1 million; mining extraction technology and explosive research, $700,000; data collection and analysis, $300,000; engineering evaluation and demonstration, $2.6 million; and the completion of the Mining Health and Safety Academy of $13 million.

I might go a little bit further, Mr. McDade. Some of these things that relate to energy, of course, would be things that would be requested in this new energy fund, if they would fit that criteria.

SPECIAL CONCERNS ON BUREAU OF MINES APPROPRIATION FOR FISCAL YEAR 1974

Mrs. HANSEN. In addition to your inquiry, Mr. McDade, I have received a copy of a letter from Carl Perkins, chairman of the Committee on Education and Labor, and John Dent, chairman of the General Labor Subcommittee. It's directed to Mr. Ash.

We are deeply disturbed to learn that the administration, under the guise of improving management, has made the following recommendations in the budget it presented:

(a) that the Bureau of Mines' mine health and safety budget should be subsumed into, and co-mingled with, funds for the Bureau's general administration and its program of mineral resource conservation and development;

(b) that mine health and safety research for fiscal year 1974 should be cut by nearly $3 million; and

(c) that the provision in the Bureau's Appropriation Act, which prohibits the use of health and safety funds to pay public relations firms for promotional campaigns among coal miners, should be deleted.

He goes on at some length. You may want to read the letter, and then make some comments for the record of this hearing.

Dr. WHITAKER. We will do so, Madam Chairman.

Mr. MCDADE. What is this $3 million in health and safety research?

Mr. WILES. They had a total of roughly $31 million for health and safety research, and in 1974 they are reducing that by $2.868 million.

Mr. MCDADE. What programs are recommended to be curtailed?

Mr. WILES. I don't believe there are any specific things because they go out and let contracts for various types as they go through the year. You wouldn't be able to say at this point which ones you would not let.

Mrs. HANSEN. I think you should give us a detailed response to the points raised in the letter.

Mr. WILES. Yes, ma'am.

(The information follows:)

The following replies to the recommendations in the order listed above:

(a) For fiscal year 1974 the Department proposed to the Office of Management and Budget that the appropriation and activity patterns of certain of its bureaus be restructured. This was done with a view to simplifying the appropriation and activity structure as well as to reduce the number of appropriation items, thus eliminating considerable redundance and improving the budget presentation.

With this in mind, the three operating appropriations of the Bureau of Mines, which are annual appropriations and not available beyond the year for which appropriated (conservation and development of mineral resources, health and safety, and general administrative expenses), were combined into a single appropriation entitled "Mines and Minerals."

Within the consolidated appropriation, the former health and safety appropriation retained its identity as a separate activity entitled "Mine Health and Safety."

In revising the appropriation structure for the Bureau of Mines, it was emphasized that the activity categories must be sufficiently clear so as to provide a basis for analysis and evaluation of the various health and safety programs not only by the Office of Management and Budget, but by the Appropriation Committees of both the House and Senate as well. The result is that the Budget appendix for 1974 sets out not only the appropriation language, but each of the

activities carried on under that appropriation, including the activity for mine health and safety, and the five subactivities within that program, together with a narrative statement under each of the subactivities listed. Furthermore, the presentation to the Congress justifies in detail the programs under each of the subactivities.

Even though funds for the mine health and safety program are included in the single appropriation "Mines and Minerals," under an agreement the Department has with the Office of Management and Budget, and the House and Senate Appropriations Committees, any proposal to reprogram funds between the activities listed in the budget must have the prior approval of all of these three parties. Disapproval of any one is sufficient to prevent the reprograming. In other words, the committees have been assured that we will allocate the funds in accordance with the budget presentation as modified by the action of Congress, and that, under no circumstances, would we feel that the consolidation of appropriation items into one account would be construed as broadening our authority to transfer funds from one item to another.

(*b*) With respect to the $3 million decrease in health and safety research funding in fiscal year 1974, in the initial stages of the accelerated health and safety research program, numerous proposals were received and funded. As the program progressed, the less promising proposals were dropped or curtailed, thereby lowering the funding level. However, some of the research we are now doing might lead into areas that would merit expanded effort. If this happens, it may be necessary to increase again the level of funding to accommodate research in such areas as suppression of mine levels to reduce the incidence of hearing damage, and technology for prevention of black lung and other respirable diseases.

(*c*) The language prohibiting the use of health and safety funds to pay public relations firms for promotional campaigns among coal miners was deleted at the time of the consolidation in an effort to keep the appropriation language as short as possible. Should the Congress feel that this provision should again be included, we would have no objection.

FISCAL YEAR 1974 BUDGET FORMULATION POLICY

Mrs. HANSEN. Mr. Secretary, could you briefly describe for the committee the procedure and strategy used in formulating the 1974 budget?

Dr. WHITAKER. I think our basic answer to that is that we gave more emphasis to Indians, and energy, and the bicentenial, and less emphasis to saline water, for the reason I indicated earlier, that private enterprise, we felt, would carry on in this area. The other area we took emphasis off was——

Mr. MCKAY. Excuse me; are they carrying on in the saline research?

Dr. WHITAKER. Yes. The budget is nowhere as large as it was. As I was remarking this morning, Congressman, we are taking emphasis off water distillation projects and continuing emphasis on sea water membrane projects.

The other area where we are taking it off is in the Land and Water Conservation Fund. I know that parks are like motherhood, but we have hit a point here where we put a tremendous amount of money into land acquisition and into the grants to States. We have come to the point where federally we have unobligated funds of $111 million, and the States have unobligated funds of $128 million because their legislatures haven't passed matching money authorizations or they haven't completed their planning. It seemed like a good year to do some belt tightening.

The obligations are only down from, I believe, $87 million in 1973 to $80 million in 1974, in the Federal land acquisitions area.

FEDERAL LAND ACQUISITIONS UNDER LAND AND WATER CONSERVATION FUND

Mrs. HANSEN. On the Land and Water Fund, have you been unable to purchase land or what? The reason the Land and Water Fund was established was to be able to purchase land before the price escalated and before it was so costly to the people of the United States, that they couldn't afford it. I will give you a classic example. I think Point Reyes was authorized for what you testified was a correct amount. Since that time, land costs increasd enormously. This is the same with practically every park area in the United States.

Dr. WHITAKER. Yes. Unfortunately, it will jump more, and even more if we go to higher budgets and higher inflation.

To answer your question, Madam Chairman, our policy is one of willing buyer and willing seller as a first resort, and condemnation only as a very last resort.

Mrs. HANSEN. Please supply for the record when BOR testifies the percent of land acquired on a willing buyer—willing seller basis, that acquired by condemnation, and that acquired through the nature conservancy.

Dr. WHITAKER. Yes, I will be glad to have that entered in the record at the time they come up, Madam Chairman?

Mrs. HANSEN. That would be fine.

Mr. MCKAY. Would you add to those also those proposed for acquisition?

Mrs. HANSEN. Yes.

Dr. WHITAKER. All right.

ACQUISITION FOR NEW GATEWAY RECREATION AREAS

Mrs. HANSEN. Tell the National Park Service to have some very firm figures on the Eastern Gateway and the Western Gateway Parks as to what acquisition is going to be required.

Dr. WHITAKER. We will provide firm figures. You are referring to the amount of acquisitions in fiscal year 1974 of Gateway East and Gateway West?

Mrs. HANSEN. That is right. Also what the total proposed acquisition will be as it relates to each part of the program.

Dr. WHITAKER. All right. We would be glad to provide that.

(The information follows:)

With reference to amounts for land acquisition for the newly authorized areas of Golden Gate National Recreation Area, Calif., and Gateway National Recreation Area, New York and New Jersey, the following is furnished:

GOLDEN GATE NATIONAL RECREATION AREA

Authorized October 27, 1972, with a monetary limitation of $61,610,000. An amount of $200,000 has previously been reallocated by the Bureau of Outdoor Recreation in two separate actions for use at this area. In addition, there is a reprograming proposal currently pending before the Subcommittee on Interior and Related Agencies of the House and Senate Committee on Appropriations, which, if approved, will provide an additional reallocation of $5.9 million for the acquisition of land for the recreation area.

GATEWAY NATIONAL RECREATION AREA

Authorized October 27, 1972, with a monetary limitation of $12,125,000. An amount of $100,000 has previously been reallocated by the Bureau of Outdoor

Recretion for use at this area to cover expenses in the transfer of the Federal and State lands. Of this 26,172-acre area, 3,716 acres are already in Federal ownership, most of which is expected to be transferred, and 22,053 acres in other public ownership which is expected to be donated. Only 403 acres are in private ownership and this constitutes the beach area in front of the Breezy Point Cooperative. Thus the private land is contained in one ownership which will require the entire balance of $12,025,000 at one time. While it would be possible to obligate these funds in fiscal year 1974, acquisition can easily be deferred until fiscal year 1975 or beyond without any harm to the national recreation area.

OFFICE OF MANAGEMENT AND BUDGET FISCAL YEAR 1974 BUDGET ALLOWANCE FOR INTERIOR

Mrs. HANSEN. Did OMB give you specific bureau-by-bureau allowances or a single allowance for the whole Department?

Dr. WHITAKER. I honestly don't know the answer, because I was in transition. I would have to defer to Frank.

Mr. WILES. It depends on which stage of the budget preparation you speak of. We first started, as Secretary Butz was saying, when we got a planning allowance which was for the whole Department. Then when the budget itself came up in January we had budget allowances by bureaus.

Mrs. HANSEN. Then you decided your priorities within the Department?

Mr. WILES. That is right.

Mrs. HANSEN. So it's useless to blame OMB for the cuts in the kindergarten programs?

Mr. WILES. On the 1973 part, yes. The bureaus decided what projects would be placed in budgetary reserve, Madam Chairman.

Mrs. HANSEN. I am delighted to know that. What was the role of the bureau directors and assistant secretaries? Did they provide the guidelines for departmental presentation to OMB?

Mr. WILES. For the 1974 budget we had a budget committee. I believe in the early stages of that committee it was chaired by the late Dr. Pecora. That committee also had the Assistant Secretary for Management and Budget and Assistant Secretary for Program Planning. They had a total departmental allowance number. From that total allowance number the committee broke it down more or less into pieces that went to each Assistant Secretary. Then each Assistant Secretary divided his respective allowance among the bureaus under his jurisdiction. Basically that was the operation.

Mrs. HANSEN. What priorities did you follow in making the final budgetary allowances?

Mr. WILES. The first priority, of course, was to continue those programs that you want to keep going.

Mrs. HANSEN. I am delighted to hear that.

Mr. WILES. It takes roughly 90 percent of the planning allowance to continue ongoing programs that need to be kept going.

Mrs. HANSEN. Have you ever evaluated what shouldn't be continued?

Mr. WILES. Yes. We have evaluated that over a period of years.

Mrs. HANSEN. What have you eliminated?

Mr. HITE. First of all, when you look at payroll and personnel related costs, you are taking in a big chunk of the budget there. You are taking about more than half of the budget.

Mrs. HANSEN. I understand that, because this is a singularly manpower-oriented. These are agencies that require manpower. You don't run the Bureau of Land Management without people and you don't run the BIA without teachers. You don't run Geological Survey without people doing mapping. Isn't this correct?

Mr. HITE. That is correct, Mrs. Hansen.

Mrs. HANSEN. We are not buying hardware. We are not buying F–111's and whatnot. You are a managerial agency, a custodian, if you please, for public lands and people.

Mr. HITE. I think the budget would reflect that we took some hard looks at on-going programs. The Secretary has discussed the judgments made with respect to land and water funds and with respect to the obligations we have in connection with the pipeline on both the Federal and State side and of course the redirection of the Office of Saline Water. Of course, some final judgments were made in the Office of Saline Water. To some extent, as Mr. Wiles explained, even the reduction in the mine health and safety research program represented a setting of priorities and a dropping of some nonproductive research programs.

Mrs. HANSEN. Are your people in the Bureau of Mines prepared to validate their cuts in research as being nonproductive?

Mr. HITE. Yes, Ma'am. These are program judgments.

FISCAL YEAR 1974 PROGRAM FOR INDIAN AFFAIRS

Mrs. HANSEN. I do want to ask about the $25 million that you propose to spend for the EDA functions. Is this not correct?

Dr. WHITAKER. That is correct, Madam Chairman.

Mrs. HANSEN. Do you have to have specific authorization? We appropriated funds a few years ago for a development program for the Indians and the chairman of the Interior Committee at that time raised the point with the Appropriations Committee that authorization was needed. He said the authorization had never been approved. Before we run into similar problems and the Indians are deprived of money that they need very badly for these programs that are literally replacing EDA programs, we better know what the status on authorization is.

Dr. WHITAKER. The $25 million you refer to, Madam Chairman, will be put in what we refer to now as provisional block grants. That is sort of like provisional revenue sharing.

Mrs. HANSEN. We have already heard too much about revenue sharing.

Dr. WHITAKER. That is about what it is. In other words, it would take the EDA funds, where previously the Secretary of Commerce would make a decision case by case, and put that into a provisional block grant so that it would be up to the Indian tribes themselves to decide how to spend that money.

Mrs. HANSEN. Will you give them technical advice on their programing? I am sure you realize that they lack the expertise and technical knowledge in many of these fields. It is due to our own inability to have provided proper education for them as rapidly as we should have.

Let's take a program that requires substantial engineering expertise. Will you provide the expertise?

Dr. WHITAKER. We will leave that option to the Indian tribe. They can contract for it and get a consultant, or they can use BIA, or they can do it and reverse track. They could start out with a consultant and if they felt they got into some trouble and wanted to go back to BIA supervision of it, that would be their option.

I recognize there could be some loss of efficiency in doing that, but one has to walk before he runs. I think it's a good approach.

Mrs. HANSEN. Will the tribes determine the priorities? I am sure you are aware that it isn't only Indian people but much of the United States which is afflicted with not determining what the priorities should be. We are always building something that later doesn't turn out to be effective.

I think the Indians, since they have such desperate problems, ought to have the very best consultants available to them.

Dr. WHITAKER. We will consult with them. But the decision as to what are first things would be theirs in the first instance, if they choose that.

MECHANISM TO PERMIT PURCHASE OF FEE LANDS BY INDIANS

Mrs. HANSEN. The Indians themselves have been very anxious to have some mechanism by which the tribes can increase their tribal lands by the purchase of fee land which is in checkerboard ownership in reservations. We will use the example of the Quinault Indians, who could have a much more manageable timber program if they could purchase these lands, but they do not have the ability to buy this land.

Does your Department contemplate, or have you contemplated, any kind of program to purchase the land when it becomes available? I discussed this with Secretary Udall several years ago. We had the problem on the beaches where the fee ownership was causing litter and debris along the shores between Moclips and Taholah. I didn't get the complete answer then, and there hasn't been answers since.

So now the Indians are very interested in trying to improve their economy and would like some mechanism by which they can acquire the fee land as it is available.

Dr. WHITAKER. I don't know the answer to your question. Mrs. Hansen, do you mean in a checkerboard situation, say, between private land and Indian land, they would have first option or some building right?

Mrs. HANSEN. They would have first option, but also their need is funds to be able to purchase this land. Most Indian tribes are very poor.

Here is a reservation which is 140 acres. It's fee land. The estate is willing to sell at a modest amount. The tribe has no money with which to purchase this land and eliminate this checkerboard.

I have been working on a bill, but we have some great unanswered questions. For example, should it be a revolving fund? What kind of mechanism should it entail? Because it could be in the same context as the $25 million economic development program.

Dr. WHITAKER. Off the top of the head, I would think they could make a decision how to spend some of that $25 million just for that purpose. There is a difficult question here—should they have first

option? I think that is a very good avenue of thought. I will be responsive to getting something down to you.

Mrs. HANSEN. We would like the answers at the time of the BIA hearings. We have scheduled their hearing late enough so we will have a complete record on the problems they have had.

Mr. WILES. There has to be legislation on this $25 million that will be coming up.

Mrs. HANSEN. The legislation should be approved before it is included in your appropriation.

Mr. WILES. That $25 million is not in the budget we are considering at the moment. It's carried in the budget for a later transmittal after the enactment of the legislation.

Mrs. HANSEN. As we consider the total Indian program we will certainly want to keep this in mind. I am very glad we have the frank answer that it does involve legislation.

BUDGET FOR TERRITORIAL AFFAIRS

What has happened to the status of Micronesia, aside from the $10 million of theirs which is impounded?

Dr. WHITAKER. The Micronesian negotiations seem essentially to be two-track negotiations at this point. I say two track generally, with the Marianas tending toward a more permanent association with the United States and the other five subdivisions perhaps tending toward a looser association with the United States.

I am told by Ambassador Haydn Williams that there have been some difficulties here where the representatives of Micronesia, who are also Congressmen of Micronesia, have negotiated toward the general thrust of control over their internal affairs and giving the responsibility of defense and foreign affairs to the United States. However, at the same time, after those negotiations start, then they go back to the Micronesian Congress and some of the individual members themselves vote against that position which, frankly, is giving us some problems.

I understand further that the Micronesian Congress has asked now that two separate packages be negotiated, one tending toward association with the United States and one away from association with the United States, which makes it a difficult diplomatic thing, to say the least.

Mrs. HANSEN. Don't you have disagreement between the islands themselves?

Dr. WHITAKER. Yes; as I indicated, of the six groups, the Marianas are tending toward association with the United States and the others I wouldn't say are against it but are not as much for it as the Marianas.

Mrs. HANSEN. You inform the High Commissioner that when he appears he had better have a good report on the progress of school construction in the eastern sector.

Mr. YATES. Does the administration have any position on what our association should be with the Trust Territories?

Dr. WHITAKER. No position, in other words, than that it has to be freely negotiated with them, obviously under our trusteeship arrangement with them.

Mr. YATES. Do you have any ideas as to the kind of relationship that you want?

Dr. WHITAKER. I can speak to the kind of relationship that is evolving, and that is one of internal control over their affairs with the exception of the United States taking the foreign affairs responsibility and the defense capability.

Mrs. HANSEN. Does that mean that they would have the responsibility of raising their own revenue and managing their own internal affairs?

Dr. WHITAKER. I cannot answer that. I don't know specifically enough about it, Madam Chairman. I cannot imagine that they would be in a position to do that, from what I understand about the economy at this time.

IMPOUNDMENT OF FUNDS FOR TERRITORIES

Mrs. HANSEN. The $10 million that you impounded, what does this involve?

Mr. WILES. It's all construction money, Madam Chairman. It will carry over to next year and will give them a chance to catch up on their construction program.

Mrs. HANSEN. Are they still having difficulties with their supplies and their personnel?

Mr. WILES. It's very difficult to construct in those islands and get contract help.

MINE HEALTH AND SAFETY STATISTICS

Mrs. HANSEN. Please insert in the record for the last 3 years the death and accident statistics in your coal and nonmetallic mines.

Dr. WHITAKER. I can give you some of those statistics right now, if you wish them.

Mrs. HANSEN. Please do.

Dr. WHITAKER. There were 181 deaths in 1971. I am now talking about coal mine health and safety. There were 260 deaths in 1970; 203 in 1969; and 311 in 1968.

Mrs. HANSEN. It's going down, then.

Dr. WHITAKER. Yes; it is going down. That is all I have, I can give you the rest of it on the metallic program for the record.

(The information follows.)

DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

Fatal Coal Mine Injuries

Year	Fatal Injuries	Frequency Rate 1/
1970	260	1.00
1971	181	0.72
1972	157	0.56

Nonfatal Coal Mine Injuries

Year	Nonfatal Injuries	Frequency Rate 1/
1970	11,552	44.40
1971	11,380	45.14
1972	12,450	47.10

Fatal Metal and Nonmetallic Mine Injuries

Year	Fatal Injuries	Frequency Rate 1/
1969	179	0.33
1970	165	0.31
1971	163	0.32
1972 2/		

Nonfatal Metal and Nonmetallic Mine Injuries

Year	Nonfatal Injuries	Frequency Rate 1/
1969	11,410	21.18
1970	12,348	22.91
1971	12,150	23.50
1972 2/		

1/ Number of injuries per million man-hours exposure.

2/ Data not available on March 1, 1973.

Mrs. HANSEN. What changes in legislation are you proposing?

Dr. WHITAKER. We may come for changes in legislation with regard to metallic mine safety. I refer to more fire drills and things of that sort. The reason I am a little cloudy on that is because I am not sure whether it takes legislation or amendment of existing legislation.

HELIUM FUND

Mrs. HANSEN. What is the status of the helium program? I believe the Secretary has terminated it again. Is this correct?

Dr. WHITAKER. That is correct. On February 2, he issued termination of a helium storage contract with Natural Helium Corp., City Service Helix Inc., and Phillips Petroleum. The district court in Kansas, which had that case, is being asked by the Government to lift their injunction against termination within 60 days of that February 2 period, or approximately April 2. If he grants that request, subject to appeal by the companies, that is it, the Federal Government can terminate it.

LAND USE LEGISLATION

Mrs. HANSEN. Thank you.

Has the land use legislation been reintroduced in the House and Senate?

Dr. WHITAKER. That is correct, with the President's message.

Mrs. HANSEN. Does that include powerplant siting, mined land regulation, and land use policy planning?

Dr. WHITAKER. They are different pieces of legislation.

Mrs. HANSEN. But it's all part of the total program on land use legislation?

Dr. WHITAKER. Yes; that is correct.

EROS PROGRAM

Mrs. HANSEN. Do you have any comments on the EROS program?

Dr. WHITAKER. The ERTS I was launched in July of 1972. So far it has done reasonably well. I can speak to it from what I know from the geology of the thing. They have been able to find shallow apertures through just different tones in the aerial photography. It looks like a very useful land use mapping tool where you can get resolutions to make one to one million scale maps. I know that seems like a very large scale, but through photo interpretation you can learn quite a bit from that.

They have also discovered new geologic fractures that they didn't know existed. It's like sometimes you are down on the earth and cannot discern the hair on the dog's back but if you get up there 100 miles you can see the dog's back and learn things in the macro scale you have been unable to learn tramping around on earth.

There is no decision yet on the second shot, ERTS II, until we get more evaluation of that material. I am somewhat suspicious of how quickly that can be evaluated because you can have all sorts of data processing systems but still in the end you have to put it through a man's mind, which may be the bottleneck of the whole problem.

I think it's a very useful program. But I am not particularly sanguine that we should necessarily rush ahead and drown ourselves in

data when you figure we are traveling the earth every 17 days, the same spot, the same meridian anyway. I am in favor of proceeding with some caution on that program in terms of funding.

Mrs. HANSEN. I like your analysis.

Mr. MCDADE. Do I read we are encountering some resistance from foreign nations now as to the information that might be gathered by this satellite?

Dr. WHITAKER. Yes, I read that in the press but, frankly, I haven't checked on it. That is obviously a question. People could go back to cold war rhetoric when dealing with something like this. That is possible.

LAND AND WATER CONSERVATION FUND

Mrs. HANSEN. Do you want to provide for the record the acquisition backlog for Federal agencies under the Land and Water Conservation Fund and whatever possible 1973 reprogramings you have in mind?

Dr. WHITAKER. Unless one of these gentlemen can do it, we will have to provide this.

Mr. WILES. We will provide the total backlog at the time the Bureau of Outdoor Recreation appears before this committee.

NATIONAL PARK VISITATION

Mrs. HANSEN. One item which we will discuss in greater detail with the National Park Service is the controversy on conservation versus development. Have you resolved that dilemma?

Dr. WHITAKER. Madam Chairman, to be truthful, I am not sure it's resolvable although I will do my best. Our park visitations are up, I think now, over 200 million and are increasing at the rate of 6 percent to 10 percent a year. The percentage increases can be misleading because some of them, the more popular parks like Yellowstone and Grand Teton, are running at the 10 percent level. Some parks aren't moving up at all.

Mrs. HANSEN. Which ones are not increasing?

Dr. WHITAKER. I don't know in detail, but I am sure they are the parks that are hard for one of us to think of offhand. It's not the ones that come to popular mind like Yellowstone, Grand Teton, the ones that every American tourist wants to see once in their lives. We can provide for the record the visitations per park if you would like that.

Mrs. HANSEN. Please do.

(The information follows:)

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NUMBER OF VISITS (Thousands)

AREA	1971	1972
ABRAHAM LINCOLN BIRTHPLACE NHS, KENTUCKY	489.3	557.4
ACADIA NP, MAINE	2,455.7	2,645.4
ADAMS NHS, MASSACHUSETTS	16.2	23.6
AGATE FOSSIL BEDS NM, NEBRASKA	9.0	10.9
ALIBATES FLINT QUARRIES NM, TEXAS	1.4	2.8
ALLEGHENY PORTAGE RAILROAD NHS, PENNA. 3/	26.9	26.3
AMISTAD NRA, TEXAS	682.9	969.7
ANDERSONVILLE NHS, GEORGIA 1/		134.0
ANDREW JOHNSON NHS, TENNESSEE	46.9	63.9
ANTIETAM NBS, MARYLAND	316.9	433.6
ANTIETAM NC, MARYLAND	28.6	42.4
APPOMATTOX COURT HOUSE NHP, VIRGINIA	240.1	260.4
ARBUCKLE NRA, OKLAHOMA 3/	629.0	528.6
ARCHES NP, UTAH 5/	202.9	225.5
ARKANSAS POST NMEM, ARKANSAS	74.4	65.9
ARLINGTON HOUSE-THE ROBERT E LEE MEML, VA. 8/	313.3	542.7
ASSATEAGUE ISLAND NS, MARYLAND-VIRGINIA	1,662.9	1,698.6
AZTEC RUINS NM, NEW MEXICO	74.0	79.4
BADLANDS NM, SOUTH DAKOTA	1,293.0	1,288.1
BANDELIER NM, NEW MEXICO	210.2	213.9
BATTLEGROUND NC, D.C.	2.7	2.7
BENTS OLD FORT NHS, COLORADO	28.9	25.7
BIG BEND NP, TEXAS	247.4	290.2
BIG HOLE NB, MONTANA	40.5	45.9
BIGHORN CANYON NRA, WYOMING-MONTANA	158.7	220.3
BISCAYNE NM, FLORIDA 1/		78.1
BLACK CANYON OF THE GUNNISON NM, COLORADO	234.6	273.3
BLUE RIDGE PARKWAY, VIRGINIA-NORTH CAROLINA	12,709.2	13,729.7
BOOKER T. WASHINGTON NM, VIRGINIA	24.1	32.0
BRICES CROSS ROADS NBS, MISSISSIPPI	2.3	2.0
BRYCE CANYON NP, UTAH	379.5	426.2
BUCK ISLAND REEF NM, VIRGIN ISLANDS	59.2	61.1
CABRILLO NM, CALIFORNIA	1,300.0	1,422.1
CANYON DE CHELLY NM, ARIZONA	422.2	508.2
CANYONLANDS NP, UTAH 7/	55.4	60.8

AREA	1971	1972
CAPE COD NS, MASSACHUSETTS	4,188.3	4,972.3
CAPE HATTERAS NS, NORTH CAROLINA	1,696.9	1,783.7
CAPITOL REEF NP, UTAH 5/	244.5	272.0
CAPULIN MOUNTAIN NM, NEW MEXICO	61.0	54.3
CARLSBAD CAVERNS NP, NEW MEXICO	791.6	856.1
CASA GRANDE RUINS NM, ARIZONA 6/	117.1	117.5
CASTILLO DE SAN MARCOS NM, FLORIDA	565.1	718.1
CASTLE CLINTON NM, NEW YORK 4/	88.4	0.0
CATOCTIN MOUNTAIN PARK, MARYLAND	446.2	403.9
CEDAR BREAKS NM, UTAH	264.7	266.0
CHACO CANYON NM, NEW MEXICO	64.6	54.5
CHALMETTE NHP, LOUISIANA	269.9	364.0
CHANNEL ISLANDS NM, CALIFORNIA	30.9	41.6
CHICKAMAUGA & CHATTANOOGA NMP, GA.-TENN.	12,416.5	14,078.7
CHIRICAHUA NM, ARIZONA	54.1	67.9
CHRISTIANSTED NHS, VIRGIN ISLANDS	25.8	30.2
CITY OF REFUGE NHP, HAWAII	243.4	351.4
COLONIAL NHP, VIRGINIA	8,453.1	8,529.3
COLORADO NM, COLORADO	473.1	597.1
CORONADO NMEM, ARIZONA	49.8	61.2
COULEE DAM NRA, WASHINGTON	424.0	450.3
COWPENS NB, SOUTH CAROLINA 5/	24.1	41.5
CRATER LAKE NP, OREGON	557.9	594.3
CRATERS OF THE MOON NM, IDAHO	274.6	205.9
CUMBERLAND GAP NHP, KY.-TENN.-VA. 3/	305.3	496.2
CURECANTI NRA, COLORADO	750.4	731.9
CUSTER BATTLEFIELD NM, MONTANA	338.6	387.7
DEATH VALLEY NM, CALIFORNIA-NEVADA 7/	559.5	568.3
DELAWARE WATER GAP NRA, PENNA.-N.J.	1,007.9	826.0
DESOTO NMEM, FLORIDA	135.5	139.2
DEVILS POSTPILE NM, CALIFORNIA 4/	79.8	86.7
DEVILS TOWER NM, WYOMING	138.4	150.8
DINOSAUR NM, UTAH-COLORADO	411.7	496.1
EDISON NHS, NEW JERSEY	55.9	57.8
EFFIGY MOUNDS NM, IOWA	94.4	79.5

AREA	1971	1972
EL MORRO NM, NEW MEXICO	30.0	34.4
EVERGLADES NP, FLORIDA	1,293.5	1,773.3
FEDERAL HALL NMEM, NEW YORK	55.7	45.7
FIRE ISLAND NS, NEW YORK 6/	445.4	578.7
FORDS THEATRE NHS, D.C. 3/	589.1	789.8
FORT BOWIE NHS, ARIZONA	1.7	3.7
FORT CAROLINE NMEM, FLORIDA	85.6	84.0
FORT CLATSOP NMEM, OREGON	123.0	109.9
FORT DAVIS NHS, TEXAS 6/	84.2	79.8
FORT DONELSON NC, TENNESSEE	16.5	13.1
FORT DONELSON NMP, TENNESSEE	978.6	1,239.1
FORT FREDERICA NM, GEORGIA	157.6	190.6
FORT JEFFERSON NM, FLORIDA	10.5	15.7
FORT LARAMIE NHS, WYOMING	135.9	158.0
FORT LARNED NHS, KANSAS	32.1	31.7
FORT MATANZAS NM, FLORIDA	184.0	217.6
FORT MCHENRY NM, MARYLAND	515.0	504.8
FORT NECESSITY NB, PENNSYLVANIA	269.9	276.4
FORT POINT NHS,CALIFORNIA 1/		512.1
FORT PULASKI NM, GEORGIA	214.8	289.6
FORT RALEIGH NHS, NORTH CAROLINA	325.4	323.2
FORT SMITH NHS, ARKANSAS	80.6	75.3
FORT STANWIX NM, N.Y. 1/	7.4	7.7
FORT SUMTER NM, SOUTH CAROLINA	179.1	170.9
FORT UNION NM, NEW MEXICO	15.6	17.5
FORT VANCOUVER NHS, WASHINGTON	207.2	245.9
FREDERICK DOUGLASS HOME NMEM, D.C. 8/	3.0	85.1
FREDERICKSBURG & SPOTSYLVANIA NMP, VA.	1,045.7	1,099.8
FREDERICKSBURG NC, VIRGINIA	35.5	34.0
GENERAL GRANT MEM, NEW YORK	93.8	74.7
GEORGE ROGERS CLARK NHP, INDIANA	73.2	71.6
GEORGE WASHINGTON BIRTHPLACE NM, VA.	153.5	140.5
GEORGE WASHINGTON CARVER NM, MISSOURI	50.7	44.0
GEORGE WASHINGTON MEMORIAL PARKWAY, VA.-MD.	3,138.6	3,605.3
GETTYSBURG NC, PENNSYLVANIA	3,374.9	2,609.1

AREA	1971	1972
GETTYSBURG NMP, PENNSYLVANIA	1,944.1	1,682.3
GILA CLIFF DWELLINGS NM, NEW MEXICO	34.1	39.1
GLACIER BAY NM, ALASKA	25.7	24.7
GLACIER NP, MONTANA	1,303.1	1,392.2
GLEN CANYON NRA, ARIZONA-UTAH	687.7	970.9
GOLDEN SPIKE NHS, UTAH	64.8	115.6
GRAN QUIVIRA NM, NEW MEXICO	31.3	37.0
GRAND CANYON NM, ARIZONA 3/	1.3	13.1
GRAND CANYON NP, ARIZONA	2,402.1	2,698.3
GRAND PORTAGE NM, MINNESOTA	70.6	62.0
GRAND TETON NP, WYOMING	3,284.5	3,002.2
GREAT SAND DUNES NM, COLORADO	211.7	218.0
GREAT SMOKY MOUNTAINS NP, N.C.-TENN. 7/	7,179.0	8,040.6
GUADALUPE MOUNTAINS NP, TEXAS	27.2	39.2
GUILFORD COURTHOUSE NMP, NORTH CAROLINA	1,045.8	1,067.5
HALEAKALA NP, HAWAII	254.8	305.5
HAMILTON GRANGE NMEM, NEW YORK	4.3	4.2
HAMPTON NHS, MARYLAND	47.3	48.7
HARPERS FERRY NHP, W.VA.-MD. 6/	1,129.9	1,110.3
HAWAII VOLCANOES NP, HAWAII 3/	980.7	1,389.1
HERBERT HOOVER NHS, IOWA 1/	175.0	395.4
HOME OF FRANKLIN D. ROOSEVELT NHS, NEW YORK	269.6	276.8
HOMESTEAD NM, NEBRASKA	22.4	19.9
HOPEWELL VILLAGE NHS, PENNSYLVANIA 3/	171.2	157.5
HORSESHOE BEND NMP, ALABAMA	349.2	387.7
HOT SPRINGS NP, ARKANSAS	2,540.1	2,738.3
HOVENWEEP NM, UTAH-COLORADO	12.0	12.1
HUBBELL TRADING POST NHS, ARIZONA	77.2	71.7
INDEPENDENCE NHP, PENNSYLVANIA	2,405.1	2,553.3
ISLE ROYALE NP, MICHIGAN 4/	15.9	16.1
JEFFERSON NATL EXPANSION MEMORIAL NHS, MO.	1,534.8	2,613.4
JEWEL CAVE NM, SOUTH DAKOTA 4/	65.8	79.7
JOHN D. ROCKEFELLER JR. MEML. PARKWAY, WYO. 1/		262.4
JOHN FITZGERALD KENNEDY NHS, MASS.	32.2	31.2
JOHN MUIR NHS, CALIFORNIA	19.6	26.1

AREA	1971	1972
JOHNSTOWN FLOOD NMEM, PENNSYLVANIA	53.6	46.0
JOSHUA TREE NM, CALIFORNIA	577.8	605.5
KATMAI NM, ALASKA	10.4	12.7
KENNESAW MOUNTAIN NBP, GEORGIA 6/	6,031.1	6,286.2
KINGS CANYON NP, CALIFORNIA	896.7	1,058.0
KINGS MOUNTAIN NMP, SOUTH CAROLINA	450.5	461.9
LAKE MEAD NRA, ARIZONA-NEVADA	4,579.1	4,888.6
LAKE MEREDITH NRA, TEXAS 8/	1,159.6	1,494.2
LASSEN VOLCANIC NP, CALIFORNIA	447.4	505.9
LAVA BEDS NM, CALIFORNIA	156.1	153.8
LEHMAN CAVES NM, NEVADA	44.1	47.5
LINCOLN BOYHOOD NMEM, INDIANA	149.0	163.9
LINCOLN HOME NHS, ILLINOIS 1/		76.6
LINCOLN MEMORIAL, DISTRICT OF COLUMBIA	2,330.7	1,989.1
LYNDON B JOHNSON NHS, TEXAS	192.1	316.6
MAMMOTH CAVE NP, KENTUCKY	1,745.0	1,872.9
MANASSAS NBP, VIRGINIA	727.9	725.9
MARBLE CANYON NM, ARIZONA 1/ 4/		11.1
MESA VERDE NP, COLORADO	519.5	547.9
MINUTE MAN NHP, MASSACHUSETTS	575.8	586.7
MONTEZUMA CASTLE NM, ARIZONA	373.9	404.0
MOORES CREEK NMP, NORTH CAROLINA	52.5	42.2
MORRISTOWN NHP, NEW JERSEY	383.5	427.8
MOUND CITY GROUP NM, OHIO	66.9	84.6
MOUNT MCKINLEY NP, ALASKA 3/	58.3	306.0
MOUNT RAINIER NP, WASHINGTON	1,742.6	1,682.4
MOUNT RUSHMORE NMEM, SOUTH DAKOTA	2,314.8	1,911.6
MUIR WOODS NM, CALIFORNIA	749.8	813.3
NATCHEZ TRACE PARKWAY, MISS.-TENN.-ALA.	11,823.2	13,297.8
NATIONAL CAPITAL PARKS, D.C.-MD.-VA.	10,971.7	9,701.5
NATURAL BRIDGES NM, UTAH	49.1	58.5
NAVAJO NM, ARIZONA	97.5	119.1
NEZ PERCE NHP, IDAHO	140.9	225.0
NORTH CASCADES NP, WASHINGTON 2/	216.3	552.3
OCMULGEE NM, GEORGIA	51.7	96.3

AREA	1971	1972
OLYMPIC NP, WASHINGTON	1,859.7	3,031.7
OREGON CAVES NM, OREGON	179.6	199.4
ORGAN PIPE CACTUS NB, ARIZONA 3/	366.9	86.6
OZARK NSR, MISSOURI	2,181.4	3,289.7
PADRE ISLAND NS, TEXAS	904.4	883.8
PEA RIDGE NMP, ARKANSAS	133.7	184.5
PECOS NM, NEW MEXICO	59.4	60.3
PERRYS VICTORY & INTL PEACE MEMORIAL, OHIO 4/ 5/	94.9	93.2
PETERSBURG NB, VIRGINIA 3/	7,367.3	2.964.9
PETRIFIED FOREST NP, ARIZONA	1,077.4	1,229.0
PINNACLES NM, CALIFORNIA	169.2	168.9
PIPE SPRING NM, ARIZONA	34.2	33.5
PIPESTONE NM, MINNESOTA 6/	156.8	169.7
PISCATAWAY PARK, MARYLAND	46.0	37.0
PLATT NP, OKLAHOMA	4,147.9	4,257.1
POINT REYES NS, CALIFORNIA	1,380.5	1,149.6
POPLAR GROVE NC, VIRGINIA	2.5	8.0
PRINCE WILLIAM FOREST PARK, VIRGINIA	424.7	459.5
RAINBOW BRIDGE NM, UTAH	41.8	73.5
REDWOOD NP, CALIFORNIA 1/	34.5	104.3
RICHMOND NBP, VIRGINIA	552.0	602.1
ROCKY MOUNTAIN NP, COLORADO	2,457.3	2,519.6
RUSSELL CAVE NM, ALABAMA	18.0	21.2
SAGAMORE HILL NHS, NEW YORK	177.4	166.4
SAGUARO NM, ARIZONA	323.3	319.1
SAINT-GAUDENS NHS, NEW HAMPSHIRE 4/	11.6	16.8
SALEM MARITIME NHS, MASSACHUSETTS	382.5	464.3
SAN JUAN ISLAND NHP, WASHINGTON	47.6	71.8
SAN JUAN NHS, PUERTO RICO	849.3	1,250.3
SARATOGA NHP, NEW YORK	356.5	288.6
SAUGUS IRON WORKS NHS, MASSACHUSETTS	21.7	28.1
SCOTTS BLUFF NM, NEBRASKA	127.7	140.3
SEQUOIA NP, CALIFORNIA	882.0	869.6
SHADOW MOUNTAIN NRA, COLORADO	179.6	158.3
SHENANDOAH NP, VIRGINIA	2,406.5	2,304.1

AREA	1971	1972
SHILOH NC, TENNESSEE	108.2	90.9
SHILOH NMP, TENNESSEE 6/	640.0	694.7
SITKA NHP, ALASKA 5/	43.2	38.1
STATUE OF LIBERTY NM, N.Y.-N.J.	1,078.5	1,091.1
STONES RIVER NB, TENNESSEE	69.2	79.2
STONES RIVER NC, TENNESSEE	48.6	69.4
SUNSET CRATER NM, ARIZONA	246.8	280.1
THEODORE ROOSEVELT BIRTHPLACE NHS, NEW YORK	11.0	12.4
THEODORE ROOSEVELT INAUGURAL NHS, N.Y. 1/		32.4
THEODORE ROOSEVELT ISLAND, D.C.	242.5	265.1
THEODORE ROOSEVELT NMEMP, NORTH DAKOTA	710.3	1,002.0
THOMAS JEFFERSON MEMORIAL, D.C.	1,279.8	1,314.2
TIMPANOGOS CAVE NM, UTAH	111.4	194.5
TONTO NM, ARIZONA	53.7	52.4
TUMACACORI NM, ARIZONA	68.7	68.4
TUPELO NB, MISSISSIPPI	0.7	0.6
TUZIGOOT NM, ARIZONA	104.9	88.7
VANDERBILT MANSION NHS, NEW YORK	295.5	269.2
VICKSBURG NC, MISSISSIPPI	140.0	143.8
VICKSBURG NMP, MISSISSIPPI	992.5	625.5
VIRGIN ISLANDS NP, VIRGIN ISLANDS	252.6	281.6
WALNUT CANYON NM, ARIZONA	68.3	71.9
WASHINGTON MONUMENT, D.C.	1,518.5	1,613.5
WHISKEYTOWN NRA, CALIFORNIA	1,153.4	932.2
WHITE HOUSE, D.C.	1,391.3	1,412.8
WHITE SANDS NM, NEW MEXICO	573.7	586.3
WHITMAN MISSION NHS, WASHINGTON	104.8	92.3
WILLIAM HOWARD TAFT NHS, OHIO 1/		0.6
WILSONS CREEK NB, MISSOURI	40.0	38.7
WIND CAVE NP, SOUTH DAKOTA	1,085.3	992.9
WOLF TRAP FARM PARK, VA. 1/	282.2	432.4
WRIGHT BROTHERS NMEM, NORTH CAROLINA	392.5	423.9
WUPATKI NM, ARIZONA	130.3	159.5
YELLOWSTONE NP, WYOMING-MONTANA-IDAHO	2,126.3	2,251.7
YORKTOWN NC, VIRGINIA	23.3	24.6

AREA	1971	1972
YOSEMITE NP, CALIFORNIA	2,416.4	2,266.6
ZION NP, UTAH	975.0	970.2

FOOTNOTES

1/ The following areas' first data series started with the months shown in parentheses: Fort Stanwix NM (June 1971), Herbert Hoover NHS (July 1971), Redwood NP (July 1971), Andersonville NHS (January 1972), Biscayne NM (January 1972), Fort Point NHS (January 1972), Marble Canyon NM (January 1972), Theodore Roosevelt Inaugural NHS (January 1972), William Howard Taft NHS (August 1972), John D. Rockefeller Jr. Memorial Parkway (September 1972), Lincoln Home NHS (October 1972).

2/ Data for North Cascades NP, Lake Chelan NRA, and Ross Lake NRA are shown combined; no breakdown is available.

3/ The 1972 figures on visits for these areas are not strictly comparable to the 1971 figures, due to changes in the counting procedures.

4/ Area is temporarily closed, or reports are discontinued seasonally.

5/ Arches NM and Capitol Reef NM were legislatively changed to National Parks in November and December, 1971, respectively; Cowpens from NBS to NB in April 1972; Sitka and Perry's Victory from NM to NHP and NMem, respectively, in October 1972.

6/ Cumulative total reflects correction of visits figure for previous month(s) of 1972.

7/ Cumulative total reflects correction of overnight stays figure for previous month(s) of 1972.

8/ Name changes: Arlington House - The Robert E. Lee Memorial was formerly listed as Custis-Lee Mansion; Lake Meredith NRA was called Sanford NRA prior to October 16, 1972; the words "National Memorial" were legislatively added to the name Frederick Douglass Home, in October 1972.

	1971	1972	% Change from 1971
TOTALS	200,543.2	211,621.1	+ 5.5

Dr. WHITAKER. We are doing some things about it. We are working at new transportation modes. We are instituting this summer in the major, very highly populated parks a reservation system. Director Walker just testified on that before Senator Bible just a few days ago in the Senate.

Mrs. HANSEN. What are you going to do if some one arrives at the gate and hasn't a reservation and has traveled 300 miles?

Dr. WHITAKER. We have had that problem all right in some places like the Great Smokies. I believe the policy will be to leave a certain amount of the camp sites uncommitted on a first-come-first-serve basis.

In spite of the comments made earlier, there has been a large pollution abatement program. We can all argue about how large it is. There is an examination going on of relocating facilities outside of parks. I have some concerns about that, that we don't end up with some of these awful tourist eyesores like you have, for example—I guess I shouldn't be too specific—in Gettysburg as one I visited where you go outside of Gettysburg and it's a pretty bad tourist milky way. I think we need as a part of the institutional solution to that problem to get a land use bill this year where private and sometimes public land is interfaced with the park boundary so that the States themselves start to exercise some control over development around parks.

Mrs. HANSEN. For your information, they have no greater desire to settle that problem than the Federal Government has.

Dr. WHITAKER. I have a desire to settle it. My basic philosophy on this matter is that I don't go along with those who would try to make the park so pristine that the family unit has no way of existing in the park. I don't believe for the wealthy backpacker who can afford a 3-week vacation that the park should be designed around him. Primarily they should be designed around the family unit.

Mrs. HANSEN. Isn't it true there is land available for those backpackers in almost all of our big parks?

LEGACY OF PARKS PROGRAM

Dr. WHITAKER. Yes. And we have a tremendous number of wilderness areas right within the national parks that have been proposed to Congress, although we are a little short on authorizations.

I would speak to one other point, Madam Chairman, which is not related to national park policy, but is something the President has done that I think has been extremely effective. That is his legacy of parks program, which deals with twisting the tail of the bureaucracy to get various departments in Government to give up some of their land. Most agencies around town feel that they have a great need for that land. The President put together a unit within the White House where each agency has to come in and justify to a very high level group consisting of Secretary Butz who will take on as one of his new responsibilities to chair this group, to get tough decisions made.

It really works. For example, in the last 4 years we have excessed about 250 Federal properties and turned them into 250 parks in all 50 States. That is about $140 million worth of land and covers about 45,000 acres. We have a couple hundred more parks in the pipeline. If we can twist the tail of the bureaucracy—and it is frankly the Department of Defense for the most part—to get rid of these lands

and turn them over to mayors and Governors and major parks particularly close to people in the major metropolitan areas, it's a very good program that isn't costing the taxpayer anything but 10 professionals who work at this matter.

Mrs. HANSEN. It's costing the taxpayers because they have to maintain them.

Dr. WHITAKER. I admit it brings up requests for BOR matching funds to some extent. I think it's a good area.

Mrs. HANSEN. The land acquisition program has been greatly increased in the last few years. But where we are going to find difficulty after a while is in maintaining these areas. For example, the U.S. Forest Service has 5 million underplanted acres. If you don't provide adequate funding, you are going to find 50 million unmanaged public land areas in various categories.

Dr. WHITAKER. You mean if the acquisition continues without increasing the number of personnel to supervise them?

PARK DEVELOPMENT

Mrs. HANSEN. Also without having some relook at the legislation to provide perhaps a little more incentive on development. By development I don't mean that you are going in and create cities, and so on. But if you acquire a very beautiful lake, for example, you might provide a marina which the public could use.

I think there is going to be increasing criticism about the failure of the Government to make sure that there are adequate facilities. America has to have a place to go. I think the policy of our park programs, State and national, have been most praiseworthy because we believed it was better for the public to enjoy themselves outdoors than it was to kill each other in some confined quarters.

CONCESSIONAIRES' POLICY

Dr. WHITAKER. Are you referring to liberalizing the concessionaires' policy in allowing more of them?

Mrs. HANSEN. No, not necessarily. In some instances you may want to do it. I think you have to review your whole concessionaire program because some of your structures are very old. They are fire hazards and yet the length of the season apparently, does not financially enable some concessionaires, to replace the facility. I was at Mount Ranier this summer.

Dr. WHITAKER. I have that same concern. They are simply not making enough profit to replace their capital investment.

Mrs. HANSEN. I am wondering if after a while the Government wouldn't be wiser to make an investment in better facilities.

Dr. WHITAKER. Either that or liberalize the profit made on a concession so that a private entrepreneur can realize a profit.

Mrs. HANSEN. I don't think you can risk having people quartered in some of these firetraps. I was startled at the Mount Ranier facility. It hasn't improved a bit in 30 years. In fact it just looked dingier.

You have a sizable construction backlog of pollution projects. Is that all going to be programed for 1974?

Mr. WILES. It's programed for 1974 in the budget, yes, ma'am.

Mrs. HANSEN. You better be firm on this because you are never going to receive $34 million from the committee again to impound.

Mr. WILES. Yes, ma'am.

Mrs. HANSEN. We are going to scrutinize your National Capital Parks requests with some great care, also.

ALASKA OIL SUPPLY

It has been said that the Alaska pipeline, if it were the total oil supply of the Nation, would produce only a 2 years supply. Is that correct?

Mr. LAY. Probably more than that. We talk in terms of proven reserves of about 10 billion barrels. It's probably a lot more than that.

Mrs. HANSEN. But that is relatively in that range.

Mr. LAY. That is relatively correct.

Mrs. HANSEN. What is the rationale for our development of this reserve rather than leaving it as a reserve and proceeding to import from other sources of oil which are available? Do you have a comment?

DEPENDENCY ON FOREIGN OIL

Mr. LAY. There are two or three things to keep in mind. First, I mentioned the national security. We are looking now at becoming dependent for one-half or more of our oil from overseas by 1985, probably sooner than that. Obviously, just about everything that we do as Americans is dependent upon energy and about two-thirds or three-fourths of that comes from oil and gas. If we had our oil supply cut off even temporarily for a few months it would pose some very, very serious problems upon our life styles, our economy and, of course, our whole national security.

So you have the fundamental question of just how dependent we should become, as a Nation, on foreign supplies and particularly distant foreign supplies. It's one question when you are dependent upon Canadian oil and Venezuelan oil. It's another situation when you are dependent upon Far Eastern oil which is several thousand miles away.

ENERGY TRADE DEFICIT

The second question is the economic security aspect. Right now our energy trade deficit is about $4 billion. It's going to get up to $25 billion, $30 billion, or $35 billion by 1985.

Mrs. HANSEN. In what area is our worst deficit?

Mr. LAY. I expect Saudi Arabia, but I would have to check it to be sure. We have a pretty good trade balance both ways in Canada, for instance, and a fairly good one in Venezuela, so I expect it's Saudi Arabia. I am sure by 1985 it will be Saudi Arabia or Iran, with of course, large amounts going into Kuwait and other Middle East countries.

Mr. YATES. Did you say our balance-of-trade deficits might get as high as $25 billion?

Mr. LAY. The Department estimate is about $25 billion by 1985 with other estimates ranging as high as $35 billion to $40 billion for 1985.

Mr. YATES. Why? What is that based on?

Mr. LAY. It mainly depends on what you estimate to be the cost, the price of the oil. As you know, the price of foreign oil has gone up very sharply the last 2 or 3 years and the current contracts with the OPEC countries will expire in 1975. So in 1976 there may be another very healthy increase. It just depends on how the supply and demand situation changes and how the prices of the foreign oil change.

Mr. YATES. If we are permitted in this country for the price of oil to meet that foreign competition in order to avoid the prospective balance-of-payments deficit, would you still have an energy crisis?

Mr. LAY. Probably not.

Mrs. HANSEN. What are you suggesting, that we increase the price of oil?

Mr. YATES. Apparently the energy crisis would disappear if the oil and gas companies were allowed to make more money.

Mr. LAY. Not right now.

Mr. YATES. We are talking now about the oil industry representatives talking about gasoline at $1 a gallon being in the very near future. Is this in the cards?

Mr. LAY. It's a possibility. Again the big thing is the price of crude oil, period. And that is just a guessing game.

Mrs. HANSEN. Then wouldn't this increase the problem? Because most of the small cars are manufactured abroad, wouldn't people be buying Japanese and German cars so they could consume less gasoline?

Mr. LAY. We have seen a lot of that in the past decade or so, but that doesn't mean the American industry can't respond as it has been doing recently.

Mrs. HANSEN. I am using more gallons of gasoline now than I was last year.

Mr. LAY. I am talking about the mini-cars from the major automakers in Detroit.

NATURAL GAS PRICES

Mr. YATES. Dr. Lay, I read from the Petroleum Independent of January 1973 which says: "Interior new energy board likely to call for much higher natural gas price." Is that true?

Mr. LAY. As far as the energy board calling for higher natural gas prices I doubt that that will happen. What I was referring to in that interview and what we talked about quite a bit is that the current price of natural gas is below the price of alternative fuels. Our cleanest burning fuel in many cases is selling for less than oil or coal, and is being used as a boiler fuel. For instance, in many cases an alternative fuel would suit just as well. Since it's being burned in that use, we don't have enough of it to use for heating homes and commercial establishments and for feed stock where it's a very essentially high priority product. Because of the regulatory process, the pricing of natural gas is just not rational now. It's hard to defend.

Mr. YATES. Is that why you said in the interview that you are sympathetic with the deregulations of natural gas?

Dr. LAY. My analysis of this particular market is that there is not good justification for Federal regulation. I think certainly if you look at the record of that regulation, as far as the drilling, the supply problems, of course now the curtailments, the inefficient use, you almost have to conclude that the regulation has not been successful. It has not been in the public interest.

Mr. YATES. Such regulation has existed since 1937, has it not?

Dr. LAY. On pipelines since 1936 or 1937, on producers only since 1954. When I am talking of removing regulation; I am talking only of the producing element. I am not talking of the pipelines or the distributors. Those are largely public utilities. I do not have any particular problem with the regulation of those elements.

What I do have trouble with is regulating the independent producer business which has many competitors, which seems to be fairly fragmented, which seems to have the ingredients at least of a workably competitive market.

Mr. YATES. The Natural Gas Act was passed in order to protect the consumer. It was to protect the consumer from having to pay higher gas prices at the gas range, at the outlet. The distributing gas companies had to pay whatever the producers charged. Has the reason for that legislation disappeared?

Dr. LAY. No.

First, my analysis of the history of the act is that the act itself was not intended to apply to the producers. There is specific language in that act, the 1936 Natural Gas Act, and also in the record of the hearings, which precludes its application to either the local distributor or to the producer.

There is specific language in the act that says that. Now in 1954 the Supreme Court ruled that the act does apply to the sales of natural gas by producers for resale in interstate commerce.

Mr. YATES. That is right.

Dr. LAY. So that act said that we are not going to regulate the producer, but the Court imposed regulation over the sales of the producer. You probably read the decision.

Mr. YATES. I was in the fight in 1954 on the Harris bill and on the other bill. I remember what John Lyle, my good friend, the Congressman from Texas, used to say. He was on the other side.

I would point out to him that it all depended on whether you were born in the shadow of the gas well or the gas stove as to which side you took on that legislation.

Dr. LAY. I am not sure that is true.

Fundamentally, I believe that the market system, the private enterprise system can do a more efficient job of allocating resources where there is competition. In that particular case, and since then, the competitive nature of the industry has not been discussed.

Fundamentally, we are at this point because of the regulation which has stymied—we are talking about bringing in foreign LNG at three or four times the cost of domestic product, gasifying coal at three or four times the price of domestic product, SNG, Arctic gas. We

have arrived at a point where the consumer is not being protected by that regulation. He is being ill-protected because he is paying a higher price for a less reliable product than he would under the competitive system.

EFFECT OF NATURAL GAS PRICE RISE

Mr. YATES. If the price were to be allowed to rise, there would be no shortage of natural gas then?

Dr. LAY. Over time, if it were to rise to a market clearing price, probably in a few years we could establish an equilibrium between supply and demand. You have probably seen the forecasts. Under the current regulation it has been estimated we will have natural gas supply gaps up to 50 percent of our demand by 1990.

Mr. YATES. May I ask some questions relating to the attitude of the Department on certain aspects of the energy crisis so-called?

What is the attitude of the Department toward the relaxation of Federal price controls for energy fuels?

Dr. LAY. I do not think we have an official position. We were concerned during the fall and winter that the price controls on No. 2 oil might have been part of the cause of the problem, just part.

I mentioned six or seven other things this morning that caused the problem. But in that case there were some built-in incentives to produce other products than fuel oil. We were seeing situations on the east coast particularly where the price of the domestic product again was being held to around 12 cents a gallon and we were importing product at 14 to 16 cents a gallon, which again seems to be a little bit of a disparity.

Mr. YATES. Do I take it on the basis of our previous discussion that you favor the partial deregulation of natural gas prices?

Dr. LAY. Yes, sir; I think it would be a wise policy move.

Mr. YATES. Is that in accordance with the recent decision of the Federal Power Commission which looks to no regulation from fields previously untapped?

Dr. LAY. Their optional pricing procedure?

Mr. YATES. Yes.

Dr. LAY. It is still different. The optional pricing procedure will still have the FPC approve or disapprove all contracts. Certainly there is still control. It is just a matter they are going to use different criteria in deciding whether to approve or disapprove than they have in the past.

Mr. YATES. It will not be based upon the previous criteria related to public utility regulation?

Dr. LAY. That is correct. But I again come back to the point that previous criteria has not served us very well.

Mr. YATES. Have any of the companies gone broke who have been subject to that?

Dr. LAY. Yes, sir.

Mr. YATES. Have there?

Dr. LAY. There are about half as many natural gas producers today as there were before the Federal Power Commission——

Mr. YATES. Because of having gone broke or who simply sold out?

Dr. LAY. The number of natural gas producers is fewer. If that means they sold out, they sold out their assets and put those into another line of business.

OFFSHORE GAS SALES

Mr. YATES. What is the attitude of the Department on more frequent offshore oil and gas sales?

Dr. LAY. We are in favor of it. We are calling for three sales in fiscal 1974. As to when or whether we will move into the Atlantic OCS, that is still being studied.

Mr. YATES. Does the Department have a position respecting the oil import quota system?

Dr. LAY. We do have a position, sir, but I do not think we can discuss it at this time. Again it is part of the total rethinking of the oil import program which will be a part of the President's energy message.

Mr. YATES. When will that be issued?

Dr. LAY. All I can say is in the near future, but it will still be probably a few weeks.

Mrs. HANSEN. It had better be issued before we the committee marks up the bill.

Dr. WHITAKER. I think it will be some time in March.

Mr. YATES. What is the attitude of the Department on the retention of preferential tax treatment for exploration activities in the extractive industry?

Dr. LAY. We think this would be a bad time to reduce them. Whether they are good or bad is not really the question as of right now. The real issue now is what impact it would have on the domestic oil and gas drilling, right now we would not want to do anything which would discourage drilling, which further reductions in the depletion allowance probably would.

Mr. YATES. What is the attitude of the Department with respect to the present and proposed leasing of current energy resources?

Dr. LAY. I think this again kind of depends on the difference in each individual case. Primarily we are in favor of developing clean energy sources so we can meet all our environmental objectives. There might be temporary occasions where we would have to delay the imposition of some standards or modify them while we do in fact create the clean energy sources. Of course coal is the one that most immediately comes to mind.

We think by the early 1980's we will have technology where we can use our coal in any way we want to. But between now and 1980, there may need to be some relaxation of environmental standards, at least in some areas, so we do not drive the coal industry out of business while we are developing clean coal technology.

UNREGULATED NATURAL GAS MARKET

Mr. YATES. Our previous discussion respecting permitting the price of natural gas to be less subject to regulation, would you permit those prices to rise to a level equivalent to the current intrastate prices and eventually reaching a price parity with the price of other heating fuels?

Dr. LAY. I would think in an unregulated market that would be what would happen.

Mr. YATES. I think it would too, but is this the attitude of the Department to permit that to happen?

Dr. LAY. I think that is the only way you will ever get the supply and demand of this product back in balance. It is like holding the price of a Cadillac below that of a Chevrolet. We would all want Cadillacs. It is that way with natural gas; if you can buy it cheap, and it is easier to store, burns cleaner and so forth, people will always buy it as long as it is cheaper than the other product.

FPC NATURAL GAS SURVEY

Mr. YATES. My earlier question to you on the survey being conducted, you said by the Federal Power Commission in cooperation with the Department of Interior, when that survey is completed will you have full knowledge of the oil reserves, oil and other reserves of the country?

Dr. LAY. That particular study is on natural gas reserves only.

Mr. YATES. Will you have full knowledge of natural gas reserves?

Dr. LAY. Yes, sir; I think we will. They have done a very definitive survey in that case. They have looked at all of the geological and geophysical data on all of the major gas fields. They have taken statistical samples from all of the smaller gas fields; they have made an independent analysis of these data and arrived at their own independent estimates of reserves. I think it will be a very credible job.

Mr. YATES. Why should not the same kind of a study be made of the oil reserve?

Dr. LAY. I do not know that it should not. Of course, as you know, the natural gas study was done in response to a lot of criticism as to the way the FPC determines rates and regulates the natural gas industry. Inasmuch as we do not regulate the oil industry in the same way, there has not been the same pressure.

Mr. YATES. I know there has not been the same pressure, but in view of the fact that we are supposed to have an energy crisis, a really critical energy crisis, which depends upon our knowledge of what our oil reserves are; why should we not have a Government survey of that?

Dr. LAY. I think, as I said earlier, we have to have better Government data on oil and gas reserves and we are thinking about this problem.

Mr. YATES. How much would such a survey cost?

Dr. LAY. I think it would be expensive. In the case of the natural gas survey, I think they have only appropriated maybe a couple of million dollars for that. I am not sure. You probably know. But of course they have had to rely very, very heavily on outside services. Again, industry services. If you want a totally independent estimate of all of these reserves and you do not want to rely on industry data, on industry personnel, it is going to be expensive.

Mrs. HANSEN. Mr. McKay?

Mr. MCKAY. No questions.

Mrs. HANSEN. Mr. Long.

OIL IMPORT QUOTAS

Mr. LONG. I still am unclear about the rationale behind our continuing to have quotas on oil imports. You are worried about the balance of payments; right?

Dr. LAY. Yes, sir.

Mr. LONG. Both now and in the distant future?

Dr. LAY. Yes, sir.

Mr. LONG. Now, if we took off the import quotas, the oil would come into the United States because it is cheaper, right?

Dr. LAY. That has been true in the past.

Mr. LONG. Well, then, if it is not cheaper, then taking off the quota would not have any effect, would it?

Dr. LAY. Certainly not much effect now.

Mr. LONG. Why not take off the quota, then?

Dr. LAY. I guess——

Mr. LONG. Make up your mind. Will taking off the quota bring oil into the United States or will it not?

Dr. LAY. It kind of depends on what you are trying to do with investor psychology. If the price of foreign crude goes above the price of domestic crude and if the price of crude stays above the domestic price, then taking off the quotas—and I say stay above it, taking off the quotas would have very little impact as far as the absolute amount of oil that comes into the United States.

The main disadvantage to that is our domestic producers; people investing in domestic production might not like to rely on that international price. In this case you are talking about countries determining the price, not individual producers, not a competitive market; you are talking about countries. Right now you are talking about a collection of countries. In other words, it is a very effective producer country cartel. They can manipulate that price up or down as they please.

EFFECT OF ELIMINATING QUOTAS

Mr. LONG. What is your best guess, if you took off the quota, would oil come into the United States or would it not?

Dr. LAY. Probably not a whole lot more in the next year or two or three, than we will have anyway, because we are going to fill the supply gap .

Mr. LONG. Why not take it off in the meantime?

Dr. LAY. What I am telling you is——

Mr. LONG. Why not take it off for the next 3 years? You can change your mind in the future.

Dr. LAY. It is a matter of reimposing, also a matter of creating stability for investor decisions.

When a person makes an investment in an oil well, he is looking for production 3, 5 years from now. He wants to know the ground rules. If he realizes that the OPEC countries can raise or lower prices——

PRICES SET BY OPEC COUNTRIES

Mr. LONG. You mean all these countries are acting in unison?

Dr. LAY. They are. There is now a collection of countries.

Mr. LONG. You mean there is an international cartel of oil producers outside of the United States that control it?

Dr. LAY. Yes, sir; it is called OEPC, the Organization of Petroleum Exporting Countries.

Mr. LONG. I wish you would document that. I do not want to hear this vague statement on it. I want to get the proof on it. I want to know how well it works.

Dr. LAY. It worked very well this past year.

Mr. LONG. I know a little bit about the history of monopoly. I have never seen a monopoly yet that did not break down because some parts of the elements of the monopoly found it profitable to chisel on it. It has been true of coffee, it has been true of everything you want. I would be very much surprised if oil, given any long period, was any exception.

Dr. LAY. I hope you are right.

Mr. LONG. All right. Oil, you feel, is going to be a lot scarcer in the future than it is now?

Dr. LAY. Yes, sir; I think most signs would indicate that.

Mr. LONG. And more expensive, right?

Dr. LAY. Probably so.

OIL IMPORTS

Mr. LONG. Then why would it not make sense for us to let all the oil we can get come into the country now, during the years when it is relatively cheap and when the cost to our balance of payments is going to be relatively small, and then in 5, 10, 15, 30 years from now, when oil gets very expensive, we will still have much or all of our oil reserves, which we can then produce? Why would that not in the long run on balance of payments have a better effect?

Dr. LAY. If we decide we want to turn around our domestic capability—and we do in fact want to produce our domestic resources—we have to make a decision which will have an impact 10, 12 years from now. In other words, you cannot turn this faucet off and on.

Mr. LONG. Has anybody proposed that we are going to take in only foreign oil and use no new U.S. oil? Is that the dichotomy you are presenting to us?

Dr. LAY. No, sir. I am talking about trends. It is a matter of whether you want to increase your dependency on foreign supplies, or you want——

Mr. LONG. Wait a minute. Who is talking about dependency? I am saying why not take all the oil we can get from foreign countries during the immediate future, the next few years, 5, 10 years, while it is relatively cheap and keep our domestic reserves until such a time when oil, worldwide, becomes very expensive?

Dr. LAY. No. I think—a number of points.

One, as I mentioned, is, relatively it is not much cheaper today than our domestic product. I mentioned other problems to you. Apparently they have not been compelling in your mind.

Mr. LONG. If it is that much cheaper, then your oil quota argument is very phony.

Dr. WHITAKER. Congressman, it would not be that much cheaper if that cartel decides to up the price and we start——

Mr. LONG. You are assuming you have a perfect cartel, it can always outsmart you.

Dr. WHITAKER. Very perfect.

Mr. LONG. I do not accept that argument and I do not think you can demonstrate it.

Dr. LAY. We can demonstrate it has worked that way the last 2 years.

Mr. LONG. For 2 years you are going to determine all of our future policy; is that it?

Dr. LAY. No, sir. But I think we have to face up to the facts. Right now it is working very effectively and they realize how effective it has become. It is in their best interests right now to keep playing this game.

The way we break up the cartel, the way we break it up is provide a very viable alternative, which is the development of our own domestic energy resources.

EFFECT OF RELAXING OIL IMPORT QUOTAS

Mr. LONG. Whoever said we should not continue to develop American oil? Do you mean to tell me if you took the quota off foreign oil, there would not be any domestic oil produced at all?

For the next 2, 3, 5 years, if you are going to relax the quotas, let some of the oil in, your argument is that it is not going to be that much different, there might be some extra oil coming in. If that is true, then you are not going to totally upset the American oil industry and keep it from continuing to develop, are you?

Dr. LAY. No, sir. It is still a matter of setting the trends where we want to be 5 years from now, 10 years from now. We are trying to develop a political climate and investment climate where we can develop the domestic energy resource base. There is going to be a lot of foreign oil come in. It is a matter of how much we want to come in.

Mr. LONG. All I want to get from you is a feeling, which you are very reluctant to tell me; would it not be a good idea to use foreign oil while the world oil can be bought relatively cheaply and save our own oil—not all of it but some of it—until some future time when oil becomes far scarcer than it is now? Are you willing to agree to that?

ALTERNATIVE ENERGY SOURCES

Dr. LAY. No, sir. It comes down to the time frame we are talking about again.

If our potential oil resources are nearly as great as the Geological Survey thinks they are, if we develop those resources, we can provide our own needs for oil and gas well into the next century. Well into the next century we are going to have a lot of other energy alternatives. It could be we will be saving our oil for 30 years and have all kinds of oil and have no use for the oil.

Mr. LONG. So there is not going to be any great shortage in the future?

Dr. LAY. It will be tight for the next few years. By the end of this century, we will be on the back side of our production curves. But we will have alternatives such as nuclear energy.

Mr. LONG. So there is not any crisis. Where is this $35 billion balance-of-payments deficit you are talking about, because of the purchase of oil and oil becoming so expensive in the future?

Dr. LAY. That is if we do nothing and we rely solely on foreign oil. We consume a lot of oil.

Mr. LONG. Who has suggested that we stop producing American oil? Have I, Has anybody here?

Dr. LAY. It is all a matter of relative amounts.

Mr. LONG. Has anybody suggested in this room or elsewhere that we become totally dependent on foreign oil?

Dr. LAY. No, sir; but we do have some latitude whether in 1985 we are going to buy 10 or 15 percent from foreign supplies or 80 percent or 50 percent. That is the type of decision we are making now.

ENERGY TRADE DEFICIT PROJECTIONS

Mr. LONG. Tell me where you get this $35 billion balance-of-payments deficit? Who made that estimate?

Dr. LAY. The $25 billion estimate is our Department position. I said other people estimated as high as $35 billion.

Mr. LONG. Is this our total balance of payments or is this our oil?

Dr. LAY. That is our oil energy trade deficit. We are talking about 12 to 13 million barrels per day.

Mr. LONG. Under what assumptions?

Dr. LAY. That is assuming that the recent trends——

Mr. LONG. Where you do not produce any American oil.

Dr. LAY. No, sir. That just means we continue the trend of the past decade or so, whether we continue the decline in domestic oil and gas and continue to rely more and more on foreign supplies.

Mr. LONG. We have to continue buying more and more and more. You are not arguing there will not be other ways of making up this balance-of-payments deficit, by selling computers and all kinds of services?

Dr. LAY. No, sir. I am just talking about the energy trade deficit going from about $4 billion last year to about $25 billion in 1985.

Mr. LONG. Is this purely an Interior Department estimate?

Dr. LAY. Most of the other estimates are higher. Commerce Department estimated around $30 billion.

Mr. LONG. These are all Government things?

Dr. LAY. Chase Manhattan Bank estimates $30 to $35 billion.

Mr. LONG. All in industry or Government? I have some feeling they are sort of in this thing together.

What about some of the universities, some of the private economists who are concerned with this? For example, Edith Penrose of the University of London, who has been very much interested in this problem. Does she have an estimate?

Dr. LAY. I do not know, sir.

Mr. LONG. Anybody can come up with estimates. The balance-of-payments deficits is hard enough to estimate for the next few months. I just see where our balance of payments, the deficit went off one-half just this last month. You are telling me what it is going to be 18, 20 years from now. I am wondering how on earth you do it. I spent my life in economics.

CREDIBILITY OF ENERGY PROJECTIONS

I have never found it that easy to make these estimates that far into the future and I wonder how you can do it and be so sure of what you are doing.

Dr. LAY. I have also done a lot of forecasting and I have more confidence in my long-term estimates than I do in my short-term estimates.

Mr. LONG. Why not? You will not be around to have somebody showing you where you were wrong.

Dr. LAY. In the long term, the short-term aberrations work out, as you well know. It is not that hard to take past trends and history and extrapolate and make some judgment calls.

Mr. LONG. I know. I have done it for years and years and years. Incidentally, the census projection of population increase in the 1920's and 1930's thought it was easy. They estimated that the U.S. population would level off at about 160 million. Here it is at 200 million and still rising.

It sounds so easy.

Dr. LAY. You have to have forecasts to make policy decisions.

Mr. LONG. Are these forecasts or projections?

Dr. LAY. They are projections.

Mr. LONG. Do you know the difference between a forecast and a projection?

Dr. LAY. A forecast says this is going to be realized.

Mr. LONG. What is your estimate? Is it a forecast or a projection?

Dr. LAY. A projection. We are hoping it is not realized.

Mr. LONG. I am glad you are now willing to come around to saying that this is not something you are saying confidently will happen, but it is something that could happen if an awful lot of other factors you put together hold out to be true.

Dr. LAY. I did not want to mislead you and I did not know I was. We make these projections so we can make policy decisions. If they are not realized, what we want to happen——

Mr. LONG. Please do not tell us that this is what is going to happen, that we had better make a policy or these hobgoblins are going to get us if we do not watch out.

BALTIMORE CANYON OCS

I am interested in the Baltimore Canyon area of the Outer Continental Shelf. We are very much concerned in Maryland about it. Are you studying this; do you have evidence of oil deposits there, and so on?

I would hope, for the record, you could give me an answer to that. I have a number of other questions for the record because I am afraid I take my life in my hands if I ask any more questions.

(The information follows:)

We are not specifically studying the Baltimore Canyon area, of the Outer Continental Shelf at the present time. The Bureau has, however, completed an environmental study of the Mid-Atlantic region, which includes the Baltimore Canyon, and is planning to contract for a socioeconomic study of the mid-Atlantic region. This study is designed only to accumulate currently available adta and will not provide new information. (A copy of the report has been furnished to the committee.)

Also in fiscal year 1974, we will be establishing an environmental assessment team in the mid-Atlantic area which will initially analyze the possible environmental impact of potential mineral development.

The Baltimore Canyon area is considered by some to have potential for oil and gas deposits. We have no concrete evidence to substantiate the presence of oil and gas deposits and the above mentioned studies will not add to this area of information. In the absence of actual drilling, no reserves can be determined and estimates of resources can only be made from consideration of the volume of sedimentary rocks inferred to be present.

STRIP VERSUS DEEP COAL MINING

Mr. LONG. I understand that there is eight times as much coal underground as can be obtained by strip mining. If this is so, why is strip mining necessary?

Mrs. HANSEN. Dr. Long, in the interests of time, we will have the answer to that questtion put in the record.

(The information follows:)

UTILIZING SURFACE COAL VERSUS DEEP MINE COAL

The ratio of underground to surface coal resources and reserves varies from region to region, and according to such factors as relative thickness of deposits and depth of overburden. Of principal relevance are the reserves of coal that can be mined economically under present economic and technological conditions. Although the ratio of "mapped and explored" resources of underground coal are nine times those of strippable coal, on the basis of economically recoverable coal at less than 1,000 feet in depth, it is estimated that underground coal is about 4.5 times that of strippable coal (205 to 45 billion tons).

Of the total estimated 250 billion tons of economically recoverable coal, 54 percent is east of the Mississippi River, of which 124 billion tons (93 percent) is mineable underground coal and 10 billion tons (7 percent) surface mineable. This compares with 81 billion tons (70 percent) of underground mineable coal in the West and 35 billion tons (30 percent of surface mineable coal). Approximately one-half of the total economically recoverable reserves are of low sulfur content of which 29 billion tons are east of the Mississippi River and 96 billion tons west of the Mississippi River.

Western coals moving eastward have high transportation costs.

In 1971, total production of bituminous coal and lignite was divided equally between underground and surface mining (276 million tons each). In 1972, it is estimated that surface mining exceeded underground production for the first time.

The prospects for substituting deep-mined coal for displaced strip tonnage are poor at best, not only because of significantly lower costs of surface mining but because of serious deterrents to the development of large, expensive new underground mines. Among the latter are oil imports, uncertainties regarding the timing and extent of nuclear power generation, and environmental restrictions. It takes from 3 to 5 years to build large underground mines to full capacity, and, because of the millions of dollars of investment required, they are developed for 20 to 30 years of life, at current costs of $12 to $17 per ton of capacity. Depending upon the size of stripping operations, they can be developed from within a few months to 3 years for lesser life expectancies and at appreciably less costs than for deep mines.

Without the removal or significant reduction of the deterrents to the expansion of large, efficient low-sulfur underground mining capacity, and the substitution of adequate financial incentives, the loss of surface-mined coal in any appreciable amount would drastically reduce the supply of domestic supplies of energy and correspondingly increase dependence on foreign sources of energy supply.

Another factor of importance is that in emergencies, such as was demonstrated during World War II, strip mining is the quickest available source of large volume increases in domestic energy supply. Because of the time factor in development, deep-mine capacity cannot be increased fast enough to meet emergencies. If supplies of alternate fuels are cut off for one reason or another, the loss of flexibility of surface mining can be a seriously adverse factor in times of national defense emergencies.

Irrespective of the ratio of underground to strippable coal reserves, the principal reason for the growth of strip mining is economic. For the period 1965–69, strip-mined production averaged $1.50 per ton less than underground coal. In 1970, it was $2.71 less, partially as a result of the requirements of the Coal Mine Health and Safety Act, under which productivity at underground mines declined by 12 percent (from 15.6 tons per man-day in 1969 to 13.8 tons). For the same reason, plus other cost increases at underground mines, the spread increased to $3.68 per ton in 1971 ($8.87 for underground mines and $5.19 for strip mines). Since approximately 75 percent of surface-mined coal is used for

electric power generation, the significantly lower cost of strip-mined coal is a very important factor in power costs and in ultimate consumer rates for electricity. It is estimated that the spread increased to approximately $3.81 per ton in 1972 ($9.46 per ton for underground coal and $5.65 for strip coal).

The steadily increasing costs of underground coal are reflected by the decline of over 3,000 in the number of underground mines between 1965 and 1971, the latest year for which final data are available. During the same period the number of surface mines increased by 933.

Regardless of the issue of surface mining, there is urgent need for a substantial increase in underground mining capacity. This problem will be compounded to the extent that surface-mined coal becomes unavailable to meet the Nation's expanding energy requirements.

SPECIAL BICENTENNIAL GRANTS-IN-AID

Mr. LONG. Madam Chairman, I have some additional questions which the department may answer for the record. Will the $8 million for "Special Bicentennial Grants-in-Aid" program be administered by the American Revolution Bicentennial Commission?

Will it just be for use in cities as indicated in the statement we have, or will it be for use in small towns and rural areas also?

(The information follows:)

The program will be administered by the National Park Service. It will be for use in cities that were important in the Revolution, that have a viable program, and can be expected to host large numbers of visitors in bicentennial years. Grants will be made to States and, by them, channeled to eligible cities.

LAND ACQUISITION

Mr. LONG. No new funds are requested for land acquisition, and you state that you plan to use carryover funds to finance a program level of about $80 million, below the $91.6 million figure for 1972 and the $87 million figure for 1973. Will you be able to acquire adequate lands with this amount?

Why are your requests getting lower?

(The information follows:)

We believe that we will be able to acquire significant amounts of land (approximately 163,454 acres) under our proposed program. Further, we can assure you that these funds will be directed toward acquisition of lands in priority recreation areas.

On the matter of the budget request decreasing, technically, we are not requesting funds for fiscal year 1974. The program which we have presented is one based on how the agencies might obligate funds. Over the life of the fund, obligations have tended to be slightly less than appropriations. Over the past 5 years obligations have averaged $83 million. Thus, our proposed obligations rate does not reflect a major reduction in acquisition activity.

ACCELERATED OCS LEASING

Mr. LONG. Mr. Under Secretary, page 4 of your statement says that you are requesting funds for an accelerated oil and gas leasing schedule and a study of new areas on the Outer Continental Shelf, as well as investigating and selecting potential tracts for geothermal steam leasing. I have several questions about this statement.

In what areas of the United States are you stepping up your oil and gas leasing?

Are you going to study the Baltimore Canyon area of the Outer Continental Shelf?

(The information follows:)

The only area of the Outer Continental Shelf in which leasing is currently active is the Gulf of Mexico. Current proposals call for increasing Gulf of Mexico lease sales from 2 to 3 a year and for increasing the sale size from approximately 600,000 acres to approximately one million acres per sale. We are also beginning to establish environmental assessment teams in the Mid-Atlantic region of the Outer Continental Shelf, the Gulf of Alaska and the Pacific Outer Continental Shelf regions. These teams will begin to analyze the possible environmental impact of mineral development. Also contract studies are being issued in this fiscal year to inventory existing data related to the Mid-Atlantic Outer Continental Shelf, the North Atlantic Outer Continental Shelf, and a portion of the Gulf of Alaska.

A Geological Survey Atlantic Study Group has been studying the Northern Atlantic Outer Continental Shelf, including the Baltimore Canyon area since January 1, 1972. Completion of the initial phase of this geologic study is scheduled for about June 30, 1973.

Mr. LONG. Do you have any evidence of oil deposits in the Baltimore Canyon area? How about gas deposits?

Have Federal geologists undertaken exploratory drilling in the Baltimore Canyon?

Do you plan to undertake some this year?

(The information follows:)

(1) Only exploratory drilling can determine the presence of oil and gas deposits. Preliminary studies of the geology of this area indicate that the area has some characteristics that appear to make it a promising area in which to explore by drilling.

(2) No exploratory drilling of any kind has been done in the Baltimore Canyon area, and no drilling of any kind is contemplated by Federal geologists. Background or baseline geologic environmental studies are planned to begin July 1, 1973.

(3) No, not at this time.

COAL GASIFICATION PROGRAM

Mr. LONG. What progress are you making on converting coal to clean-burning synthetic fuels?

Dr. WHITAKER. Interior's program for producing clean burning synthetic fuels from coal holds great promise for future utilization in the energy industry. Departmental programs have clearly established that high sulfur coal can be converted to a clean-burning liquid, a clean-burning gas, as well as to a clean-burning solid. These programs have included laboratory and process scale experiments in Bureau of Mines laboratories and under contract to the Office of Coal Research. Additionally four pilot plants have been built and two additional pilot units are under construction. Work in these areas includes alternate process ways to manufacture a clean low-British thermal unit gas, a high quality pipeline quality gas, a low sulfur fuel oil, and a solvent refined coal. Our work has been sufficiently promising to warrant consideration of a demonstration plant program, and the Office of Coal Research is currently engaged in preliminary planning for a demonstration plant capable of converting coal to a clean-burning solid and liquid with the sulfur content ranging from about ½ percent to less than .2 percent.

Mr. LONG. Is it vastly more expensive to convert coal to a clean-burning synthetic fuel than to produce coal?

Dr. WHITAKER. Naturally, the conversion process cannot be accomplished at no cost, so that a coal synthetic fuel will cost more than

the coal from which it was produced. Typically, a high sulfur Eastern coal costing 35 cents per million British thermal unit's can be converted to a low-sulfur fuel to sell for $.75 to $1 per million British thermal units depending on the final synthetic chosen, method of financing, and particular process employed. Our program efforts are directed toward determining these costs with a greater degree of precision than is now possible. We will supply the financial data on this program.

(The information follows:)

FINANCIAL DATA (R. & D. EXPENDITURES ON CLEAN-BURNING SYNTHETIC FUELS FROM COAL

[In millions of dollars, rounded]

	Fiscal year—			
	1971	1972	1973	1974 proposed
Bureau of Mines	4.4	4.5	9.4	9.4
Office of Coal Research:				
(a) Government	13.5	23.0	40.0	45.0
(b) Industry		8.5	14.0	14.5

TRANS-ALASKA PIPELINE

Mr. LONG. What action do you contemplate on the Trans-Alaska pipeline? Are you appealing the adverse decision you received from the appeals court to the Supreme Court?

Dr. WHITAKER. As you know, the appeals court found for the Wilderness Society that the Secretary of the Interior does not have authority to issue permits for temporary use of land more than 25 feet from the outer edge of the pipeline. Secretary Morton plans to make an announcement shortly on future appeals and possibly seeking congressional action to resolve the questions of authority to issue permits covering temporary use of lands beyond the statutory breadth on transmission lines right-of-way. We will be happy to insert the Secretary's statement in the record.

(The statement follows:)

Insert page 273b

DEPARTMENT of the INTERIOR

news release

OFFICE OF THE SECRETARY

For Immediate Release February 27, 1973

SECRETARY MORTON ANNOUNCES TRANS-ALASKA PIPELINE
ACTION WILL BE SOUGHT IN CONGRESS AND SUPREME COURT

Secretary of the Interior Rogers C. B. Morton announced today, from his temporary office in Menlo Park, California, that the Administration will seek action from the Congress and the Supreme Court to allow construction of the Trans-Alaska pipeline at the earliest possible date.

He stressed that "with each passing month it becomes ever more obvious that it is in our national interest to get delivery of Alaskan oil to the Lower 48 States at the earliest practicable date. We will have to import every barrel of oil we don't get from Alaska. Alaskan oil is necessary to relieve the energy picture in this country, to avoid further deterioration of our trade balance, and to avoid increasing our dependence on foreign supplies of oil.

"As I said last May, this is going to be the most carefully built and operated pipeline in history. We understand the environmental risks involved and we are going to assure they are avoided to the maximum possible extent. We've studied this matter for almost four years; it's time to get on with the job.

"I am confident that the Congress and the Supreme Court will share our view that this is a matter of the highest national importance and will act with a sense of urgency to remove the obstacles to prompt construction that arise from the Court of Appeals' decision of February 9, 1973."

The Court of Appeals held, in Wilderness Society v. Morton, that under the Mineral Leasing Act of 1920, Secretary Morton does not have authority to issue special land use permits authorizing the temporary use, for construction purposes, of land more than 25 feet from the outer edge of the pipeline. In view of this holding, a majority of the Court refused to decide whether the six-volume environmental impact statement, prepared by the Federal Task Force on Alaskan Oil Development, satisfied the requirements of the National Environmental Policy Act (NEPA).

The three judges who considered the merits of the environmental issue found that the statement was adequate; they felt the Court should have rejected the contention of the plaintiff environmental groups that the statement failed to consider adequately an alternative Trans-Canada route for the pipeline.

Secretary Morton pointed out that before he can issue permits authorizing pipeline construction it will be necessary to resolve both the issue of his

statutory authority and the question of whether the impact statement meets the requirements of NEPA. He said, "I am recommending that the Solicitor General ask the Supreme Court to review this case as a matter of urgency and decide both issues this term. I believe the Supreme Court will decide in favor of the Government on both points.

"But, because an unfavorable decision on the question of my statutory authority would do such great damage to our entire economy, I am also recommending that the Congress promptly enact legislation that will remove any doubt about my authority to issue permits necessary for construction not only of pipelines, but also transmission lines and other facilities that must cross Federal lands.

"Under the Court of Appeals' opinion, it will probably be impossible to build any new oil or gas pipeline across Federal lands anywhere in the United States. The opinion even casts a cloud over the very common practice of using public lands beyond the statutory breadth of transmission line rights-of-way for the purpose of bringing in materials and equipment during construction. Because we simply must have such new facilities to support our expanding economy, I will ask Congress to include an appropriate right-of-way provision in the Administration's proposed National Resource Land Management Act of 1973."

On the question of an alternative pipeline route through Canada, Secretary Morton said, "I explained in detail to the Joint Economic Committee of Congress on June 22 of last year why I am totally convinced my decision to grant a permit for the Trans-Alaska route is in the highest public interest and why we cannot afford to try to force the oil companies to build a pipeline through Canada. For a number of reasons, a pipeline across Canada would involve great delay in delivery of oil to our markets even if the Canadian Government could and would grant the permits necessary for construction. And, even after the line is in operation, recent statements by Canadian leaders indicate that its full capacity will not be available to U.S.-owned oil. This is of great concern from a balance of trade point of view, and it is inconsistent with our desire to place the maximum possible reliance on our own, rather than foreign, sources of energy. My concern on this account is increased by the fact that the Canadian Government has recently found it necessary to place controls on their export of crude oil to us."

Morton said he has found that a large number of people in the West share the view that it is important to clear up the obstacles to construction of the pipeline as soon as possible.

x x x

Mrs. HANSEN. Mr. McDade?

Mr. MCDADE. No questions.

Mrs. HANSEN. Mr. Wyatt?

Mr. WYATT. I think the matter has been thoroughly covered, Madam Chairman.

Mrs. HANSEN. Mr. Yates.

TIME LIMIT ON OCS LEASES

Mr. YATES. I still have a couple of points. I want to ask some questions about our own shelf here.

In the leases, is there any provision in the leases made by the Government to the lessees for exploiting the Outer Continental Shelf which require the lessees to try to exploit them within a particular time, or may they sit on their leases?

Dr. LAY. Yes, sir; there is. They must be producible or producing at the end of 5 years.

Now there is a provision——

Mr. YATES. How long a lease do you give them?

Dr. LAY. Five years. They have it for 5 years, to make the lease producing or producible. In other words, they have proven the oil and are waiting for the pipeline to hook up to produce. If at the end of 5 years they have shown diligent effort, they have drilled exploratory wells and they propose to make it producible, we can extend that for 2 years. It has been our experience, because of the shortage of crude oil, that these leases are generally proved up much faster than 5 years.

I know that in the 1970 sale, just a little over 2 years ago in December, most of those leases have been developed now and are awaiting pipelines to start producing. I say most, about a third of them I think is the last estimate I saw, are ready to produce now.

Mr. YATES. Where do they get the pipelines from?

Dr. LAY. The pipelines come from onshore out to the rigs to take the oil on shore and transport it.

Mr. YATES. Are these separate pipeline companies that do it?

Dr. LAY. It depends. In some cases they are pipelines owned by the producers. At other times there is some kind of a consortium arrangement, several producers, other times an independent pipeline company will hook it up.

Mr. YATES. How many wells have come in on those leases?

Dr. LAY. On all of the OCS?

Mr. YATES. Yes.

Dr. LAY. I do not have that readily available.

Mr. YATES. How many leases?

Dr. WHITAKER. There are about 6,000 wells out there, as I recall.

Dr. LAY. I can provide that.

Mr. YATES. How many leases have you given?

(The information follows:)

Since we began the Outer Continental Shelf leasing program in 1954, slightly more than 1,800 leases have been issued. Approximately 1,000 leases covering 4.3 million acres are still active. The number of wells capable of production totals 192 on the west coast and 9,277 in the Gulf of Mexico.

Dr. LAY. I can give you the acreage, which is about 8.1 million acres over the past 19 years.

Mr. YATES. 8.1 million acres over the last 19 years.
Dr. LAY. I think that is right.

OCS RECEIPTS

Mr. YATES. How much compensation has the Government received for its leases?
Dr. LAY. I think between $7 and $8 billion.
Mr. YATES. What does it receive per lease? Is it a standard price? Does it vary?
Dr. LAY. It varies. It is leased through bonus bids. In addition to the bonus bid, we get a 16⅔-percent royalty.
Mr. YATES. It used to be 12 percent.
Dr. LAY. Twelve and one-half percent is the minimum. The Secretary can increase that. I think it is up to 16⅔.
Mr. YATES. Up to 16⅔?
Dr. LAY. Yes, on the OCS.
Mr. YATES. Is this an equitable arrangement for the Government?
Dr. LAY. We rely mainly on the bidding competition to drive the price to its fair value.
Mr. YATES. I am talking about the percentage of the take.
Dr. LAY. Again, if the bidding process is competitive, we can increase or lower the royalty, and adjustments will be made in the bonus bid to reflect that, if it is a relatively competitive market for these leases.
Mr. YATES. What liability is there on the Government in case the lessee breaks the skin, as he did in Santa Barbara?
Dr. LAY. I think none, but——
Mr. CARTER. I do not think the Government is liable.
Mr. YATES. Is the lessee liable to correct it?
Dr. LAY. Yes, sir; he is.
Mr. YATES. The lessee himself must correct it?
Dr. LAY. Yes, sir.
Mr. YATES. If that is true, why should you give the Santa Barbara lessees Government money? Why should not the companies themselves correct it?
Dr. LAY. They have. Union Oil, which had the spill, has restored the bay and the beach.
Mr. YATES. What is the Government's liability to do anything in this case then?
Dr. LAY. The liability relates to the fact that we leased the land to be developed. Of course, the companies bought that in good faith to develop it. Then we said, "No, you cannot develop it." So they gave us money for the public property to develop, and then we prevented the development of that property.
Mr. YATES. I have some other questions.
Mrs. HANSEN. Mr. Wiles, do you have your estimate on the amount of funds being spent per acre on those lands you administer? What is your estimate?
Mr. WILES. This is a quick calculation, Madam Chairman. We have 451 million acres under BLM supervision in the United States, against an adjusted fiscal year 1974 budget for the Department excluding territories and most of the Indian programs of $1,062,703,000; it figures out

to $2.36 an acre annually. There are 515 million acres additionally on the Continental Shelf out to the 200-meter depth. When added to the continental lands makes a total acreage of 966 million acres. Again, using the same amount of money, the figure comes to $1.10 per acre per year.

Mrs. HANSEN. You did not include Indian lands or Park Service land, so my figure of $1.09 is probably going to be correct.

Mr. WILES. It is awful close. I would not argue with it, Madam Chairman.

OMB MANAGEMENT

Mrs. HANSEN. There was a recent Washington Post article about a so-called OMB Mod Squad, involving former Assistant Secretary Richard Bodman. Can you tell us what this is about?

Dr. WHITAKER. Is the question is Dick Bodman going to work for OMB? The answer is "Yes."

Mrs. HANSEN. Is he a member of the "Mod Squad"?

Dr. WHITAKER. I do not know that he is very mod, but he is part of the squad.

Mrs. HANSEN. What is their purpose?

Dr. WHITAKER. Oh, I do not know.

Mr. YATES. Freeze more money?

Dr. WHITAKER. Are you asking me the purpose of OMB?

Mrs. HANSEN. No, no, that is to cut the congressional budget. That is a very easy, quick answer. What is this so-called new look in OMB all about?

Dr. WHITAKER. I can only answer that from a distance, Madam Chairman.

They are talking, they seem to be talking about putting in each department more management structure. What happened in the past in OMB is, you separate the M, for management, from the B, for budget. Different men have had different responsibilities. Under the new system the assistant directors of OMB will have both budget and management supervision experience, and at the same time they will narrow the territory which they cover so they do not have so much traffic they cannot do the job.

Mrs. HANSEN. The reason I ask is, OMB does not answer to Congress at the present time, and Congress is deeply concerned because the Secretaries and the staff of each department are answerable to Congress.

Dr. WHITAKER. I think we will be answerable to OMB, as I think we are to Congress, on management objectives; in other words, in the way of your line of questioning this morning, as to how many dollars are used for what are you getting?

This is speculation, because the Mod Squad system is not in operation yet, I think they will be putting in finite goals and action-forcing events as well as monitoring what have you gotten done by what amount of time. So I think to that extent it is a good thing.

Mrs. HANSEN. No one objects to the analysis of how successful government is in a program. I think it has been said in the committee many times that, I am not sure the spirit of America should entirely be ruled by the soul of an accountant.

Dr. WHITAKER. That is a good line. I have no——

Mr. YATES. Back on energy, who are the companies who have contracts with OPEC?

Dr. WHITAKER. Contracts with them.

CONCENTRATION OF ENERGY RESOURCES

Dr. LAY. There are a number of companies. Of course, the big ones are the big international oil companies. Both United States and foreign. British Petroleum and Royal Dutch——

Dr. WHITAKER. I am thinking of the U.S. companies.

Dr. LAY. The big international oil companies, Exxon, Texaco, and Shell.

Mr. YATES. They are also big U.S. domestic producers, are they not?

Dr. LAY. Correct.

Mr. YATES. Are they not in a pretty favorable position to balance their U.S. production against their OPEC dealing?

Dr. LAY. They certainly are. It is mainly a matter of where they are going to put their investments.

Mr. YATES. They are putting them in both places and they are going to make sure they make money out of both of them.

Dr. LAY. They have recently been putting them overseas because that has been more attractive within the last 10 or 15 years.

Mr. YATES. Does the Department of Interior have any policy against the concentration of energy resources in the hands of a few companies?

For example, of the 25 largest oil companiees, 11 have coal assets and 18 have uranium assets. According to the Committee on Small Business, the major oil companies which account for 84 percent of the U.S. refining capacity and 72 percent of the natural gas production also account for 30 percent of domestic coal reserves and more than 20 percent of domestic reserves resources.

The question is, Are you giving leases to the big oil companies for exploration of coal reserves on Government lands? Are you concentrating, in other words, are you helping to concentrate this great power in fewer hands by your leasing policy?

COMPETITIVE BIDDING FOR OSC SALES

Dr. LAY. We have not leased any coal leases for almost 2 years now. We are revising our leasing policies now. We are going more and more to a competitive bidding system on coal leases as we currently have on the OCS lands. Right now we do not have any specific prohibition against an oil company or anybody else buying the coal—when we implement our system. So it just depends who wants to bid the highest price.

Dr. WHITAKER. We have a law in Congress where there would be competitive bidding on coal leases.

Mr. YATES. It would seem to me that the biggest companies could buy your leases?

Dr. WHITAKER. If they are the highest bidder, yes.

Mr. YATES. Of course, they usually are, or can be. I do not know that is socially desirable. Do you not think this is a matter which ought to be discussed with the Department of Justice antitrust section?

Dr. LAY. Both Justice and the Federal Trade Commission have had studies on this, as well as Congress.

To answer your question directly, we do not have a specific policy on that question or on that issue.

Mr. LONG. And will not for the next 4 years?

TRANS-CANADA PIPELINE

Mr. YATES. Where is your negotiation with Canada respecting the trans-Canada pipeline? Are you having any discussion with them?

Dr. LAY. About the oil or the gas pipeline?

Mr. YATES. Both.

Dr. WHITAKER. There are no negotiations that I am aware of going on right now with regard to bringing Alaska oil through Canada. There have been negotiations in the past, discussions with the Canadians, they have not amounted to much.

Mr. YATES. Is that because of the U.S. attitude or the Canadian attitude?

Dr. WHITAKER. I think a common understanding has been reached so far, I guess they could be changed at the present time; the Canadians have in no way indicated any disposition to put up any funding with regard to bringing a pipeline through Canada.

Secondly, it is assumed that if they did want to put some Canadian Federal financing into it, that they would want a portion of the throughput. We need all we can get.

This is one of the reasons why we favor the Valdez route.

Mr. YATES. Is that an assumption or have you tested that assumption with the Canadian authorities?

Dr. WHITAKER. An assumption that they would not contribute?

Mr. YATES. That they would want some of the oil.

Dr. WHITAKER. We have never gotten that far because they have never come to the point where they want to put up any money for the pipeline.

Mr. Carter?

CANADIAN INSISTENCE ON PIPELINE OWNERSHIP

Mr. CARTER. As Secretary Morton testified to the Joint Economic Committee last June, he has assumed, after talking with Minister McDonald, that the Canadians would insist on 51 percent ownership and the ability to put in up to that amount how much oil they would have available to transport. During the recent Canadian campaign, several statements to that effect came out as well. So we have assumed that the Canadians would insist upon control over at least half of the throughput of the pipeline.

Mrs. HANSEN. That is their right-of-way charge, in other words?

Mr. CARTER. Yes.

Mr. YATES. That is the reason that the discussions got no further?

Mr. CARTER. That, and there are several other practical reasons: that it would take a great deal longer to build a trans-Canadian pipeline.

Mr. YATES. And a great deal more money?

Mr. CARTER. And a great deal more money and we would wind up without control over the throughput and therefore we do not get the

balance-of-trade benefits that Dr. Lay was talking about. We would, in the face of these recent Canadian controls over exports, not get the degree of certainty of planning from the point of view of our companies producing in Alaska or of our people who were purchasing oil at the end of the pipeline, that is desirable for a project of that magnitude.

Mr. YATES. Very well. So that is dead at the present time, then?

Mr. CARTER. Yes, sir.

Dr. WHITAKER. It is dead the other way, too, until we get our legal situation straightened out.

Mr. YATES. Yes. That is the trans-Alaska?

Dr. WHITAKER. Yes.

Mr. YATES. What is the situation with respect to the trans-Alaska pipeline. Is it contemplated any of that oil would be exported or would it all be delivered to the United States?

Mr. CARTER. The projections are that it will all be delivered to the United States. The demand in district 5 is projected to go up greater than will be able to be supplemented by the pipeline throughout.

STRIP MINING

Mr. YATES. Now may I ask you a few questions on strip mining? When the underground coal reserves outnumber the strippable reserves by 8 to 1, why do we have to continue to destroy the land by stripping?

Dr. LAY. It is mainly economics again.

As you well know, particularly in the past, the social cost of stripping that land was not borne by the producer. So there was a very strong economic incentive to strip mine it. Even when the cost of reclaiming the land is included, there probably still will be an economic incentive to strip mine. We are talking about a very wide cost differential here.

Mrs. HANSEN. I have a second question as it applies to your coal reserves in the West.

The committee has had testimony that most of your land in the West does not lend itself to deep mining; is this correct?

Dr. LAY. I just know the converse of that, that a good deal of it does lend itself to strip mining.

Dr. WHITAKER. And also there are a lot of low sulfur coals near the surface.

Mrs. HANSEN. It has been said by a great many people that because of the many problems you have, the earthquakes, the problem of subsidence in the West, that it did not lend itself to deep coal mining. Is that correct?

Dr. LAY. Yes, ma'am; I believe it is. So many of the real thick reserves are close to the surface. Those types of reserves do not lend themselves readily to deep mining.

Mr. YATES. An insertion in the Congressional Record for February 22, placed there by Senator Mansfield at page S-3152, who expressed his very deep concern about strip mining in Montana, he said there are some rather grim prospects, if this resource development proceeds without proper planning and control.

In reading that article, I notice that it is stated that the semiarid condition of Montana hampers reclamation efforts considerably, particularly with low rainfall, short growing season and poor soil. Ac-

cording to areas that have been strip mined, reclamation has rarely if ever been successful. So apparently that is the reason you have had no reclamation.

Mrs. HANSEN. This has been true in the Four Corners area.

Mr. YATES. But is that sufficient reason, though, for permitting the strip mining to proceed without efforts at reclamation?

STRIP MINING LEGISLATION

Dr. WHITAKER. We are not permitting it to proceed. As I said earlier, the Secretary is allowing leases on an individual basis. No leases have been allowed in a 19-month period. The administration has before Congress for the second year a strip mining legislation bill which would require each State within 2 years to regulate, by permit, mining operation of all minerals in underground areas. There would be provision in there for restoration.

I think reclamation can be divided into two basic areas; one is the surface stabilization of the land, which is a controllable thing, if you put enough money into it. The other question is vegetation related to strip mining. That is a tougher nut to crack. Without rain it just cannot be done.

I think we have to face up to that. I do not think any amount of research will make it rain any more. Nor is there water available. That is what I alluded to earlier as a concern.

Mr. MCKAY. But there is a research project which you have been whacking on, withholding funds, which could come up with certain vegetation which could survive in low yield water areas.

Dr. WHITAKER. It can come back naturally over a certain amount of time as it does right now. You can bring it back to a state where it is by the natural rainfall, but to improve it——

Mr. MCKAY. You also have some research, I think you will find, that even in those areas with adaptation of some existing and developable cover, that can come back quicker than the native habitat that is there now.

Dr. WHITAKER. That could be, Congressman, but I am not aware of it.

Mr. MCKAY. I think if you will check into it, you will find it.

STRIP MINING LEASES

Mr. YATES. How many leases has Interior given to companies for strip mining in the West or through the country?

Dr. WHITAKER. I do not know. I would have to supply that for the record.

(The information follows:)

Leases issued by BLM have not necessarily specified the method by which the mineral will be mined. I can tell you, however, that we have issued 524 Federal coal leases covering 780,000 acres; of this acreage, 23 percent—approximately 181,260 acres—are amenable to strip mining.

In addition we have issued leases covering 95,176 acres for phosphate, some of which is being surface mined.

Mr. YATES. Has it given any?

Dr. WHITAKER. Oh, yes; but not in the last 19 months in the West anyway. I could not give you the answer as to how many. I can get it for you and I will.

Mr. YATES. Do you know whether strip mining has taken place on those lands?

Dr. WHITAKER. Some strip mining has taken place both on public and private lands all over the country. There has been no——

Mr. YATES. I am talking about public lands because that is your jurisdiction.

Dr. WHITAKER. There have been no leases granted within the last 19 months in the West. What the record is before then I would have to get for the record for you.

(The information follows:)

Of the 181,260 acres of Federal land leased for coal, which are amenable to strip mining, approximately 7,988 acres have been strip mined and approximately 3,955 acres reclaimed.

In addition, 1,439 acres have been surface mined primarily for phosphate, and approximately 656 acres have been reclaimed.

Mr. YATES. The reason I am asking the question is to find out whether you have investigated to see whether there has been any reclamation made on the lands where you have given leases and where there has been strip mining.

STRIP MINING EXPERIENCE AT FOUR CORNERS

Mr. CARTER. One of the problems in some of those areas, the chairman mentioned Four Corners, that lease is on Indian land. We get into a position in exercising our trust responsibility, where the Indians want to make the lease and want the income from it. At the time the lease was granted, we did not have the degree of specific environmental concerns for reclamation in the lease that our regulations would now require.

Nevertheless, we have, with a great deal of persuasion on the companies, convinced them that they should engage in an active effort to reclaim that land, they should upgrade their mining plan and they are engaging in some research for revegetation at the present time.

Mrs. HANSEN. Was not Four Corners leased for mining to eliminate the possibility of having to dam the Grand Canyon for the production of power for California?

Mr. CARTER. I do not know whether, if you had not developed Four Corners, you would have gotten to that.

Mr. YATES. To dam the Grand Canyon?

Mr. CARTER. To dam the Grand Canyon.

Dr. WHITAKER. We were to the point where hydroelectric power was running out.

Mrs. HANSEN. That is right. You have to go back 4 years when the Arizona delegation presented unanimity in support of a dam in the canyon, this was violently objected to by environmental groups around the country.

At the same time you were faced with loss of power in Los Angeles, and the entire southern California segment.

So apparently the recognition was that the power had to be supplied from someplace and they went the route of leasing the Four Corners area. The Indians wanted the revenue.

(Discussion off the record.)

Mrs. HANSEN. I do recall that the Public Works Committee had before it proposals on the daming of the Grand Canyon.

Mr. YATES. I am not talking about the Indian lands. Is there anybody here who can tell me what the Department has done respecting the reclamation of land which has been strip mined, public lands that have been strip mined?

Mr. CARTER. In the Southwest energy study there are several main sites that are studied in there. The conclusion reached is that at the Four Corners, the Navajo mine, there is not a good job being done; at a couple of the others, and I do not recall the names.

Mrs. HANSEN. Insert a list of the names in the record.

Mr. CARTER. Yes.

(The informaiton follows:)

The Southwest energy study discusses the McKinley and Black Mesa Mines in addition to the Navajo Mine. Fortunately, in contrast with the Navajo Mine, the assessments of reclamation efforts at the McKinley and Black Mesa Mines are very favorable. At the McKinley Mine about 500 acres of land have been disturbed and about 450 acres of this total have been reclaimed.

Actually, since the promulgation in 1969 of more stringent departmental regulations for reclamation of disturbed land, the situation has improved. For example, the Decker Mine in Montana had a program which involved the testing of plant types and growth success before the coal pit was fully developed. The Western Energy Co. Mine in Colstrip, Mont., has been working on better methods of grading and stabilizing the spoils through revegetation, testing plant types and densites, and determining which soil materials should be put back on slopes. In addition we are seeing a much better working relationship between the operators and various educational facilities (such as the Agricultural Research Center at Montana State) in developing effective reclamation measures.

Mr. YATES. Do you know any place where a good job is being done?

STRIP MINE RECLAMATION

Mr. CARTER. Yes. They generally go along with the rainfall. The further north there is more rain, the efforts are reasonably successful in getting some good vegetation.

Mrs. HANSEN. Why does Montana continue to mine?

Mr. CARTER. I do not know the answer to that.

Dr. WHITAKER. I suspect they want the revenues from the coal.

Mr. YATES. Yes.

Mrs. HANSEN. I am asking you because every year the Montana people, including Senator Mansfield request increased funding for MHD, which is utterly dependent, as I understand, on coal production. Is that not correct?

Dr. LAY. Yes.

Mrs. HANSEN. You see this is why the committee raises these questions with you. Is deep coal mining going to increase in the future? Do you have the personnel to go down in those mines? Every bit of testimony we receive year after year is that the available manpower for coal mining is decreasing and you cannot get your Appalachian manpower to move out of the region. They are not about to go to Utah or Montana or anywhere else.

We raised this issue in our report last year, that we must have a national coal policy, because it does not seem very sensible to us to spend millions of dollars per year to develop the use of coal for gasification or for any other of the energy purposes, if there is going to be a prohibition against strip mining. I can foresee that the strip mining is going to be increasingly a controversial subject. Certainly I believe

that deep mining is going to be equally controversial, because every time you have an explosion in a mine and you have a loss of life, there comes an urgency to close the mines, in spite of the fact that there is testimony we have 600 years of coal resources. I just cannot believe at the present time it is going to be possible to produce this amount of coal with the present techniques.

Dr. LAY. I think we are just optimistic that we will get good reclamation.

Mrs. HANSEN. Senator Mansfield does not think you are doing it in Montana. Certainly the health and safety people do not look with any pleasure on deep mining.

Dr. LAY. It is going to be expensive in some areas. There have been some estimates like on the Montana-Wyoming reserves, but because of the very thick deposits, if you just added another nickel a ton, which is a very modest amount for that coal, you could afford to spend $2,000 or $3,000 an acre to reclaim it. That may not be adequate. We may have to triple it.

Mrs. HANSEN. I was going to say it is almost impossible because of the arid land in Montana.

Mr. LONG. Would you yield?

Mrs. HANSEN. Yes.

STRIP MINING IN WESTERN MARYLAND

Mr. LONG. We have a tremendous amount of strip mining in western Maryland. There has been a great outcry about it.

According to recent surveys, studies done by the Baltimore Sun, the amount of strip mining, land that is stripped, is increasing. There is practically no land that has been reclaimed. There is no lack of rainfall in the mountains of Maryland.

Dr. WHITAKER. That is precisely why we are proposing a law which would make Maryland have a tight strip mining law.

Mr. LONG. We have had laws. They talk about laws, laws, laws, and still the land gets ripped up.

Dr. WHITAKER. No, there is no Federal law and it is not necessary or compulsory to have a State law. If they choose to have one, fine; if they do not, they don't need a law. That is what the President is proposing. It is mostly private land you are referring to, I know that.

Mr. LONG. Unless you specify that you keep the mineral rights, most people do not even know about that, they just come right in and strip the cover right off. You do not own the land, you do not really own land in the mountains of Maryland and West Virginia, unless you have been very careful to make sure that you stipulate you have the mineral rights in there, and most people are not that smart. So that this is being done to private land and often without the knowledge of the people, or at least they did not know about it when they bought the land.

Dr. WHITAKER. This would not be the case if the Federal law were passed.

Mr. YATES. In response to what you said about your strip mining bill, I read an article in the New York Times on Sunday, February 18. The lead line says, "Revisions in strip mining bill appear to aid industry." They are talking about the administration's revisions.

Dr. WHITAKER. The New York Times and the Nixon administration have not held the same view for some time.

Mr. YATES. This is true.

Mr. CARTER. What points on the reclamation issue?

Mr. YATES. The point is, I would like to have you put in the record a response. The article I think is correct. You are still strip mining in the West, under your old leases if not under the leases in the last few years.

Dr. WHITAKER. That is true.

GAO REPORT ON STRIP MINING

Mr. YATES. What is happening to reclamation? You tell me what happened to Four Corners. I pointed out to you this morning the report of the GAO, which said you were not really paying any attention to reclamation.

I think on the basis of the reports I have seen that the Department of Interior really has not been doing very much.

Mr. CARTER. I just think we are not today prepared as well as we should be to remove all of your concern, but we can do a lot better job than we have done today.

Mr. YATES. What you have done today or what you have done out in the West?

Dr. WHITAKER. We will send you our response to the GAO report.

Mr. YATES. I would like to have that.

(The information follows:)

'Insert Page 308A

NINETY-SECOND CONGRESS

Congress of the United States

House of Representatives

CONSERVATION AND NATURAL RESOURCES SUBCOMMITTEE
OF THE
COMMITTEE ON GOVERNMENT OPERATIONS
RAYBURN HOUSE OFFICE BUILDING, ROOM B349-C
WASHINGTON, D.C. 20515

Action Office ASR
For info only

August 21, 1972

Honorable Rogers C. B. Morton
Secretary of the Interior
Department of the Interior
Washington, D. C. 20240

Dear Secretary Morton:

On October 6, 1971, this Subcommittee asked the Comptroller General to conduct an investigation into the Interior Department's administration and enforcement of its January 18, 1969 regulations concerning surface mining reclamation for public coal lands (43 CFR, Pt. 23) and Indian coal lands (25 CFR, Pt. 177).

Enclosed for your information, review and comment are two copies of his August 10, 1972 report (B-163623) of that investigation. The Comptroller General informs us that the "contents" of the report "were discussed" with officials of your Department, but "written comments were not obtained."

The GAO found that despite the fact that these "regulations have been established for more than 3 years, they were not being implemented effectively."

The report clearly indicates that the Department's administration and enforcement of the regulations have been lax. For example, the GAO found:

-- that the Bureau of Land Management's (BLM) formal procedures for the preparation of environmental impact statements "do not comply" with the "implementing guidelines" of the Council on Environmental Quality;

-- that the Bureau of Indian Affairs (BIA) "has not developed any procedures for the preparation of environmental impact statements";

-- that, even though the regulations require a technical examination of the effects of the proposed mining on the environment, 35 of the 65 permits and leases were issued, extended, or readjusted "without" such technical examinations;

-- that in February 1970, BLM issued instructions, aimed at satisfying this regulation requirement, which stated that such examinations "were to be based on data available" in its field offices

and that "field examinations" would be made to supplement them "when necessary";

-- that, even though the regulations require that the Geological Survey approve an exploration or mining plan before surface mining operations are commenced, many coal operators were operating "without" such approved plans or with plans approved without technical examinations;

-- that some of the required "compliance and performance bonds" were not obtained and, that, in one case, the acreage under lease exceeded the "acreage covered" by a compliance bond "by about 56 percent";

--that coal operators failed to submit to BLM or BIA required reports on such matters as the number of acres reclaimed, the methods of reclamation, abandonment of operations, etc.;

-- that a 1970 Geological Survey instruction calling for inspection of active leases and permits 3 and 2 times a year, respectively, and inactive leases and permits once annually, was not being followed, and that when BIA and BLM officials conducted inspections they did not file reports;

-- that the Department lacked any procedure for the public to comment on pending "applications for permits or leases or proposed exploration plans";

-- that GS, BLM, and BIA lacked procedures "to consult Federal and State environmental, pollution control, and health and safety officials prior to approving" a permit, lease or plan;

-- that despite the fact that administrative costs have nearly doubled in recent years, the Department for the past 20 years in the case of BLM, and for the past 12 years in the case of BIA, has required an application filing fee of only $10 to cover such costs, which is refunded if the application is disapproved.

The GAO report makes the following recommendations:

"We recommend that the Secretary of the Interior clarify the requirements of the Department's regulations by providing guidance as to

-- the timing and scope of technical examinations and related permit and lease requirements and the submission and approval of exploration and mining plans,

-- the required amount of coverage to be provided by performance bonds,

-- the need for adequate documentation of the results of the activities conducted under the regulations, and

-- the need for periodic reviews of the administration of the regulations."

1. We note that in several instances the report indicates that the Department is taking some steps to carry out these recommendations. Please provide to us a statement of the actions taken or planned by your Department to carry out each of these recommendations. Also indicate the precise date when these actions will be fully implemented.

2. GAO recommends that your Department "appraise the adequacy of the fee associated with processing an application for a coal permit or lease." After discussions with Interior officials, GAO reports (p. 27) that your agency will make "a study to determine the costs associated with processing" these applications and "adjust the fees, if warranted."

It is patently absurd to think that $10 is even remotely adequate to cover these costs. No study is needed to prove this. We request that the Department raise this fee to at least $300 to $500 now as an interim measure and then conduct a study to see how much higher it should be.

3. The GAO report states (p. 23):

> "We were advised by Department officials that consideration was being given to allowing the public to comment on pending applications for permits or leases and proposed exploration plans on a case-by-case basis when it was determined that a proposed operation might have an adverse effect on the environment."

From this statement, we imply that these officials believe such operations may, on occasion, not have such an "adverse effect."

(a) Please explain to us when and under what circumstances such operations might not "have an adverse effect on the environment."

(b) Please tell us when the Department will issue regulations to allow such comment.

4. The report states (p. 23):

> "Department officials told us that the Survey, BLM, and BIA consulted with Federal and State environmental, pollution control, and health and safety officials on a case-by-case basis when it was determined that the Department's agencies did not have the required technical expertise within their organization, or when, in their opinion, the subject operation might have an adverse effect on the environment. A Department official advised us that instructions were being developed to provide guidance for such consultations."

Please provide to us a copy of those instructions.

5. The GAO also made the following recommendation (p. 31):

> "We recommend that the Secretary of the Interior require BLM to revise its procedures to comply with the Council guidelines and BIA to adopt procedures for the preparation of environmental impact statements for those cases in which the statements are required."

Please advise us when these "procedures" will be available for public review.

Sincerely,

HENRY S. REUSS
Chairman
Conservation and Natural Resources
Subcommittee

GUY VANDER JAGT
Ranking Minority Member
Conservation and Natural Resources
Subcommittee

Encl

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

OCT 11 1972

Dear Mr. Chairman:

This Department has reviewed the Comptroller General's report to your subcommittee entitled, "Administration of Regulations for Surface Exploration, Mining, and Reclamation of Public and Indian Coal Lands, Department of the Interior (B-143623)."

Attached are statements relative to the concerns expressed in your letter of August 21, 1972, and our analysis of the report. After reviewing the report, I find that the Department of the Interior is indeed properly administering the lands in question and continues to vigorously support the philosophy and policies expressed in the National Environmental Policy Act.

The attached material indicates that the GAO report was not in all cases factual and accurate. After reviewing the report, it is my opinion that its findings were more representative of clerical shortcomings than dereliction of this Department's responsibility to properly administer the public lands. Nevertheless, we have found the GAO report useful because technical aspects of administering the public lands can always be updated.

The Department's mission in natural resources involves heavy responsibility for environmental protection as well as for resource development. It is important that we continue to exercise both responsibilities in any operation which involve the lands administered by the Department or within our trust. As you know, this approach has been reflected in stipulations we have made in several recent cases. I have recently reiterated to the Department this policy to assure our continuing effort to achieve high quality of living within an acceptable environmental framework.

We are currently preparing additional and more comprehensive responses to your letter and will make every effort to expedite the delivery of this material to you.

Yours Sincerely,

Rog Morton

Secretary of the Interior

Hon. Henry S. Reuss
Chairman, Conservation and Natural Resources
House of Representatives
Washington, D. C. 20515

DEPARTMENT OF THE INTERIOR STATEMENT
CONCERNING GAO REPORT AND CONGRESSMAN
REUSS' LETTER OF AUGUST 21, 1972, ON
STRIP MINING

This enclosure is prepared in sequential order of the inquiry and numbered accordingly. Certain data, to be fully responsive to the subcommittee request, is not available until later and will be forwarded as specified in our answers.

Item 1, page 1--"that the Bureau of Land Management's (BLM) formal procedures for the preparation of environmental impact statements 'do not comply' with the 'implementing guidelines' of the Council on Environmental Quality;"

We believe that the BLM's procedures for the preparation of environmental impact statements fully comply with the CEQ guidelines. These procedures were updated on May 4, 1972, to reflect the changes incorporated in the Revised Guidelines of the Council of Environmental Quality (April 23, 1971) and the revised Departmental Manual 516, Chapter 2 (Attachment #9) which deals with the preparation of environmental statements. The procedures were developed through formal and informal consultation with CEQ under Departmental guidance. Of course, we will continue to work with CEQ to insure full consistency of our procedures with NEPA and CEQ guidelines.

Item 2, page 1--"that the Bureau of Indian Affairs (BIA) 'has not developed any procedures for the preparation of environmental impact statements;"

It is the Department's position that when the BIA acts as a trustee for Indian people and the act does not involve Federal lands, monies, or activities the National Environmental Policy Act does not apply. However, Departmental and Bureau instructions require that an adequate environmental analysis be conducted on any proposed permit or lease of Indian lands. The BIA has established an Interdisciplinary Task Force headed by the Chief of Environmental Quality to develop the needed procedural instructions which will indicate the timing and scope of the required environmental analysis. It is anticipated that the procedural instructions should be finalized in about 60 days.

Item 3, page 1--"that, even though the regulations require a technical examination of the effects of the proposed mining on the environment, 35 of the 65 permits and leases were issued, extended, or readjusted 'without' such technical examinations;"

At the request of the Department, the GAO supplied it with a list of 53 cases which were the basis for its comment with respect to the public lands. The reports of the BLM field offices on these 53 cases are summarized in the attached tabulation. (Attachment #1)

A review of attachment #1 indicates that 10 of the cases cited by GAO did not have technical examination before issuance, extension or adjustment instead of 23 cases as reported by GAO (page 12). Action on eight of these cases occurred before manual guidelines implementing 43 CFR 23 were issued (November 9, 1970). Technical examinations in these eight cases were not made because field personnel thought extensions were subject to requirements existing at the time of initial issuance (prior to 43 CFR 23) or that they did not apply when the surface was privately owned. The issuance of manual guidelines clarified this misunderstanding. The remaining two cases that did not have technical examinations did contain permit or lease requirements which were prepared on the basis of knowledge of comparable lands in the vicinity of the areas covered by the leases or permits.

Item 4, page 1--"that in February 1970, BLM issued instructions, aimed at satisfying this regulation requirement, which stated that such examinations 'were to be based on data available' in its field offices and that 'field examinations' would be made to supplement them "when necessary;"

The BLM manuals of February 1970, and November 1970, stated: " A technical examination is to be based on data available in the field office and is to be supplemented by a field examination of the proposed operation when necessary."

Item 5, page 2--"that, even though the regulations require that the Geological Survey approve an exploration or mining plan before surface mining operations are commenced, many coal operators were operating 'without' such approved plans or with plans approved without technical examinations;"

Of the 171 permits and leases issued during the study period which are or were active, 165 have approved plans. On page 15 of their report, GAO states that: "Only two of the 13 BLM leases we reviewed had approved mining plans." However, on page 11 they point out that only two lessees had commenced mining operations. Inasmuch as mining plans are not required until such time as operations are to be started, the GAO should have more properly concluded that 100 percent of the required mining plans were obtained.

GAO also states that seven permittees had conducted exploration operations without approved plans. Our investigation shows that two of these permittees were, in fact, operating under approved plans. Of the remaining five permittees, two were discovered by the Mining Supervisors to be exploring without a plan in the course of the Survey's routine examinations of the lands. The remaining three permittees were found to have been operating without a plan only when the drilling data were submitted to the Office of the Regional Mining Supervisor.

Department officials have informed GAO personnel that new technical examinations based on field analysis are not necessary in all cases in response to applications for permits or leases. Field personnel of the surface managing agencies are quite familiar with lands under their jurisdiction. Good environmental stipulations can be developed without site examination. Indeed, the GAO report (page 12) points out that of the 23 permits and leases issued, extended or readjusted without the required technical examination, 17 included permit and lease requirements similar to those incorporated in

leases and permits on which on-site technical examinations had been made. Reference to Attachment #1 indicates that all six cases that lacked lease or permit stipulations were processed before issuance of manual guidelines. In two cases, field personnel were not aware that cases involving private surface ownership were covered under 43 CFR 23. In the issuances of the other four cases field personnel were not aware that extensions were covered in 43 CFR 23. The issuance of manual guidelines (November 9, 1970) has eliminated such misunderstandings.

Item 6, page 2--"that some of the required 'compliance and performance bonds' were not obtained and, that, in one case, the acreage under lease exceeded the 'acreage covered' by a compliance bond 'by about 56 percent;"

The GAO Report cited two cases under BLM jurisdiction for which no performance bonds had been secured. These were cases No. NM 8745 and W 9035.

NM 8745 involves an assignment of a 51 percent undivided interest. The entire operation is covered by a bond held by the Maryland Casualty Company and is properly recorded on Form 3106-10. In addition, the party holding the 51 percent assignment is also covered by a $75,000 nationwide bond held by Argonaut Insurance Company. This bond is indicated in the operator's file and was referenced in the case file to the bond file--No. NM 0558400.

W 9035 was extended October 7, 1970. It is a case in which the surface is owned privately. The extension was approved before issuance of the manual guidelines which clarified the application of 43 CFR 23 to lands on which the surface is privately owned.

The incident cited by GAO concerning BIA is in error. The Peabody Coal Company holds six coal mining leases on the Northern Cheyenne Indian Reservation in Montana. The leases cover 12,946; 480; 2,041; 249; 140; and 180 acres respectively for a total of 16,036 acres. There are two collective bonds each in the amount of $15,000, instead of one as reported in the GAO report. Thus, instead of being delinquent in coverage by about 56 percent, the unobserved bond overextends the coverage by approximately 28 percent. Copies of the two bonds are enclosed. (Attachment #2)

92-148 O - 73 - pt. 1 - 15

Item 7, page 2--"that coal operators failed to submit to BLM or BIA required reports on such matters as the number of acres reclaimed, the methods of reclamation, abandonment of operations, etc.;"

The existing regulations require that such reports be submitted to USGS as part of the mining plans. The information is available from this source. The Survey is currently developing a revised report form to be submitted by a lessee that will provide for separation of material concerning the number of acres reclaimed, the methods of reclamation, etc. for use of the surface management agency in maintaining the complete file of each lease holder.

Item 8, page 2--"that a 1970 Geological Survey instruction calling for inspection of active leases and permits 3 and 2 times a year, respectively, and inactive leases and permits once annually, was not being followed, and that when BIA and BLM officials conducted inspections they did not file reports;"

In 1970, the above guidelines for exemplary lease management were established by the Geological Survey, Conservation Division. However, with 3,200 mineral leases, licenses and permits under supervision embracing nearly six million scattered acres of Federal and Indian lands, and with limited personnel available to accomplish the work, it has become necessary to handle work on a priority basis.

The BLM's instructions contained in the manual part 3509.4 (Attachment #3) provide for such reports to be made and submitted to the State Director. State Office evaluations are made on a continuing basis and when such deficiencies are noted, steps are taken to correct them. We believe such reports are necessary and each case file involved should be documented. We are reminding the State Directors of this requirement.

The Bureau of Indian Affairs acknowledges some of the reports were not fully documented and placed in the records. Instructions have been issued to fully document the files in compliance with existing regulations.

Item 9, page 2--"that the Department lacked any procedure for the public to comment on pending 'applications for permits or leases or proposed exploration plans;"

Although no specific provision is made for public review before each lease or permit is issued, Land Office records are open to public inspection and policies require full consideration and response to all comments and suggestions. If the proposed issuance of a lease or permit is found to constitute a "major Federal action significantly affecting the quality of the human environment," an environmental impact statement is prepared and the public has adequate opportunity for review and comment under the Department's procedures for the preparation of environmental impact statements. The Bureau of Land Management Planning System calls for public participation in all the various stages of decision-making from the collection of inventory data to the preparation of detailed operation plans. Attached is BLM Manual 1608.14 (Attachment #4).

This is particularly important in that BLM procedures for environmental analysis and statements require an analysis of responses to the substance and intensity of public concern at the local, regional, and national levels. Specific organizations and individuals are identified as far as possible.

In those instances where BIA is acting as a trustee for Indian people and no Federal lands, monies, or activities are involved, the National Environmental Policy Act does not apply. The procedural instructions presently being developed by BIA will provide for criteria to determine when permits or leases or related exploratory plans will have an adverse effect on the environment.

In cases where an environmental assessment indicates that approval will constitute a major Federal action significantly affecting the quality of the human environment, requiring an impact statement to be prepared the general public has an opportunity to comment.

Item 10, page 2--"that GS, BLM, and BIA lacked procedures 'to consult Federal and State environmental, pollution control, and health and safety officials prior to approving' a permit, lease or plan;"

Attached are copies of BLM Manual 3509 (Attachment #3), 1792 (Attachment #5 and #6), and Section 1608.14 (Attachment #4, which contain specific instructions for consulting with Federal, State, and local agencies and the general public.

The GAO Report states, "We believe that the Indian landowners were adequately consulted as to actions proposed under permits or leases even though technical examinations had not been conducted."

In response to Geological Survey Manual Part 516, Chapter 2, issued March 11, 1972, (Attachment #7), the Branch of Mining Operations very recently issued instructions and guidelines to Mining Supervisors for complying with this Directive, which include guidelines for consulting with other Federal, State and local agencies before approving exploration or mining plans.

Item 11, page 2--"that despite the fact that administrative costs have nearly doubled in recent years, the Department for the past 20 years in the case of BLM, and for the past 12 years in the case of BIA, has required an application filing fee of only $10 to cover such costs, which is refunded if the application is disapproved."

The Bureaus involved have a study underway concerning the costs associated within administration and processing of permits and leases. Application service charges for coal permits and leases are not refundable as is the case for all other applications accepted for filing. Current priority backlogs are being reviewed to determine a specific completion date of the study.

The GAO report makes the following recommendations:

"We recommend that the Secretary of the Interior clarify the requirements of the Department's regulations by providing guidance as to

--the timing and scope of technical examinations and related permit and lease requirements and the submission and approval of exploration and mining plans,

--the required amount of coverage to be provided by performance bonds,

--the need for adequate documentation of the results of the activities conducted under the regulations, and

--the need for periodic reviews of the administration of the regulations."

See the answers to the specific recommendations which follow.

Item 1, page 3--"We note that in several instances the report indicates that the Department is taking some steps to carry out these recommendations. Please provide to us a statement of the actions taken or planned by your Department to carry out each of these recommendations. Also indicate the precise date when these actions will be fully implemented."

After reviewing Departmental regulations, manual guidelines, and procedures, we find:

(a) Timing and scope of technical examinations and related permit and lease requirements and the submission and approval of exploration and mining plans.

We believe that further clarification of 43 CFR 23.5(a), 23.7, and 23.8 and BLM Manual Section 3509 and other implementing guidelines of the Geological Survey is unnecessary. For example, the regulations direct that a technical examination be made for every application for a permit or lease under the mineral leasing acts. In regard to scope, manual section 3509.1 and GS guidelines include a comprehensive list of factors to be considered in conducting a technical examination and preparation and approval of exploration and mining plans.

(b) Coverage under performance bonds.

We believe that BLM Manual 3509.31 clearly specifies the amount of the required bond, e.g. "The bond shall be an amount sufficient to cover full compliance with all terms and conditions of the permit or lease including surface protection and reclamation requirements, and to ensure adherence to the exploration or mining plan as approved, amended, or supplemented."

(c) Need for adequate documentation.

BLM Manual 3509.4 requires the District Manager to make site inspections and to prepare compliance reports with recommendations. These requirements appear to us to be clear and adequate.

(d) Need for periodic reviews of the administration of the regulations.

Such reviews are an ongoing aspect of the administration of the Department of the Interior. On February 25, 1972,

the Acting Secretary specifically directed that the Department conduct an in-depth environmental review of its coal-leasing and mining activities. This review is underway, and it covers all activities having environmental impacts; and may result in such things as changed regulations, revised lease and permit provisions, revised operating procedures, and criteria for identifying areas of environmental concern.

Item 2, page 3--"GAO recommends that your Department 'appraise the adequacy of the fee associated with processing an application for a coal permit or lease.' After discussions with Interior officials, GAO reports (p. 27) that your agency will make 'a study to determine the costs associated with processing' these applications and 'adjust the fees, if warranted."

Departmental coal fees involve two principles stated in OMB Circular A-25:

> General policy 3a.--Special Services. Where a service (or privilege) provides special benefits to an identifiable recipient above and beyond those which accrue to the public at large, a charge should be imposed to recover the full cost to the Federal Government of rendering that service.
> General policy 3b.--Where Federally owned resources or property are leased or sold, a fair market value should be obtained.

In establishing the filing fee (or application-service fee, as generally referred to in the regulations), the Department tried to identify the charges which are properly recoverable through the receipt of fair market value on the basis that the market includes such costs in market prices. The filing fee (or application-service charge) was considered as something outside that area and a separate charge was therefore required.

In establishing the application service charge, the Department was faced with the choice between establishing standard fees or varying each fee according to the costs of receiving and recording individual applications. Some applications, for example, are defective or incomplete requiring further processing before filing. The decision was made to charge a standard fee to recover costs on an overall basis rather than on individual basis. Costs of administration of the fee collection were an important consideration.

Similar principles were followed in deciding the question whether collection for services in addition to application services should be made for applications for leases or permits which are denied. For example, private business does not consummate every transaction it negotiates and thus includes in market prices enough to cover such activity. The matter of setting fees equitable to both the general public and the applicant requires application of professional principles. We will review the matter of service charges for coal permits and leases. We will let you know of the result.

Item 3, page 3--"The GAO report states (p. 23): 'We were advised by Department officials that consideration was being given to allowing the public to comment on pending applications for permits or leases and proposed exploration plans on a case-by-case basis when it was determined that a proposed operation might have an adverse effect on the environment."

"From this statement, we imply that these officials believe such operations may, on occasion, not have such an "adverse effect.'

(a) Please explain to us when and under what circumstances such operations might not 'have an adverse effect on the environment.'

(b) Please tell us when the Department will issue regulations to allow such comment."

(a) It is obvious that every coal exploration or mining operation will disturb some part of the natural environment, hence will have an "adverse" effect. However, it is not true that each such operation will be a "major Federal action significantly affecting the quality of the human environment" as defined by NEPA. We believe that the paragraph on page 23 of the GAO Report refers to the latter case.

(b) Departmental environmental procedures require that all activities and proposals of recommended actions of the Department be assessed for their environmental impact. Responsible officials are required to determine whether or not the action is "a major Federal action significantly affecting the quality of the human environment." If so, he must prepare an environmental statement. Our procedures for the preparation of environmental statements provide for the public to review the draft and final statements and may include public hearings on the proposal and/or on the draft statement. Every attempt is made to encourage public participation in the review of environmental statements. (Attachment #9--Departmental Manual 516 DM 2)

Item 4, page 4--"The report states (p. 23): 'Department officials told us that the Survey, BLM, and BIA consulted with Federal and State environmental, pollution control, and health and safety officials on a case-by-case basis when it was determined that the Department's agencies did not have the required technical expertise within their organization, or when, in their opinion, the subject operation might have an adverse effect on the environment. A Department official advised us that the instructions were being developed to provide guidance for such consultations.'

Please provide to us a copy of those instructions."

The BLM Manual (Attachments #3, 4 and 5) provide for consultation with Federal, State and local officials at several stages in the public land management process; these are:

Section 3509.1 (Step 6) requires the team leader, in scheduling a field examination, in the processing of applications, offers, bureau motion sales and applications for renewal, to coordinate participation with other agencies and individuals such as:

--Regional Mining Supervisor of the Geological Survey.
--Representatives of any other agency having jurisdiction over the land.
--The applicant.
--The surface owner.
--Other interested agencies, including local governments counties, cities, etc.).

Section 1792.25A1 requires that the views of Departmental bureaus and offices and of other Federal, State, and local agencies will be utilized to the maximum extent practicable in the preparation and subsequent review of draft environmental statements.

Section 1608.14A states that "The involvement of land and resource user groups, State and local governments, other Federal agencies, and interested citizens in the Bureau's data gathering and planning process is essential." The district manager is directed to keep all appropriate groups, agencies, and public sufficiently informed and involved.

Geological Survey Manual Part 516, Chapter 2, published in the Federal Register March 11, 1972, (37 FR 5263--Attachment #7) governs all actions by Geological Survey personnel in regard to the requirements of the National Environmental Policy Act of 1969. In accordance with this Directive, the Branch of Mining Operations subsequently issued an Instruction Memorandum to its Mining Supervisors on how to proceed with environmental impact assessments.

The procedural instructions for the BIA are being developed for environmental analysis to be performed under the trust responsibilities and should be available in draft within 60 days.

Item 5, page 4--"The GAO also made the following recommendation (p. 31): 'We recommend that the Secretary of the Interior require BLM to revise its procedures to comply with the Council guidelines and BIA to adopt procedures for the preparation of environmental impact statements for those cases in which the statements are required.'

Please advise us when these 'procedures' will be available for public review."

See response to Item 1, page 1, for the Bureau of Land Management.

The BIA has developed a preliminary draft manual outlining procedures for the preparation of environmental impact statements under the National Environmental Policy Act. These preliminary draft instructions have cleared the President's Council on Environmental Quality and are presently being processed in final draft for publication in the Federal Register for public review and comment.

The report concludes that regulations concerning the Surface Exploration, Mining and Reclamation of Lands (43 CFR 23 and 25 CFR 177), (Attachment #8) have been in effect for over three years but are still not being implemented effectively.

The regulations were adopted as the result of an accelerated program immediately prior to the last change of administration. Although the Department has never been specifically funded to carry out its responsibilities under these regulations, we have implemented them to a large degree at the expense of other responsibilities. Initially, of course, there was a period of several months, during which operating procedures were being established, when some misunderstandings of the requirements of the regulations did exist.

During this interim period, Geological Survey, the Bureau of Land Management, the Bureau of Indian Affairs, and personnel in the field were operating under existing or temporary procedures. Most of the deficiencies cited by the GAO occurred during the period when operating procedures were being developed.

In conclusion, we agree with GAO's lead finding and conclusion that, "the Department's regulations, if properly implemented, should help in protecting environmental values." We believe that significant strides have been made in the past three years in implementing the regulations 43 CFR 23 and 25 CFR 177 and that we now have fully implemented these regulations.

Mrs. HANSEN. Insert in the record the number of leases issued since 1960 and the reclamation stipulations.

(The information follows:)

Records are not available on a yearly basis from 1960 to 1966. We do, however, have a base figure of leases that had been issued through 1966. On public domain we had issued 98,168 oil and gas leases, 417 coal leases, and 381 other mineral leases for a total of 98,966 leases. On acquired lands we issued 7,689 oil and gas leases and 324 coal and other mineral leases for a total of 8,013 leases. From 1967 to 1972 on the public domain we issued 69,182 oil and gas leases, 162 coal leases, and 239 other mineral leases for a total of 69,583 leases. On acquired lands we have issued 7,651 oil and gas leases, four coal leases, and 17 other mineral leases for a total of 7,672 leases.

The following information provides examples of the current stipulations which are being included in the leases.

Form 3040–4
(November 1970)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MINERAL LEASING STIPULATIONS

SURFACE MANAGEMENT REQUIREMENTS FOR EXPLORATION, MINING, AND RECLAMATION

Stipulations may be selected from the following list for inclusion in permits or leases. Care must be exercised to assure that any stipulation used apply specifically to the need for such stipulation. Other stipulations may be drafted as needed to meet specific problems.

1. Activities employing wheeled or tracked vehicles shall be conducted in accordance with industry practices and in such a manner as to minimize surface damage.

2. Trail widths shall be kept to the minimum necessary and may not exceed feet. Surface may be cleared of timber, stumps, and snags. Care must be taken to avoid scarring or removal of ground vegetative cover.

3. Drainage systems shall not be blocked. No cuts or fills shall be made near or in streams which will result in siltation or accumulation of debris. All damage to streams must be repaired to the satisfaction of the authorized officer.

4. All operations must be conducted so as not to change the character or cause pollution of streams, lakes, ponds, waterholes, seeps, and marshes or cause damage to fish and wildlife resources.

5. Surface damage which causes soil movement and/or water pollution must be corrected to the satisfaction of the authorized officer.

6. Vegetation must not be disturbed within 300 feet of any waters designated in a (prospecting permit) (lease) (contract) *except* at authorized stream crossings.

7. No explosives may be used without prior written consent of the authorized officer.

8. Trails and campsites must be kept clean. All garbage and foreign debris must be eliminated by removal or burial. Burning is permissible only by prior written consent of the authorized officer.

9. Existing roads and trails shall be used whenever possible.

10. All survey monuments, witness corners, reference monuments, and bearing trees must be protected against destruction, obliteration, or damage. Any damaged or obliterated markers must be reestablished in accordance with accepted survey practices at expense of (permittee) (contractor) (lessee).

11. The operator shall make every effort to prevent, control, or suppress any fire in the operating area. Reports of uncontrolled fires must be immediately sent to the authorized officer or his representatives.

12. Fill all holes, pits, and excavations to the extent agreed in the approved mining plan and grade to the natural contour.

13. When surface operations are conducted, overburden or other waste shall be returned to the excavation, as set forth in the mining plan and except in instances when the district manager or state director determines that it would be desirable to use an excavation for the permanent impoundment of water or for other beneficial uses.

14. Disposal sites shall be selected and prepared so as to avoid downward percolation of pollutants into aquifers.

15. Disposal systems for solid and liquid wastes shall be designed and constructed so as to avoid landslides, control wind and water erosion, and establish conditions conducive to vegetative growth in the disposal area.

16. Casual accumulations of water on waste piles shall be avoided, and, where necessary, surface waters shall be directed around the piles.

17. Final grading of backfilled and other unconsolidated materials shall be so performed as to present a surface susceptible to vegetation or desired land form.

18. Excavations used for the permanent impoundment of water shall be graded to establish safe access to water for persons, livestock, and wildlife.

19. No solid rock face or bench face shall exceed feet in height. Appropriate access suitable for persons, lifestock, and wildlife shall be provided for every feet of continuous rock or bench face.

20. Except for solid rock faces, bench faces, and excavations used for impoundment of water, those surface areas of the leased premises disturbed by operations conducted by the lessee shall be revegetated when their use is no longer required by the operator. *(Species, methods, and season of seeding or planting, etc. should be specified. These requirements should be practical and generally should not require vegetative rehabilitation beyond level of production.)*

21. Backfilling, final grading, and vegetation shall be completed within two (2) years after the completion or termination of the particular operation involved unless the district manager extends the time.

22. Drill holes shall be permanently sealed or filled as directed by the district manager upon completion of operations.

23. Surface buildings, supporting facilities, and other structures which are not required for particular operations shall be removed and the area graded and revegetated.

24. All operations shall be conducted with a view to avoidance of range and forest fires and spontaneous combustion. Open burning of carbonaceous materials shall be in accordance with suitable practices for fire prevention and control.

25. The lease or contract premises shall be appropriately posted and fenced or otherwise protected to minimize injury to persons, livestock, and wildlife.

26. All access, haul, and other support roads and trails shall be constructed and maintained in such a manner as to control and minimize channeling and other erosion. Roads and trails shall be constructed only at locations approved by the authorized officer.

27. All roads constructed in the operation shall be closed by barricades or protected from erosion by placing of water control bars as required by the district manager.

28. All existing improvements including, but not limited to, fences, gates, cattle guards, roads, trails, culverts, pipelines, bridges, public land survey monuments, and water development and control structures shall be maintained in serviceable condition. Damaged or destroyed improvements shall be replaced, restored, or appropriately compensated for.

29. When agreed by lessee and lessor, the lease site shall be available for other public uses including, but not limited to, livestock, grazing, hunting, fishing, camping, hiking, and picnicking.

30. Topsoil shall be removed and stockpiled prior to removal of overburden. Stockpiles shall be located so as not to be covered by spoil materials and to facilitate their use in final backfilling and grading.

GPO 831-559

Mineral Leasing Stipulations

Recommendations for Mitigation of Environmental Impacts:

The following stipulations to the proposed lease are recommended:

(1) Bond - Before any exploration or mining activities may be authorized, the operator must post a $5,000 performance bond to cover estimated reclamation costs and to insure compliance with surface protection stipulations of the lease. An increase in the amount of the bond may be required at any time during the life of the lease on approval of an exploration plan or an approved change in plan or to reflect changing surface conditions.

(2) Mining Plans - Before commencement of mining operations a general plan of operations must be filed with the Mining Supervisor. This mining plan shall project the plan of operations for the lease area as far in the future as possible, with particular emphasis on methods of operation, including a description of proposed roads or vehicular trails including railroads and the size and location of structures and facilities to be built. The plan will be updated annually. If no new developments are planned, a letter so stating shall be given the Mining Supervisor. A more detailed mining plan shall be filed before commencement of mining in a given area. This plan shall provide, in addition to the information required by section 23.8 of Title 43 CFR, a schedule for reclamation of the area covered by the plan.

(3) General - In order to control conditions causing or contributing to water pollution, soil erosion, or hazards to health, safety and property, and for the conservation of the resources and the preservation of natural beauty, the lessee will design and perform all operations with a view to the prevention of pollution and erosion and the utilization of the natural topography to achieve harmony with the landscape.

(4) Surface Reclamation - All overburden, coal waste and other wastes shall be disposed of and the area of land affected reclaimed in accordance with the following requirements:

a. Disposition of wastes and placement of overburden:

(1) Soil Material - In those areas to be strip-mined and identified by the District Manager, soil material will be removed and stockpiled for final reclamation of the spoil banks. The soil material will be replaced on the disturbed areas after completion or termination of that particular phase of the mining operations, at a depth sufficient for plant growth.

(2) All mine and other wastes shall be returned to the excavation. Overburden (spoil) shall be returned to the excavation unless that excavation is to be used for the permanent impoundment of water.

(3) Where an excavation is to be left for the impoundment of water the sides shall be graded to at least a 2:1 slope so as to provide safe access to water for persons, livestock and wildlife.

(4) Overburden (spoil) shall be flattened on the top to a width of twenty-five feet and have side slopes no greater than 2:1, unless otherwise specified, and shall be so deposited that it does not inhibit the flow of water nor produce sediment into the drainages of the North Platte River. Overburden (spoil) piles shall be located so as to minimize damage to the surrounding lands.

(5) Backfilling of excavations and sloping and grading of spoil piles shall be undertaken concurrently with mining operations. Final grading of backfill, spoil piles, and other unconsolidated materials shall be so performed as to present a stable surface which is susceptible to vegetation. In all cases, gently undulating skyline showing peaks and ridges similar to the surrounding area is the objective.

(6) Where outcrop stripping is conducted the disturbed area shall be sloped to a 2:1 slope and top soil distributed on waste piles and all disturbed areas from which top soil has been removed.

(7) Where underground mining operations are conducted, all dump piles and mine wastes shall be sloped to a 2:1 slope and sufficient top soil distributed thereon to provide a surface which is susceptible to vegetative growth.

b. Seeding:

(1) Overburden (spoil) piles and disturbed areas shall be seeded when mining operations are completed in a given locality at the rate per acre, with grasses, legumes and shrubs specified by the Mining Supervisor. Such species will generally be the same as those found growing in the area or such exotics as are adaptable to the particular soil and climate. Seeding is to be accomplished between April 1 and April 30 or between September 1 and October 30.

(2) On slopes too steep or rocky for drilling, aerial or ground broadcasting of seed will be acceptable. On the more level, smooth areas drilling will be required.

(3) All seed sown must be tested and meet the standards for purity and germination established for the area. The cost of seed testing is to be born by the operator.

(4) Planting any affected land whose chemical and physical characteristics are toxic, deficient in moisture or plant nutrients, or composed of sand, gravel or stone to such an extent as to seriously inhibit plant growth, will generally be deferred for a period of time, depending upon soil properties and characterisitcs as determined from soil tests. The operator shall notify the Mining Supervisor when seeding operations are to be started.

(5) In the event that the first seeding is not successful, the operator will make a second attempt. Such attempt will generally not be sooner than two years after the first. In no event will more than two seedings be required of the operator.

(6) When water suitable for irrigation is available in an excavated area, the seeded area shall be irrigated by sprinkling.

Water Pollution Control:

All operations must be conducted so as not to change the character or cause pollution of streams, lakes, ponds, waterholes, seeps, and marshes, or damage to fish and wildlife resources. No contaminants or pollution will be allowed to enter streams, springs, stock waters or ground waters. No water will be used from stock ponds or springs without written consent of the owner. The lessee will be required to comply with all Federal and State laws, regulations and standards relating to air, water and land pollution.

Air Pollution Control:

All operations shall comply with all applicable air quality standards and criteria established by Federal, State or local authority.

Special Requirements:

Surface mining once started in an area visible from Seminoe Reservoir shall be carried on to completion in that area without interruption until reclamation has been completed.

Miscellaneous Requirements:

a. All operations shall be conducted so as to prevent the occurence of range and forest fires.

b. All access and haul roads shall be constructed and maintained in such a manner as to control and minimize erosion. When no longer needed for mining operations, unless otherwise designated by the Mining Supervisor after consultation with the District Manager, all spur and haul roads, will be treated with water bars to prevent erosion and seeded as in 4b. above.

c. All existing improvements, including but not limited to fences, gates, cattleguards, pipe lines, reservoirs and other water developments damaged or destroyed by the operations of the lessee shall be replaced or restored to their original condition or appropriately compensated for.

d. Hunting and other outdoor recreational activities shall be allowed on the lands covered by the permit except in areas where such activities are found to be hazardous and interfere with the operations of the operator.

e. Equipment, trash, abandoned buildings, etc. shall be removed or buried and the area restored as near as possible to its original condition upon completion of operations in the area. The area will be kept clean and orderly at all times.

f. Housing and other facilities and services related to community development shall be kept to a minimum on the leased premises and shall require the approval of the District Manager prior to construction or location of the facility on the leased area.

g. Areas where spoil piles and strip pits have not been sloped to a 2:1 slope must be fenced for the safety of man and animals.

h. When American antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, vertebrate fossils or artifacts, are discovered in the performance of this leas, the item (s) or condition (s) will be left intact and immediately brought to the attention of the Mining Supervisor.

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Mrs. HANSEN. Mr. Secretary, I want to express my appreciation for your presentation. It was excellent. I also want to thank your staff. They are very knowledgeable. Please give our best to Secretary Morton; we all wish him a speedy recovery.

Dr. WHITAKER. Thank you very much.

TUESDAY, FEBRUARY 27, 1973.

FOREST SERVICE

WITNESSES

T. K. COWDEN, ASSISTANT SECRETARY OF AGRICULTURE
J. R. McGUIRE, CHIEF, FOREST SERVICE
R. A. RESLER, ASSOCIATE CHIEF, FOREST SERVICE
R. K. ARNOLD, DEPUTY CHIEF, FOREST SERVICE
J. W. DEINEMA, DEPUTY CHIEF, FOREST SERVICE
T. C. NELSON, DEPUTY CHIEF, FOREST SERVICE
R. M. HOUSLEY, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE
R. P. McROREY, ASSOCIATE DEPUTY CHIEF, FOREST SERVICE
W. A. CAMPBELL, BUDGET OFFICER, FOREST SERVICE
WARREN A. BLIGHT, DEPUTY DIRECTOR OF FINANCE, DEPARTMENT OF AGRICULTURE

Mrs. HANSEN. The committee will come to order.

This morning we have the U.S. Forest Service. Because we are trying to get a total look at our forests, we have asked forest people from the Bureau of Land Management and the Bureau of Indian Affairs to sit in with us and to listen. Some of these problems in the U.S. Forest Service spill over into the Bureau of Land Management and the BIA.

This morning we have as our principal witnesses Dr. Cowden, the Assistant Secretary of Agriculture.

Secretary Cowden, we are very happy and pleased to have you with us this morning.

Dr. COWDEN. Thank you.

BIOGRAPHIES OF NEW WITNESSES

Mrs. HANSEN. And John McGuire, the Chief of the U.S. Forest Service. Mr. McGuire, we will insert in the record at this point the biographies of witnesses appearing before this committee for the first time.

(The biographies follow:)

REXFORD A. RESLER
ASSOCIATE CHIEF, FOREST SERVICE

Rex Resler, who didn't enter the forestry profession full-time until he was 30 years old, today, less than 20 years later, was named Associate Chief of the Forest Service effective July 23, 1972.

Mr. Resler has been one of the nine regional foresters in the Forest Service since mid-1970, when he took charge of the Pacific Northwest Region headquartered at Portland, Oregon. The new Associate Chief first worked for the Forest Service in 1950 as a summer employee while attending Oregon State University. Before that, he had served four years during World War II in the Army Air Corps and had worked four years as a journeyman carpenter before deciding he would go into forestry.

He received his appointment as forester in 1953, upon graduation from Oregon State, and simultaneously began work toward a Master of Forestry Degree, granted by Oregon State in 1954. After serving as Ranger in the Siuslaw and Rogue River National Forests, he was promoted to the staff of the Willamette National Forest in 1959. In 1962, he became deputy supervisor of the forest and in 1965 became supervisor of the Malheur National Forest.

In 1968, he was transferred to the Washington, D.C., headquarters to work first in the Division of Recreation and then as Assistant Director of the Division of Timber Management. In 1970, he became Deputy Regional Forester for the Pacific Northwest Region and the following year, he was promoted to Regional Forester.

JACK W. DEINEMA
DEPUTY CHIEF, ADMINISTRATION
FOREST SERVICE

J. W. (Jack) Deinema, Forest Service Associate Deputy Chief for National Forest Systems, was named Forest Service Deputy Chief in charge of Administration, effective July 9, 1972.

Since his first Forest Service assignment, 22 years ago, as smokejumper on the Payette National Forest in Idaho, Deinema's forestry career has been both varied and meteoric.

He was born in Nashua, Iowa, and graduated from Iowa State College with a bachelor's degree in forestry. During World War II, he served in the Marine Corps and took part in invasions at Tarawa, Saipan, and Tinian. Following some graduate work in range management at Utah State University, Deinema began his Forest Service employment. After his initial smokejumping assignment, he successively held positions as District Ranger in the Challis and Teton National Forests in Idaho, Forest Supervisor of the Challis, and later, Assistant Regional Forester in the Forest Service Intermountain Regional Office at Ogden, Utah, where he was in charge of Personnel Management.

When the Job Corps program was begun in 1964, Deinema transferred to Washington, D.C., to head up this program for the Forest Service. He later moved to the Office of Economic Opportunity as National Director of the Job Corps Conservation Centers. Five years ago, he returned to the Forest Service as Regional Forester for the California Region.

In July 1970, Deinema returned to Washington, D.C. to become Associate Deputy Chief of the Forest Service.

Deinema is married and has three daughters. He is a member of the Society of American Foresters, the American Society of Range Management, the American Forestry Association, and served as President Nixon's representative on the Tahoe Regional Planning Agency.

THOMAS C. NELSON
DEPUTY CHIEF, STATE AND PRIVATE FORESTRY
FOREST SERVICE

Dr. Thomas C. Nelson, present Forest Service Deputy Chief for Programs and Legislation, became Deputy Chief in charge of State and Private Forestry August 20, 1972.

Until a year ago, Dr. Nelson was Associate Deputy Chief of that same cooperative programs operation of the Forest Service. In 1971 he was appointed to his present position in Programs and Legislation.

He is a native of Wisconsin. His formal education includes a master's degree in forest pathology from Michigan State University in 1947, a doctor's degree in forest ecology from the same university in 1950 and post-Doctoral training at the University of Georgia and the Graduate School of the U. S. Department of Agriculture.

Before coming to the Forest Service, Dr. Nelson worked as a biologist in charge of the Cusino Wildlife Experiment Station in Michigan. He was a communications officer on a destroyer for three years during World War II and started his Forest Service career as a silviculturist and project leader for the Southeastern Forest Experiment Station in Asheville, N.C., from 1950 to 1957.

In 1957, he went to work for a private timber company in Texas and Louisiana, but returned to the Forest Service two years later as Assistant Division Chief of Timber Management Research at the Southeastern Station.

In 1963, he was promoted to the Forest Service's national headquarters in Washington, D.C. as Branch Chief in Timber Management Research. The following year, he was promoted to Assistant to the Deputy Chief of Research in the Washington Office.

In 1966, he was appointed Director of the Southern Forest Experiment Station at New Orleans, Louisiana, which is responsible for Federal forestry research in the seven States of the mid-South. In 1970, he came back to the national headquarters as Associate Deputy Chief for State and Private Forestry.

Dr. Nelson served on the Advisory Committee to the Southern Forest Resource Analysis Committee, which published the report, "The South's Third Forest," and he has held various appointive and elective offices and is a fellow in the Society of American Foresters. He is a member of the Forest Farmers Association and the American Forestry Association.

RAYMOND M. HOUSLEY, JR.
ASSOCIATE DEPUTY CHIEF, NATIONAL FOREST SYSTEM
FOREST SERVICE

Raymond M. Housley, Jr., was promoted to Associate Deputy Chief of the Forest Service for the National Forest System in August 1972.

Housley received a bachelor's degree in forestry from Colorado State University in 1952. His first professional job with the Forest Service was a forester on the Carson National Forest in New Mexico. He served as Assistant Ranger on the Cibola National Forest, New Mexico, and District Ranger on the Coconino and Kaibab National Forests in Arizona before becoming Forest Staff Officer in charge of range, wildlife, and land uses on the Coconino National Forest in 1958.

In 1961, he transferred to the Forest Service's Southwest Regional Headquarters in Albuquerque, New Mexico, as Assistant Chief of the Division of Information and Education, and later became Branch Chief in the Division of Range and Wildlife Management. In 1964, he was promoted to Forest Supervisor of the Coconino National Forest. He came to national headquarters in Washington, D.C., in 1968 as Assistant Director of the Division of Recreation and was named Director of that Division in 1971.

Ray Housley is a member of the Society of American Foresters, a former Director of the Society for Range Management, and is a member of the American Forestry Association, and serves on the United States-Japan Panel on National Parks and Equivalent Reserves.

WARREN A. BLIGHT
DEPUTY DIRECTOR OF FINANCE
U. S. DEPARTMENT OF AGRICULTURE

Warren A. Blight was born in Genesee County, Michigan. He attended the public schools at Flushing, Michigan and was graduated in 1939. He received his college training at Michigan State University and was awarded a B.S. degree in Agricultural Education in 1943.

Before entering the Federal Civilian Service, Mr. Blight served in the military in the European Theater of Operations. From 1945 to 1949 he served as Instructor of Vocational Agriculture at Charlotte, Michigan.

He began his Federal Government career as a District Conservationist with the Soil Conservation Service in 1949. In 1957, he was selected as Area Conservationist where he served until 1962. He transferred to the Soil Conservation Service Washington, D. C. office where from 1962 to 1966 he served in the Budget Branch, Management Records Branch and as Assistant to the Administrator. He was awarded a Congressional Fellowship for 1966-1967. Immediately following the Congressional Fellowship Program Mr. Blight was Internal Audit Officer with the Office of the Inspector General. From 1968 to the present he has served as Chief, Division of Legislative and Financial Reporting, Office of Budget and Finance, and now (October 1972) as Deputy Director of that Office.

Mr. Blight is married to the former Kathryn E. Beckwith. They have two sons and one daughter. The youngest son, Alan, is still at home. They reside at 5806 Norton Road, Alexandria, Virginia.

MURL W. STORMS
CHIEF, DIVISION OF FORESTRY
BUREAU OF LAND MANAGEMENT

Born April 14, 1924, at Oconto, Nebraska. The Storms family moved to Yakima, Washington in 1936. Mr. Storms completed grade and high school in the Yakima vicinity and entered the Yakima Valley Jr. College in 1942. From April 1943 to September 1945 he served in the U. S. Army Air Corps.

He obtained a BS degree in Forestry at the University of Washington in 1949 and joined BLM Medford, Oregon, District shortly thereafter.

In 1951, Mr. Storms was selected to attend a nine-month Department of the Interior management training program in Washington, D.C. He subsequently was assigned to the BLM Regional Office in Portland, Oregon where he served as an Administrative Assistant.

During 1954 and 1955, Mr. Storms was detailed to the Department of State as a Forestry Advisor in the Foreign Operations Administration Mission, Amman, Jordan. Upon return to the United States he was assigned to a position in Medford District as the Planning and Protection Staff Forester.

In 1958 and 1959, Mr. Storms worked in the Oregon State Office in Portland, Oregon, as the Staff Reforestation Specialist, and in 1959 became the Assistant District Manager, Roseburg, Oregon.

Mr. Storms was selected for academic training at the University of Michigan during the 1961-62 academic year, obtaining an MS degree in Natural Resources Administration. Thereafter, he was appointed to the position of District Manager, Roseburg, Oregon. In 1966, Storms was assigned to the Oregon State Office as Chief, Division of Resources, and in 1971 to his present responsibility of Chief, Division of Forestry in Washington, D. C.

He is married to the former Julia Fedderly Fry, who is a native of Yakima, Washington. They have a daughter, Kellie, and a son, John. The family resides in Fairfax County, Virginia.

INTRODUCTION OF STAFF

Mrs. HANSEN. Mr. McGuire you may introduce your staff.

Mr. MCGUIRE. You already mentioned Assistant Secretary Cowden. To his left is Dr. Keith Arnold, Deputy Chief for Research.

Mrs. HANSEN. It is a pleasure to have you back again, Dr. Arnold.

Mr. MCGUIRE. Raymond Housley, Associate Deputy Chief for the National Forest System; Dr. Tom Nelson, Deputy Chief for State and Private Forestry Cooperation.

Mrs. HANSEN. He is in charge of the Clarke-McNary program.

Mr. MCGUIRE. Yes, ma'am.

To my right is Russ McRorey, also an Associate Deputy Chief for the National Forest System. To the rear, my far left, is Mr. Warren Blight, representing the Department's Office of Budget and Finance.

Dick Dickerman, Associate Deputy Chief for Research in the Forest Service; Rex Resler, Associate Chief of the Forest Service, making his first appearance at this kind of hearing.

Behind me is Bill Campbell, our Forest Service budget officer.

Mrs. HANSEN. He has an appropriately dismal look this morning, also.

Mr. MCGUIRE. We have Jack Deinema, Deputy Chief for Administration. Over against the file cabinets, I would like to introduce Murl Storms, Chief of the Division of Forestry in BLM; Ed Hastey, the Assistant Director for Administration in BLM, and Mr. Earle Wilcox, Chief of the Branch of Forestry in the Bureau of Indian Affairs.

Mrs. HANSEN. We met him the other day on a supplemental item. It is a pleasure to have you here this morning.

TRIBUTE TO EDWARD P. CLIFF

This is the first regular appropriation hearings in many years without our very good friend, Chief Cliff. I would like you, when you see Chief Cliff, to express our sorrow that he is no longer with the Forest Service. Tell him that we miss him very much and extend our best wishes. We always enjoyed working with Chief Cliff and always liked his very forthright comments. I think his comments were even more forthright in his concluding sessions with us. He probably said things he would like to have said many years before.

TRIBUTE TO EDWARD SCHULTZ

Also, we do not have with us our friend Mr. Schultz, the former Deputy Chief who passed away. The committee extends our sorrow and sympathy to his family and we certainly regret that he is not with us now.

You have a general statement, Dr. Cowden. Would you please place it in the record and summarize it or you can read it, if you wish. It is rather short.

Mr. COWDEN. It is short.

Mrs. HANSEN. Then just read it.

STATEMENT OF ASSISTANT SECRETARY COWDEN

Mr. COWDEN. Madam Chairman and members of the committee, we are pleased to have the opportunity to appear before this committee and discuss our forestry programs.

In developing this budget several important factors were involved. In order to control inflation it is necessary that excess Government spending be curbed. This is always a painful process.

IMPOUNDMENT OF FUNDS

Mrs. HANSEN. My question, why did it all have to come out of our natural resources budget?

Mr. COWDEN. I do not believe it all came out of here.

Mrs. HANSEN. A sizable amount did.

Mr. COWDEN. Of course we would all like to have it someplace else.

Mrs. HANSEN. But the thing that troubles me, Mr. Secretary, is that through the years this committee has not gone over the budget by any large amount. This committee always reports a bill below the budget figure sent us by the President. Yet we discovered yesterday that there are Department of Interior impoundments amounting to approximately half a billion dollars. What are your total impoundments?

Mr. COWDEN. In Agriculture as a whole?

Mrs. HANSEN. No, just in the Forest Service.

Mr. MCGUIRE. The amounts impounded in the Forest Service amounted to about $22 million of add-ons plus——

Mr. CAMPBELL. The total was about $28 million of items added by the Congress above the President's budget and the further reduction of $26 million, which made a total of $54 million.

Mrs. HANSEN. $54 million. You remember our comment last year when your budget arrived here, Mr. Cowden. It did not reflect a sharp increase in funding. In other words, it barely stayed even when you factored in cost escalation. So when you take this $54 million, it is really quite a cut. What is your total budget?

Mr. MCGUIRE. The total budget is approximately half a billion dollars.

Mrs. HANSEN. This is a pretty large cut. I did not see foreign aid with these sizable cuts.

Please proceed, Mr. Secretary.

Mr. COWDEN. We in Agriculture must make our contribution to curtailed Government spending. Thus, an intensive review was made to identify programs that could be reduced or eliminated. In the Forest Service programs we found that more responsibility for timber access roads could be shifted to the timber purchasers. Revenue sharing offers the possibility for reduced cooperative forest fire control programs. Some other programs were reduced or kept at the same level. There are some increases for minerals and special use management to meet urgent land management needs. We want to meet the need for timber for housing and at the same time recognize that timber harvest-

ing must meet today's concepts of being in harmony with the environment.

We recognize the critical importance of forestry research and State and private forestry programs which are vital to the solution of problems of the environment and State and private area development.

With all these considerations we must do a quality job in managing the national forests.

Chief John McGuire and his staff will handle the major presentation and discussion.

TRIBUTE TO JOHN M'GUIRE AND THE FOREST SERVICE

I would like to add, Madam Chairman, that we have been very well pleased with the way Mr. McGuire has stepped into his new responsibility.

We share your high regard for former Chief Cliff, but we think John has brought good vigor and he is doing a good job with the Forest Service.

Mrs. HANSEN. We agree, Mr. Cowden. The committee is very pleased to have had the opportunity of meeting with Mr. McGuire last year on supplementals and we have enjoyed the association, and will continue to enjoy it providing he does not cut everything.

Mr. COWDEN. I think it only fair to add that not only John McGuire, but his top staff, we have a very high regard. I personally think it is one of the most capable agencies in Government.

Mrs. HANSEN. Mr. Secretary, I think too much has been said about the lack of quality in Federal employees.

This committee works very closely with many of our Federal agencies, including the Forest Service, Interior Department, and we find a high quality people handling these programs. We particularly salute the Forest Service on the type of people who have managed the program through the years. Personally, I am very proud of the people that serve our departments, and particularly this agency.

Mr. McGuire, I guess you are going to bear the brunt of explaining all your cuts and what you are not going to do this year. You have a prepared statement. Do you want to place it in the record and summarize it for us?

Mr. MCGUIRE. I will list a few brief points that are in my longer statement.

STATEMENT OF CHIEF, FOREST SERVICE

Mrs. HANSEN. The statement will be inserted in the record.

(Prepared statement follows:)

Madam Chairman, it is a pleasure for me to have this opportunity to highlight some of our accomplishments and discuss with the committee our fiscal year 1973 budget request.

As you know, this is my first such appearance as Chief of the Forest Service. There have been several changes in our top staff since we appeared before you last spring. Rex Resler is now the Associate Chief. Dr. Tom Nelson, Deputy Chief for State and Private Forestry Cooperation, has replaced Bill Bacon who retired. Jack Deinema is the Deputy Chief for Administration, replacing Dick Droege who retired. Ray Housley and Russ McRorey are the Associate Deputy Chiefs for the National Forest System. We have not yet filled the vacancy left recently by the death of Ed Schultz as Deputy Chief for National

Forest System. Dr. Keith Arnold, Deputy Chief for Research, and Bill Campbell, our Budget Officer complete my staff here today.

The Forest Service reflects the direction and guidance from the Congress in our objectives and policy guides. In our "Framework for the Future" issued in early 1970, for example, a major objective is to protect and improve the quality of air, water, soil, and natural beauty. This applies to programs involving all forest ownerships.

We have given the need for a quality management job great emphasis in the last several years. We intend to continue that emphasis. The American people deserve and expect a quality job of management on all forest land. We particularly want the national forests to demonstrate that type of natural resource use and stewardship. There has been considerable discussion of quality versus quantity. Some people reason that you can have one or the other, but not both. We disagree. Quality management can and must include the attainment of production goals. In all aspects of our management—from planning through execution—we identify and evaluate the consequences of alternative courses of action. Usually, we can find the alternative that will meet commodity production goals, while at the same time be least restrictive in terms of meeting scenic, wildlife, watershed, recreation, and other needs.

The demands of the public for natural resources and concern for the environment continue to increase. At the same time Federal spending must be held within limits which will not fuel inflation or the necessity for a tax increase. This stimulates a continuing review of programs and activities to make sure that we are both responsive and efficient. Some programs have substantially achieved their objectives, others can be modified, and in some cases, State, local or private organizations can effectively supply the same services. We are looking at every opportunity to cope with emerging demands and constraints. For example, we are studying possible realinement of our field organizations. Preliminary evaluations indicate that substantial savings can be made by reducing the number of regional offices and experiment station headquarters. This would help maintain effective resource management by making more dollars available for on-the-ground projects and improve working relationships with States and other Federal agencies.

ENVIRONMENTAL CONSIDERATIONS

One item that stands out again this year is the extent to which environmental concerns on all ownerships of forest land have brought about new problems and challenges. Public concern about timber harvest methods, aerial application of pesticides, and road construction requires examination of a wide range of technical alternatives.

This generates increased costs due to intensified analysis and review in the planning stage as well as higher-cost technical solutions to reduce adverse impacts. In addition, the NEPA process requires complete documentation for each major environmental impact or controversial issue with appropriate public involvement.

One example is minerals. Mineral resources are critically essential to the Nation's economy and security. Yet, environmental impacts can be great. To help meet this challenge we have initiated a research, development and application program on "Surface Environment and Mining" (SEAM). The aim is to help meet the Nation's energy crisis and produce needed minerals in harmony with a quality environment and other natural resource values. Several watershed research projects have been reoriented to deal with problems on mined lands.

This new knowledge is urgently needed. The forecast of mineral shortages has prompted a tremendous surge in exploration and development activities all over the West. Management of surface resources on mining claims was accomplished on 22,000 claims within the National Forest System during fiscal year 1972. We have helped to develop mining regulations which should be published in the near future.

In addition to mining, occupancy and use permits, easements and memoranda of understanding authorized 48,300 special land uses on 5.4 million acres of the national forests in 1972. The number of new permits issued has increased about 3 percent per year. Intensive administration of permit programs is essential to assure environmental protection. We are increasingly using technical knowledge in the fields of water, geology, and soils to guide activities such as road building, winter sports, pollution abatement, timber harvest, range management, fish and wildlife habitat improvement, and so forth. Interdisciplinary

teams, operating on a multifunctional basis, are the key to our decisionmaking process.

There has been no slackening in the steady increase in forest recreation use; a trend which has remained fairly constant for more than two decades. Last season we accommodated a record 182.4 million visitor-days of recreation use. In calendar year 1973 we anticipate an additional 8 million visitor-days of use. Studies leading toward classification of primitive areas will remain on schedule to assure completion within the time allotted under the Wilderness Act of 1964.

We will meet additional refuse collection and disposal requirements associated with maintaining sanitary landfill dumps developed in 1973. Off-road vehicle use regulations will be implemented. We will also provide quality management and operation of two new national recreation areas established by Congress in 1973—the Oregon Dunes NRA in Oregon and the Sawtooth NRA in Idaho.

TIMBER ACTIVITIES

All recent timber demand and supply studies have clearly indicated that the level of management on forest lands must be improved if the Nation is to meet its long-run timber needs at reasonable prices. Our fiscal year 1974 program aims at long-term timber requirements as well as relating to the current, short-term crises in timber prices and supply.

Recent analyses have also indicated that improvements in timber harvesting on private lands, in timber processing, and efficient use of products design are essential. Widespread application of existing knowledge in these areas could result in large improvements now and further significant gains could result from implementation of new research findings. The State and private forestry programs proposed for 1974 are designed to take advantage of the large potentials from the nearly 400 million acres of the Nation's non-Federal forest land.

A program with excellent payoff is the tree improvement program; cooperative tree improvement activities, the product of forestry research findings, are now underway in 41 States. The application of genetic principles through this program offers great opportunities for increasing wood yields.

Each year assistance is provided to about 130,000 small forest owners and to 16,000 forest products operators by the State service foresters and the State and Federal forest utilization specialists. The cooperative forestry programs are contributing to the timber supply solution by emphasizing the extension of present timber supplies. A concerted effort is made to increase the use of private consultants in providing this assistance.

Forest residues present a problem of major dimensions, particularly in the old-growth forests of the West. Forest Service research strongly supports actions in residue reduction in either a direct or indirect sense. Residues can furnish the raw material base needed to expand production of fiber and board products. Plans for fiscal year 1974 place emphasis upon reprograming existing resources and redirecting research to achieve the goal of getting structural particleboard from forest residues past the pilot plant stage within 4½ years.

During fiscal year 1972, on the national forests, 11.7 billion board feet of timber was cut and 10.3 billion board feet of timber was sold in 25,419 sales. More than 24,000, or 94 percent, of these sales were of a size that small timber operators could bid on or handle. The greatly increased cost and complexity of timber sale preparation, coupled with court actions, has adversely affected our outputs.

We are following the guidelines included in the report on "Clearcutting Federal Timberlands" issued by the Subcommittee on Public Lands to the Senate Committee on Interior and Insular Affairs. These guidelines have been incorporated in the "Action Plan—National Forests in a Quality Environment."

In addition, 109,367 acres were reforested and 191,041 acres were treated with timber stand improvement cultural measures in 1972. We plan to reforest about 153,300 acres and thin or release 108,600 acres in 1974.

Last year on the national forests we built the equivalent of about 850 miles of federally financed roads and provided engineering and some supplementation for about 7,000 miles of purchaser built roads. In 1974 we will build about 175 miles of roads and the timber purchaser will build about 7,300 miles. This rate of construction is enough to about maintain recent levels of allowable cut and make additional timber available through such efforts as salvage and thinning.

FOREST PROTECTION

Almost 117,000 acres of the National Forest System were burned over during the year. Extreme burning conditions continued in the Southwest during the spring and summer. Some areas showed as little as one-fourth of the normal precipitation for the 7-month period, March through September. The number of fires (14,140) is the largest in 11 years, excluding 1970. A 30-percent increase in the number of fires in the Western States, accompanied by a 17-percent decrease in the number of acres burned, as compared with 1971, attests to the effectiveness of first attack forces during the year. During the Bear Fire, Los Padres National Forest in California, six men lost their lives in a helicopter accident. One other fatality in an air accident occurred in the southwest region. Already results are starting to flow from the increase of the past 2 years in forest fire research. We are constantly improving our initial attack forces and coordination during periods of high fire hazard to stop fires before they become large conflagrations. Fuels management offers a real opportunity to reduce acreages burned and the costs of suppressing fires, while at the same time helping to maintain the environment and achieving ecological benefits. Although much has been accomplished in the 50 years since inception of the cooperative forest fire control program in reducing the damage from wild fires, a big job remains. We still experience about 95,000 fires a year on State and private lands that burn more than 2½ million acres of forest and watershed lands. More than 40 million acres of these lands still do not have fire protection.

Forest insect and disease cause losses equal to 40 percent of the current timber harvest. A change was made this year in the approach to financing cooperative forest pest control programs with the States, that will provide States increased opportunities to carry out more effective cooperative forest pest control activities.

Current outbreaks of Southern pine beetle, spruce budworms, tussock moth, gypsy moth, and other damaging insects have placed great demands on the many Federal and State forest pest control agencies. The protection job has been made more complex with the increased environmental demands and the elimination of many pesticides.

BUDGETARY MATTERS

We have included in our budget for the first time a new appropriation, Construction and Operation of recreation facilities. These are funds proposed for appropriations from recreation admission and user fees collected under the Land and Water Conservation Fund Act of 1965, as amended by Public Law 92-347, July 11, 1972. An estimated $3.5 million will be available from this source for use by the Forest Service for outdoor recreation purposes.

Also included in our budget for the first time is $1 million for a special foreign currency research program on forestry projects. In 1973 and prior years such projects were funded by the special foreign currency program of the Agricultural Research Service.

The budget we will be discussing for fiscal year 1974 contains National Forest System program increases required to do a quality job of timber sale administration and includes increases to intensify biological coordination, soil, geology, and hydrology support, and landline location related to timber activities. Other increases are for such important activities as supervision of mining activities and special uses; land classification adjustments, and surveys including requirements for the Sawtooth National Recreation Area and in Alaska pursuant to Alaska Native Claims Settlement Act; fire protection and improvement maintenance. It will be necessary to reduce our overall reforestation and timber and improvement effort, as well as recreation operation and rangeland management.

The amounts appropriated in 1973 over the Presidential budget request for FALCON (forest advanced logging and conservation) and research operating programs are not being requested for 1974. The cooperation in forest fire control program is being continued at the reduced 1973 level.

A reduction of $44.7 million in our road program will be accomplished by shifting to more purchaser road construction. Planning, design, and construction inspection will continue to be done by Forest Service professionals to assure the work is performed to quality standards. Maintenance of the existing transportation system will remain at about the same level.

A decrease in Construction and Land Acquisition appropriation is partially offset in 1974 by the use of funds for projects which were eliminated in 1973.

The program will allow for pollution abatement improvements required under Executive Order 11507.

Cash receipts from the sale and use of National Forest System resources amounted to $350 million in fiscal year 1972, a record high. This is an increase of $113.8 million from the preceding year. For fiscal year 1973, receipts are estimated to be $421.8 million, and for 1974, $379.5 million. In 1973 we have increased the average grazing fees by 11 cents per animal unit month above the level existing in 1972, which is in keeping with the overall objective of grazing fee adjustments to reach their market value.

The Youth Conservation Corps was one of our most popular human resource programs again last year. The 3,495 young men and women who participated accomplished valuable conservation work and at the same time increased their own appreciation of resource and social needs and problems. Last August, Public Law 92–597 authorized continuation of this program on Federal lands and established a pilot program to assist States in establishing YCC projects on non-Federal public lands. The Departments of the Interior and Agriculture share the program equally.

Thank you for the opportunity to make these comments. We will be glad to answer any questions you might have.

Mr. McGuire. We have given the need for quality management job great emphasis in the last several years. We intend to continue that emphasis in the Forest Service because the American people deserve and expect a quality job on all of our forest lands.

We particularly want the national forests to demonstrate that type of natural resource use and stewardship.

The demand of the public for natural resources and their concern for the environment both continue to increase. At the same time we recognize that Federal spending must be held within limits. This has stimulated a continuing review of Forest Service programs.

For example, we are studying possible realinements of our field organizations. We are trying to do as much as we can to insure that the available dollars are expended on the ground where the need is.

ENVIRONMENTAL CONCERNS

One item that stands out again this year is the extent to which environmental concerns on all ownership of private lands have brought about new problems and challenges. Public concern about the timber harvest methods, aerial application of pesticides, and road construction require examination of a wide range of technical alternatives.

This generates increased costs due to intensified analysis and review in the planning stage as well as higher-cost technical solutions to reduce adverse impacts. In addition, the NEPA process requires complete documentation for each major environmental impact or controversial issue with appropriate public involvement.

SEAM PROGRAM

One example is minerals. Mineral resources are critically essential to the Nation's economy and security. Yet environmental impacts can be great. To help meet this challenge we have initiated a research, development, and application program on surface environment and mining (SEAM). The aim is to help meet the Nation's energy crisis and produce needed minerals in harmony with a quality environment and

other natural resource values. Several watershed research projects have been reoriented to deal with problems on mined lands.

In addition to mining, occupancy, and use permits, easements and memoranda of understanding authorized 48,300 special land uses on 5.4 million acres of the national forest in 1972. The number of new permits issued has increased about 3 percent per year. Intensive administration of permanent programs is essential to assure environmental protection.

FOREST VISITATION

There has been no slackening in the steady increase in forest recreation use, a trend which has remained fairly constant for more than two decades. Last season we accommodated a record 182.4 million visitor-days of recreation use.

Mrs. HANSEN. What was that percentage increase?

Mr. MCGUIRE. I think it was in the neighborhood of 5 percent.

Mrs. HANSEN. Please supply for the record the number of visitations since the year 1960.

Mr. MCGUIRE. We will be glad to do that.

[The information follows:]

Recreation use of the national forests

Calendar year:	*Visitor days* [1]
1960	[2] 92, 594, 500
1961	[2] 101, 912, 500
1962	[2] 112, 762, 200
1963	[2] 122, 582, 000
1964	[2] 133, 762, 300
1965	160, 336, 100
1966	150, 728, 900
1967	149, 647, 100
1968	156, 665, 300
1969	162, 838, 100
1970	172, 554, 500
1971	178, 109, 500
1972	183, 958, 300

[1] Recreation use of national forest land and water which aggregates 12 person-hours. May entail 1 person for 12 hours, 12 persons for 1 hour, or any equivalent combination of individual or group use, either continuous or intermittent.

[2] Use listed is in visits. Any length of stay by 1 person was counted as 1 visit. Measurement of use was changed to visitor days in 1965.

Mr. MCGUIRE. In calendar year 1973 we anticipate an additional 8 million visitor-days of use.

We will meet additional refuse collection and disposal requirements associated with maintaining sanitary landfill dumps. Off-road vehicle use regulations will be implemented.

Mrs. HANSEN. Are these sanitary landfill dumps your own or are they from others who are using your lands?

Mr. MCGUIRE. Most of these are dumps on Forest Service land operated under permit by some outside organization or unit of Government.

GUIDELINES FOR LANDFILL DUMPS

Mrs. HANSEN. Please insert in the record the standard operating guidelines that you use in the issuance of permits on these landfill dumps?

Mr. MCGUIRE. We will be glad to do that, Madam Chairman.

[The information follows:]

2723.13 - Solid Waste Disposal Area.

Permits for solid waste disposal sites will require operation in compliance with the Solid Waste Disposal Act (PL 89-272, as amended; PL 91-512). The act provides for the Administrator of The Environmental Protection Agency (EPA) to establish guidelines for solid waste disposal. His guidelines in title 42 CFR 476.8 prohibit open dumping and virtually eliminate open burning of trash and garbage. For example, waste shall not be burned in open fires in urban areas and in nonurban areas, there shall not be burned in open fires, within a 24-hour period, more than 25 pounds of waste at a single site nor more than 500 pounds of waste at any number of sites within a 1-mile radius. Incinerators may be operated under certain very strictly controlled limits. See 42 CFR 476.8. The remaining acceptable and most commonly used solid waste disposal method is by sanitary landfill. Sanitary landfills will be operated in accordance with procedures described in "Sanitary Landfill Facts" (Public Health Service Publication SW-4ts of 1970).

The location and design of sanitary landfills will require careful analysis to ensure that adequate measures are taken to protect ground and surface waters. Prior to construction, the permittee and the Forest Service will prepare operating plans to designate responsibilities for fire and health protection, to establish responsibilities for monitoring to see that standards are met, and to cover payment responsibilities for suppression in the event fire occurs in or around the disposal site. Design and operating plans will include a plan for ultimate closure considering the anticipated use of the land after completion of landfill activities. This plan will include shaping, landscaping, planting, drainage, etc. to be done by the permittee that will prevent erosion, water pollution, or other health hazards and facilitate transition to the planned subsequent use. Planners must be aware of the subsidence, leaching, and methane gas problems commonly associated with landfills.

The permit must contain a clause holding the United States harmless in event of damage to a third party. Solid waste disposal sites will be fenced to control access, animals, and windblown debris. Although no burning will be allowed a firebreak, not less than 10 feet wide to confine accidental fires, must be constructed and maintained outside the fence by the permittee. The location of the firebreak must be approved by the Forest officer in charge. The permittee must comply with all Federal, State, and local standards for sanitary landfill operations and water quality as well as National Forest requirements.-*

*-Frequent inspections must be made to observe disposal activities and the condition of the area. Inspections will consider drainage and leaching problems, animal and insect problems, fire problems, and windblown debris problems. Any undesirable condition that may be found must be promptly corrected or the site will be closed. The closing of existing dumps will be in accordance with standards established in the Public Health Service publication, "Closing Open Dumps", Report No. SW-61 ts.

Fees will be charged for these permits in most instances. The fee will be based on land value (FSM 2715) subject to a $25 minimum annual fee. Permits may be issued free or at nominal rates when fully qualified under Regulation 36 CFR 251.2.

Mr. McGuire. We will also provide quality management and operation of two new national recreation areas established by the Congress in 1973, the Oregon Dunes in Oregon and the Sawtooth National Recreation Area in Idaho.

TIMBER ACTIVITIES

All of our recent timber demand and supply studies have clearly indicated that the level of forest management must be improved if the Nation is to meet long-run timber needs at reasonable prices. Recent analyses have also indicated that improvements on private lands in timber harvesting, processing, and products design are essential.

I would like to mention our program of tree improvement which is showing an excellent payoff.

The cooperative tree improvement activities, which are the product of forestry research findings, are now underway in 41 States.

During fiscal year 1972——

Mrs. Hansen. On that point, what is the total fiscal commitment of the Government to match State funds?

Mr. Nelson. On the tree improvement program? These are part of our assistance to States for tree planting.

Mrs. Hansen. What did you have in the budget last year?

Mr. Nelson. $1,028,000.

Mrs. Hansen. What do you have this year?

Mr. Nelson. $1,020,000.

Mrs. Hansen. About $8,000 less service?

Mr. Nelson. I am sorry. I gave you 1972; 1973 and 1974 are the same.

Mrs. Hansen. Identical? Please proceed.

Mr. McGuire. During the fiscal year 1972, on the national forests, 11.7 billion board feet of timber were cut and 10.3 billion board feet of timber were sold in more than 25,000 sales.

In addition, 109,367 acres were reforested and 191,041 acres were treated with stand improvement cultural measures in 1972. We plan to reforest about 153,300 acres and thin or release 108,600 acres in 1974.

ROADS

Last year on the national forests we built the equivalent of about 850 miles of federally-financed roads and provided engineering and some supplementation for about 7,000 miles of purchaser-built roads.

In 1974 we will build about 175 miles of road and the timber purchasers will build about 7,300 miles.

NEW APPROPRIATIONS

We have included in our budget for the first time a new appropriation, "Construction and operation of recreation facilities." These are funds proposed for appropriation from recreation admission and user fees collected under the Land and Water Conservation Fund Act of 1965.

Also included in our budget for the first time is $1 million for a special foreign currency research program on forestry projects.

Mrs. Hansen. What countries will you be doing this with? Every time I turn around there is a budget for a new foreign currency program.

Mr. ARNOLD. We are doing research in India, Pakistan, Yugoslavia, and Poland at the present time. We have had the program for a number of years in other countries, but many countries have no foreign currency funds available at this time.

Mrs. HANSEN. This foreign currency seems to pop up with every agency in Government. We must have foreign currency scattered all over the Government.

Mr. MCGUIRE. We have been using these moneys, but they have come to us under an appropriation to the Agricultural Research Service. We put them in our budget this year to more precisely define the amount going into forestry research.

RECEIPTS

Finally, I should mention that cash receipts from the sale and use of National Forest System resources amounted to about $350 million in fiscal year 1972. That was a record high. For fiscal year 1973, we estimate that receipts will be about $422 million, and for 1974, nearly $380 million.

Mrs. HANSEN. A decrease of what amount?

Mr. MCGUIRE. About $42 million. I think that is about all I need to emphasize in my prepared statement, Madam Chairman.

PAYMENTS TO STATES IN LIEU OF TAXES

Mrs. HANSEN. This revenue decrease is of great concern to our States and counties, because when you reduce revenue to your counties, you have reduced revenues to school districts.

Mr. MCGUIRE. That is right. Twenty-five percent of all gross receipts go to the States for distribution to the counties.

Mrs. HANSEN. Most of the school districts in this Nation, particularly in the forest States, do not have the assessed valuation, the tax base, to manage their schools. Is this not correct?

Mr. MCGUIRE. That is correct.

Mrs. HANSEN. Many of these are the low-income areas and have a low tax base. The forest funds literally are in lieu of payment for what would ordinarily be on the assessor's roles for a portion of the tax base in the counties; is this not correct?

Mr. MCGUIRE. That is correct.

Mrs. HANSEN. And used jointly by the counties for roads and schools?

Mr. MCGUIRE. That is the law. That is the limitation on how the funds can be used.

Mrs. HANSEN. So when we automatically lower the receipts, we lower the receipts literally to the counties by proportionate sum?

Mr. MCGUIRE. That is correct. That completes my summary, Madam Chairman.

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1973 FUNDS PLACED IN RESERVE

Mrs. HANSEN. On January 8, 1973, I received a letter from Earl L. Butz, Secretary of Agriculture, indicating you have placed in reserve fiscal year 1973 funds totaling $54,285,900. Of this amount, $28,321,900 involves congressional additions. Please insert in the record a listing by project of the amount of funds in reserve.

In regard to funds in reserve for the State and private forestry program, provide a State-by-State listing.

Mr. MCGUIRE. We would be pleased to do that.

[The information follows:]

Fiscal Year 1973 Funds Placed in Reserve

FOREST PROTECTION AND UTILIZATION:	
Forest land management	
Reforestation and stand improvement, Service-wide (includes $479,000 for silvicultural examination)	$3,000,000
Reforestation and stand improvement, Montana	45,000
Recreation-public use, Montana	10,000
Wildlife habitat management:	
Sierra National Forest	65,000
Clark and Mark Twain National Forests	418,000
Alaska	232,000
Rangeland management, Montana	75,000
Forest fire protection, Montana	10,000
FALCON	5,000,000
Travel reduction savings	1,499,000
Total, Forest land management	10,354,000
Forest research	
Timber management research:	
Orono, Maine	150,000
Bend, Oregon	140,000
Alexandria, Louisiana	420,000
Stoneville, Mississippi	150,000
Travel reduction savings	78,000
Watershed management research:	
Berea, Kentucky	150,000
Durham, New Hampshire	100,000
Fairbanks, Alaska	100,000
Travel reduction savings	42,000
Wildlife habitat and range research:	
Reno, Nevada	315,000
Stoneville, Mississippi	200,000
Orono, Maine	100,000
Olympia, Washington	150,000
Fresno, California	50,000
St. Paul, Minnesota	300,000
Travel reduction savings	24,000
Forest recreation research:	
Seattle, Washington	150,000
Juneau, Alaska	100,000
Travel reduction savings	8,000
Fire and atmospheric sciences research:	
Macon, Georgia	400,000
Fairbanks, Alaska	100,000
Travel reduction savings	50,000
Forest insect and disease research:	
Delaware, Ohio	450,000
Carbondale, Illinois	240,000
Travel reduction savings	66,000
Forest products utilization research:	
Madison, Wisconsin	100,000
Travel reduction savings	61,000
Forest engineering research:	
Travel reduction savings	10,000
Forest survey:	
Travel reduction savings	23,000
Forest products marketing research:	
Travel reduction savings	13,000
Forest economics research:	
Travel reduction savings	10,000
Total, Forest research	4,250,000

State and private forestry cooperation	
Cooperation in forest fire control:	
Alabama	$260,200
Alaska	114,100
Arizona	29,300
Arkansas	250,200
California	598,400
Colorado	86,400
Connecticut	66,300
Delaware	20,900
Florida	335,700
Georgia	354,200
Hawaii	31,100
Idaho	182,100
Illinois	62,900
Indiana	46,100
Iowa	33,600
Kansas	104,100
Kentucky	196,400
Louisiana	298,800
Maine	236,600
Maryland	125,900
Massachusetts	116,600
Michigan	298,000
Minnesota	191,400
Mississippi	282,900
Missouri	235,000
Montana	99,100
Nebraska	86,400
Nevada	98,200
New Hampshire	63,000
New Jersey	129,300
New Mexico	42,000
New York	240,900
North Carolina	310,500
North Dakota	16,800
Ohio	106,600
Oklahoma	118,400
Oregon	313,900
Pennsylvania	230,000
Rhode Island	36,100
South Carolina	279,500
South Dakota	41,100
Tennessee	282,900
Texas	204,800
Utah	70,500
Vermont	36,900
Virginia	261,100
Washington	315,600
West Virginia	116,600
Wisconsin	280,400
Wyoming	55,400
Administration and inspection	606,800
Total, State and Private Forestry Cooperation	9,000,000
FOREST ROADS AND TRAILS:	
Trail construction	1,345,000
Recreation road construction	6,339,000
Other road construction	4,206,000
Other activities	6,110,000
Total, Forest Roads and Trails	18,000,000

CONSTRUCTION AND LAND ACQUISITION:

Water system, Kootenai NF, Montana	$ 48,000
Water system, Custer NF, Montana	50,000
Water system, Coeur d'Alene, Idaho	70,000
Dwellings, Flathead NF, Montana	64,000
Dwelling, Beaverhead NF, Montana	28,000
Low cost housing, Custer NF, Montana	20,000
Communications, Grand Mesa-Uncompahgre NF, Colorado	8,600
Dwelling, San Juan NF, Colorado	35,000
Water/Sanitation System, Arapaho NF, Colorado	9,200
Low cost housing, Rio Grande NF, Colorado	23,000
Mixing facilities, Denver Fire Center	51,000
Warehouse, San Isabel NF, Colorado	33,000
Boulder picnic ground, Tonto NF, Arizona	52,400
Low cost housing, Prescott NF, Arizona	45,400
Oak Creek - VIS, Coconino NF, Arizona	14,900
Dipping Vat Campground, Gila NF, New Mexico	35,800
Rose Canyon picnic ground, Coronado NF, Arizona	15,400
Dwelling/warehouse, Targhee NF, Idaho	76,000
White Pine, Humboldt NF, Nevada	121,700
Miscellaneous-general planning projects	31,200
Firehole, Ashley NF, Wyoming	126,000
Currant Creek B.R., Uinta NF, Utah	74,900
Boulder Lake Campground, Bridger NF, Wyoming	35,300
Princess Campground, Sequoia NF, California	94,000
Dinkey Creek Campground, Sierra NF, California	31,500
Silver Creek Campground, Eldorado NF, California	5,500
Low cost housing, Sequoia NF, California	16,000
Cedar Springs, San Bernardino NF, California	33,400
Water system, Wallowa-Whitman NF, Oregon	34,000
Bly water system, Fremont NF, Oregon	35,000
Office, Willamette NF, Oregon	40,000
Cave Run, Daniel Boone NF, Kentucky	126,500
Quality improvement, Southern States	162,500
Council Bluff-Lake Huzzah, Clark NF, Missouri	125,000
Rochester complex, Green Mountain NF, Vermont	114,000
Burr Oak Campground, Wayne NF, Ohio	14,000
Miscellaneous projects, Wayne NF, Indiana	11,900
Miscellaneous recreation projects, Service-wide	52,900
Boundary Waters Canoe Area Work Study Program, Minnesota	200,000
North Cascades Highway, Okanogan NF, Washington	182,900
Deschutes NF, Oregon	150,000
Robert S. Kerr Memorial Arboretum and Nature Center, Oklahoma	285,000
Lava Lands Visitor Center and Benham Falls Campground, Oregon	239,500
Charleston Recreation Area, Nevada	525,000
Angel Lake Campground, Nevada	150,000
Corney Lake, Kisatchie NF, Louisiana	250,000
Eagle Lake Dam, West Virginia	815,000
Lake of the Clouds Dam, West Virginia	25,000
Flaming Gorge NRA, Utah and Wyoming	404,000
Mt. Rogers NRA, Virginia	187,000
Council Bluffs Dam, Clark NF, Missouri	514,000
Allegheny NF, Pennsylvania	300,000
Kincaid recreation project, Louisiana	500,000
Laurel Reservoir, Kentucky	473,000
LaCroix Ranger District, Superior NF, Minnesota	293,500
Laboratory, Corvallis, Oregon	1,500,000
Land exchange-purchase, Madison, Wisconsin	963,000
Redwoods Laboratory, Arcata, California	800,000
Shrub improvement laboratory, Provo, Utah	760,000

Headhouse-greenhouse, Rhinelander, Wisconsin	$335,000
Addition to Forest Products Marketing Laboratory, Princeton, West Virginia	660,000
Forestry Sciences Laboratory, Charleston, South Carolina	125,000
Total, Construction and Land Acquisition	12,601,900
ASSISTANCE TO STATES FOR TREE PLANTING:	
Travel reduction savings	15,000
COOPERATIVE WORK, FOREST SERVICE:	
Travel reduction savings	65,000
GRAND TOTAL	54,285,900

SPECIFIC ITEMS IN RESERVE

Mrs. HANSEN. Mr. McGuire, I think it would be well for you to review in detail this entire situation and explain how you can afford to take this action in view of the ever-increasing demands placed on the Forest Service. Let me review for you some of the specific items that the Congress provided in your 1973 budget.

RESEARCH IN BEREA, KY.

For example, there is an item for watershed management research in Berea, Ky. This was oriented to strip mine reclamation. The committee report last year told the Congress and the Administration that before we spend large sums of money on coal research, we must have better answers on strip mine reclamation. We did not feel the American people were going to stand the devastation on the American landscape by strip mining; rather, that you should step up your research. Now the $150,000 at Berea to step this up has been impounded. I suspect that the committee will have a long look, a very long look, at increased coal research before there is a coal policy and some answers on reclamation.

RESEARCH IN MACON, GA.

There is an item for controlled burning fire research in Macon, Ga. This troubles me because, as you are well aware, in the South the problem is to determine how to get rid of the slash. The problem is how to get rid of the particulates in the burning. What are the answers? The people in the South, the entire region, joined in supporting this research so that they could have the answers as expeditiously as possible because this was an environmental concern.

RESEARCH IN DELAWARE, OHIO

Then you have the problem of the walnut growth in Ohio. We added funds to step-up the research that would give us some answers on programing the growth of walnuts, which are disappearing, as you are well aware, at a tremendous rate.

Then at the request of the States, we provided additional funds for Clarke-McNary, realizing that the costs of firefighting were going up.

We have a long list of construction and land acquisition impoundments which were to improve the recreation facilities. I think by your own testimony you have told us many times that if you are going to manage your forests for recreation use that some planning must be done and some installations must be provided for the campers and the users, just to prevent fires, if nothing else.

POLLUTION ABATEMENT PROJECTS

Then you presented to us last year a long list of what you called your top priority pollution abatement projects. These were such things as water systems, water sanitation, and sewage systems to comply with the Presidential order. These are all impounded. You had better explain this action.

Mr. MCGUIRE. Madam Chairman, you have touched on many items in the list, in research and in construction. There were always some items——

REFORESTATION

Mrs. HANSEN. I did not mention all of the items. There is the reforestation item. This committee is weary of being accused year after year as not providing money for reforestation. We just happen to believe that one of the highest priorities that you can have in the forest is replanting trees. How are we going to meet our needs for forest resources in the year 2000 without putting the trees in the ground now? Yet reforestation was one of the impounded items.

Mr. EVANS. How much?

Mrs. HANSEN. In total $3 million.

Mr. YATES. What is his answer?

USE OF IMPOUNDED FUNDS

Mr. MCGUIRE. Madam Chairman, in the hearing last week on the supplemental, we had proposed a part of these impounded funds be used to offset——

Mrs. HANSEN. $22 million was it not?

Mr. MCGUIRE. $22 million to offset the cost of forest firefighting in the current fiscal year.

Mrs. HANSEN. Is this not the first time you have proposed such an action? Do you not usually request supplementals for the full cost of fire?

Mr. MCGUIRE. Yes. I do not recall another instance of where we have proposed this kind of an offset, but there may have been such instances in the past.

Mrs. HANSEN. Not in 10 years.

Mr. MCGUIRE. Last year there were personnel savings, for example, but that was a smaller amount.

Mrs. HANSEN. You proposed doing something else first and the committee did not approve it.

Mr. MCGUIRE. I think that is right. The remainder of the $54 million we are suggesting be used to offset our requests for the fiscal year 1974.

POLLUTION ABATEMENT

Mrs. HANSEN. Why did you request in your budget last year these urgently needed water systems and so on, if you could set them aside?

Mr. MCGUIRE. Well, the President's direction gave us adequate time; it was just a question of completing the entire job or getting started on completing the entire job by the time spelled out in the Executive Order. We will still be able to do that if funds are made available in 1974.

Mrs. HANSEN. As I understand, you have been on this sort of project now for the last 3 years.

Mr. MCGUIRE. That is about correct, I believe.

Mrs. HANSEN. You were to do a certain number of these projects each year so that you kept within a reasonable time frame for construction. So now you have actually delayed the schedule another year, have you not?

Mr. MCGUIRE. We will still complete the program in accord with the direction we have in the Executive Order.

Mrs. HANSEN. You will if you receive the money.

Mr. McGuire. If we get the money. But it will, as you say, tend to require more work in the next year than we had originally planned.

Mrs. Hansen. How do your requests this year compare with what you asked for last year?

Mr. McGuire. Our 1974 budget request for pollution abatement is approximately $23 million, as compared to a budget request in 1973 of $29 million, which would be about $6 million difference.

Mrs. Hansen. Six million dollars lower?

Mr. McGuire. Yes. However, the pollution abatement money was not impounded.

Mr. Campbell. None of the pollution abatement money was impounded.

Mrs. Hansen. It will all be spent?

Mr. Campbell. It is budgeted for obligation this year.

USE OF CARRYOVER FUNDS

Mrs. Hansen. But the carryover funds, why could we not use part of that to pay your fire costs with?

Mr. McGuire. Well, it would have been possible except that we had about $12 million—and this is where I was confused before—we had about $12 million in our construction and land acquisition category that we are proposing to carry over for financing the 1974 program.

Mrs. Hansen. Those are no-year funds, are they not?

Mr. McGuire. That is correct, yes.

Mrs. Hansen. So you made no attempt to transfer those to meet fire costs?

Mr. McGuire. That is correct.

1974 BUDGET REQUEST LEVEL

Mrs. Hansen. Your 1974 budget request, including forest roads and trails, totals $456,972,300, a reduction of $105,256,600 from fiscal year 1973. With the exception of the Youth Conservation Corps and the addition of three new accounts, every other activity is being reduced. In a period of escalating costs because of inflation, environmental considerations and other reasons, and with the importance of our National Forests, I am amazed that your budget estimate for 1974 is under 1973 appropriations by $105,256,600. Will you discuss with the committee the basis on which you present the 1974 budget estimate at this level?

Mr. McGuire. As you know, Madam Chairman, the principal reasons for this particular level of request rests on the establishment of priorities that go far beyond the Forest Service.

Mrs. Hansen. Who established the priorities?

Mr. McGuire. Of course these priorities must be established in the context of overall needs and they are established by the administration, by the Secretary, and by the President.

We recognize, as you know, that looking at just the natural resources picture or just the forestry picture, one would come out with a much higher request than we have before us. But certainly when you look at other requirements in the economy, and in the Nation as a whole, these priorities for natural resources perhaps have to give way. Admittedly, that is a matter of judgment.

Mrs. HANSEN. What are we defending if we are not defending the land and the people of the United States? That does not make sense at all.

Mr. MCGUIRE. Someone has to establish such priorities. I believe all I can say is that the budget does reflect a higher judgment here about how money should be spent.

ESCALATING COSTS

Mrs. HANSEN. Mr. McGuire, let us look at some figures.

I believe you say in your justifications that the preparation of environmental statements costs between $12 and $15 million. Is this correct?

Mr. MCGUIRE. That is the figure we have estimated for the past year for implementing the National Environmental Policy Act. It will be considerably higher in 1974.

Mrs. HANSEN. How much higher?

Mr. MCGUIRE. Perhaps around $28 million.

Mrs. HANSEN. $28 million. Then you have, I believe, a customary 10-percent escalation of cost in the conduct of departmental activities. Is this about correct?

Mr. MCGUIRE. It is somewhere in that neighborhood.

Mrs. HANSEN. When you factor in your escalation and your environmental costs, you might more properly designate your cuts as something in the vicinity of $150 million instead of $105 million, is this correct?

Mr. MCGUIRE. On that basis, yes.

Mrs. HANSEN. Well, I do not know what other basis we can use. We know what the costs are.

Mr. MCGUIRE. You are absolutely right, if you take into account the increases in costs, inflation.

Mrs. HANSEN. At the same time, you are reducing your revenue. When you shift the road construction to the purchaser, don't you, in fact, lower the revenues? It is perfectly obvious that the purchaser of timber is not going to pay as much for his sale, when he has to build the road. So what you are doing is lowering your revenue through this device and decreasing the appropriation by other devices. You are already accused of undermanagement of your forests, because in this particular time in American history, we need to use timber for economic purposes and at the same time maintain the environmental requirements. You have to spend more money on management, is this not correct?

Mr. MCGUIRE. Yes, that is certainly correct.

Mrs. HANSEN. Well, you are not going to be able to do it.

Mr. MCGUIRE. We do not intend to sacrifice the quality of management in any event. If anything has to give, it will have to be the quantity of output.

Mrs. HANSEN. Yes; but you have been acquiring land all over the United States. What is your total ownership?

Mr. MCGUIRE. 187 million acres.

Mrs. HANSEN. And with your proposed budget you are not even going to spend $2 an acre for management; is this not correct?

Mr. MCGUIRE. That is correct.

Mrs. HANSEN. At this point in the record, please insert the total acreage for private forest lands and indicate which are under the large and small ownership categories. Aso provide the total acreage in the United States in State forest lands. Then with Federal forest lands show the total number of acres that are available for commercial use; wilderness, recreation areas, et cetera.

Mr. MCGUIRE. We would be glad to do that.

[The information follows:]

TABLE I

Acres of State and private commercial forest land in the United States by ownership as of January 1970.

	Acres
Forest Industry	67,341,000
Farmer - Small Ownership	131,134,000
Miscellaneous Private - Small Ownership	165,100,000
Total Private	363,575,000
State Owned	21,422,000
Total State and Private	384,997,000

TABLE II

Acres of National Forests by major class of land
(thousand acres)

Reserved (Wilderness, Recreation, etc.)	
66 Wildernesses	10,738.1
Primitive Areas	3,886.3
Recreation Areas	1,245.6
Scenic Areas	927.3
Proposed New Wilderness Study Areas	10,939.2
Natural Areas	109.1
Subtotal - Reserved	27,845.6
All Other - Primarily Range and Watershed Lands	67,331.5
Commercial Forest	91,924.0
Total All Lands - National Forests	187,101.1

TABLE III

Areas of National Forest and Other Lands
Administered by the Forest Service
(thousands of acres as of June 30, 1972)

State	Nonavailable for Commercial Use	Available 1/ for Commercial Use
Alabama	1.2	633.5
Alaska	2,963.8	17,759.2
Arizona	1,103.1	10,319.7
Arkansas	1.9	2,455.8
California	2,925.8	17,144.3
Colorado	2,266.8	12,094.6
Florida	32.4	1,049.1
Georgia	6.4	845.0
Idaho	4,894.4	15,457.5
Illinois	1.0	246.6
Indiana	.1	168.1
Iowa	- -	.4
Kansas	- -	107.9
Kentucky	1.4	615.4
Louisiana	.5	594.3
Maine	- -	50.1
Michigan	4.3	2,683.3
Minnesota	751.2	2,045.4
Mississippi	.3	1,136.0
Missouri	42.1	1,398.9
Montana	3,578.4	13,125.7
Nebraska	.7	349.9
Nevada	418.0	4,690.7
New Hampshire	34.6	648.6
New Mexico	1,340.3	7,856.2
New York	- -	13.8
North Carolina	44.8	1,090.6
North Dakota	- -	1,105.2
Ohio	- -	154.2
Oklahoma	- -	290.7
Oregon	1,233.4	14,247.0
Pennsylvania	4.3	491.6
Puerto Rico	10.3	17.7
South Carolina	6.1	592.2
South Dakota	1.2	1,984.5
Tennessee	1.9	611.9
Texas	1.1	775.4
Utah	644.9	7,397.8
Vermont	- -	243.4
Virginia	98.3	1,440.1
Washington	1,819.7	7,247.6
West Virginia	46.4	903.6
Wisconsin	.6	1,489.0
Wyoming	3,563.9	5,682.9
Virgin Islands	- -	.1
Total	27,845.6	159,255.5

1/ Includes 67,330,700 acres of range and watershed lands.

OFF-ROAD VEHICLE USE REGULATIONS

Mrs. HANSEN. In your statement you mentioned off-road vehicle use. I assume these are the snowmobiles and so on. Do you have any guidelines or rules for their use now in the National Forests?

Mr. MCGUIRE. We have some new regulations.

Mrs. HANSEN. Would you place a copy of those in the record at this point?

Mr. MCGUIRE. We will do that.

[The information follows:]

DEPARTMENT OF AGRICULTURE
Forest Service
(36 CFR Part 295)
USE OF OFF-ROAD VEHICLES
Regulations for National Forest System Lands

Notice is hereby given that it is proposed to issue a new Part 295 to Chapter II of Title 36, Code of Federal Regulations, as set forth herein. This Part 295 deals with the designation of specific areas and trails of National Forest System lands on which the use of off-road vehicles shall be allowed, restricted, or prohibited. Regulations for administration, control, and restrictions of other uses of roads and trails are in Part 212 of this title.

Sec.
295.1 Applicability.
295.2 Definitions.
295.3 Planning Designation of Areas and Trails.
295.4 Public Participation.
295.5 Public Information
295.6 Operating Conditions. (Reserved)
295.7 Restricted and Prohibited Use.
295.8 Off-Road Vehicle Permit.
295.9 Monitoring Effects of Off-Road Vehicle Use.

Authority: 30 Stat. 35, as amended; 16 U.S.C. 551; 50 Stat. 525, as amended; 7 U.S.C. 1011; 83 Stat. 852; E.O. 11644.

295.1 Applicability.

The regulations in this part pertain to administrative designation of specific areas and trails of National Forest System lands on which the use of off-road vehicles shall be allowed, restricted, or prohibited and establishing controls governing the use of off-road vehicles on such areas. The use of off-road vehicles in National Forest Wilderness and Primitive Areas is governed by Sections 293.1 through 293.17 of this Title.

295.2 Definitions.

(a) "Off-road vehicles" means any motorized vehicles designed for or capable of travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other terrain; except that such term excludes (1) any registered motorboat, (2) any military, fire or law enforcement vehicle when used for emergency purposes, and (3) any vehicle whose use is expressly authorized by the Chief, Forest Service, under a permit, lease, license, or contract.

(b) "National Forest System lands" means National Forests, National Grasslands, and other lands and interests in lands administered by the Forest Service.

(c) "Official use" means an employee, agent, or designated representative of the Forest Service or one of its contractors in the course of his employment, agency, or representation.

295.3 Planning Designation of Areas and Trails.

On National Forest System lands the continuing resource planning process will provide for designation of specific areas and trails for off-road vehicle use, use restrictions, and closures to any or all types of such use. The planning process will analyze and evaluate alternatives to enable decisions which best balance protection of the resources, promotion of safety for all users, minimization of use conflicts, and accomplishment of all of the other resource objectives for National Forest System lands. Analysis and evaluation of off-road vehicle uses will take into consideration factors such as noise, safety, quality of the various recreational experiences provided, potential impacts on soil, watersheds, vegetation, fish, wildlife, fish and wildlife habitat, and existing or proposed recreational uses of the same or neighboring lands.

295.4 Public Participation.

The public shall be provided an opportunity to participate in the designation of areas and trails relating to off-road vehicle use. Advance notice will be given to allow review by the public of proposed designations or revisions of designations of any areas or trails for off-road vehicle use, for restrictions, or for closures to such use. Time will be allowed for public response prior to any designations or revisions.

295.5 Public Information.

Areas and trails where off-road vehicle use is restricted or prohibited shall be marked with appropriate signs. Notices of restrictions or notices of the closure shall be posted so as to reasonably bring them to the attention of the public, and a copy of the restriction order or closure order shall be kept available to the public in the Offices of the District Rangers and Forest Supervisors. Information and maps will be published and distributed describing the conditions of use and the time periods when areas and trails are: (a) open to off-road vehicle use, (b) restricted to certain types of off-road vehicle use, (c) closed to off-road vehicle uses.

295.6 Operating Conditions. (Reserved)

295.7 Restricted and Prohibited Use.

Except as provided in Section 295.8 of this part, and except for use in connection with mining activities under the provisions of the General Mining Act of 1872, the use of off-road vehicles is prohibited in areas and trails on National Forest System lands during any period when such areas and trails have been closed to vehicles or certain types of vehicles pursuant to these regulations.

295.8 Off-Road Vehicle Permit.

Use of off-road vehicles on National Forest System lands where the use of off-road vehicles is prohibited may be allowed for official use or with prior authorization by means of an Off-Road Vehicle permit. Off-Road Vehicle permits may be issued by the Chief, Forest Service, and such permits will be for a specific area, conditions-of use, and a definite period of time. Off-Road Vehicle permits shall be revocable for violation of the rules and regulations governing the National Forests.

295.9 Monitoring Effects of Off-Road Vehicle Use.

The effects of off-road vehicle use will be monitored. Designations, use restrictions and operating conditions will be revised as needed to meet changing conditions and needs.

All persons who wish to submit written data, views, or objections pertaining to the proposed amendment may do so by submitting them to the Department of Agriculture, Forest Service, Division of Recreation, South Agriculture Building, Washington, D.C. 20250, within 30 days of the date of this notice in the Federal Register.

All written submissions made pursuant to this notice will be available for public inspection in the Division of Recreation during regular business hours. (7 CFR 1.27(b))

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Assistant Secretary of Agriculture

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RESPONSIBILITY FOR BUDGET DECISIONMAKING

Mrs. HANSEN. Mr. Yates.

Mr. YATES. Who made the decisions respecting the freezing and the passovers of funds?

Mr. MCGUIRE. Well, the decisions come to the Department in the form of allowances. The allowances for the Forest Service are received by us from our finance officer in the Department. Where the decisions were made beyond that I do not know.

Mr. YATES. The finance officer is not here, is he?

Mr. MCGUIRE. He is represented here.

Mrs. HANSEN. The finance officer that we would like to meet is in the Office of Management and Budget.

REDUCTIONS IN COTTON SUBSIDIES

Mr. BLIGHT. I think we should state at this point that the Secretary has commented numerous times on this and he has said that whatever was agreed to in terms of program cuts and reductions and this type of thing, were arrived at by mutual consent between the officials of the Department and the Office of Management and Budget.

Mrs. HANSEN. Please insert in the record the total amounts that the cotton subsidy received.

Mr. BLIGHT. I would be glad to put in the record, if you wish, a listing of total cotton.

Mrs. HANSEN. If you please.

REDUCTIONS IN TOBACCO SUBSIDIES

Mr. WYATT. How about tobacco?

Mrs. HANSEN. You had better insert that also.

REDUCTIONS IN ALL AGRICULTURE DEPARTMENT PROGRAMS

Mr. YATES. Have there been reductions in those?

Mr. BLIGHT. I do not recall offhand if there have been.

Mrs. HANSEN. We want a list of them.

You show all the agricultural subsidies and what cuts they received in this budget.

Mr. BLIGHT. I will be glad to place in the record a list of all of the cuts, it will be all-inclusive.

[The information follows:]

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UNITED STATES DEPARTMENT OF AGRICULTURE

Commodity Credit Corporation

Outlays, 1973 Budget Estimate Compared with 1973 Current Estimate
(In Millions)

Program	1973 Budget Estimate	1973 Estimate Shown in 1974 Budget	Change
Feed grains and products:			
Set-aside payments	$1,968.0	$1,880.0	-$88.0
Sales proceeds and repayments	-170.0	-344.7	-174.7
Total	1,798.0	1,535.3	-262.7
Wheat and products:			
Marketing certificates to producers	899.0	723.0	-176.0
Set-aside payments	- -	132.2	+132.2
Export payments	67.3	314.4	+247.1
Sales proceeds and repayments	-173.0	-1,141.9	-968.9
Total	793.3	27.7	-765.6
Cotton, Upland:			
Set-aside payments	822.0	808.1	-13.9
Other costs	80.2	140.2	+60.0
Total	902.2	948.3	+46.1
Tobacco:			
Export payments	26.5	26.0	-.5
Other costs	32.7	-177.6	-210.3
Total	59.2	-151.6	-210.8
Rice:			
Export payments	41.4	18.6	-22.8
Other costs	11.4	-.9	-12.3
Total	52.8	17.7	-35.1
Dairy purchases net of sale proceeds	337.0	208.3	-128.7
Soybeans	- -	-14.1	-14.1
Peanuts	86.3	110.2	+23.9
Storage Facility Loans	-5.3	64.6	+69.9
Short-term export credit program	58.2	318.0	+259.8
Other items including interest and financing	223.9	339.8	+115.9
Total Price Support	4,305.6	3,404.2	-901.4
Special Activities:			
National Wool Act	81.4	63.5	-17.9
Other	-10.0	.1	+10.1
Total	71.4	63.6	-7.8
Total, Commodity Credit Corporation	4,377.0	3,467.8	-909.2

March 2, 1973

AGREEMENT TO REDUCTIONS

Mr. YATES. Do I understand your comment to mean that the witness and the Secretary agreed mutually on the cuts?

Mr. BLIGHT. I indicated that the Secretary made the statement that different officials in the Department and OMB had agreed on where program cuts would come.

Mr. YATES. Then OMB is the agency that made these cuts and these gentlemen had nothing to do with it, is that correct?

Mr. BLIGHT. Sir, what I am saying is that the Secretary has said this was a mutual agreement and it is not one party or the other.

Mr. YATES. Mutual between whom?

Mr. BLIGHT. Between officials of the Department of Agriculture and the Office of Management and Budget.

Mr. YATES. But not the witnesses here?

Mr. BLIGHT. Whether Mr. McGuire or Dr. Cowden were personally involved I do not know.

Mr. YATES. I would like to know that.

Mrs. HANSEN. Were you told or were you asked?

Mr. MCGUIRE. We were indeed consulted and we had the opportunity to some extent, within the overall allowances, to suggest——

Mrs. HANSEN. You were given an allowance and you could not go above that allowance?

Mr. MCGUIRE. That is correct.

Mrs. HANSEN. So that you had to choose within the framework of that allowance?

Mr. YATES. Is this for the new budget or for the funds that were impounded?

Mr. MCGUIRE. Both, sir.

Mrs. HANSEN. We wasted our time last year.

Mr. YATES. Apparently. Are we wasting our time this year, too?

Mr. MCGUIRE. I hope not.

Mrs. HANSEN. We are going to take more time about it.

IMPACT OF IMPOUNDMENTS

Mr. YATES. What is your impression? What will happen as a result of these impoundments and cutbacks? What will happen to the National Forests as a result?

Mr. MCGUIRE. The national forests will simply have to offer less in the way of goods and services, if we do not have the funds to provide them.

Mrs. HANSEN. Will the gentleman yield?

Mr. YATES. Certainly.

Mrs. HANSEN. Well, when you say offer less in goods and services, are you prepared to go and put signs up around your national forests that say that we do not have the money to keep this up so stay out?

Mr. MCGUIRE. We may have to do that in some of our campgrounds. For example, we will have to say that we do not have the money to maintain this area, therefore it is closed to campers.

Mr. YATES. How many campgrounds will that affect?

Mr. McGUIRE. We do not know yet. It will depend on how much we can stretch our available dollars, whether we can keep up the maintenance, and let something else take the cutback.

Mrs. HANSEN. We had this problem as you well recall, 3 years ago in the national parks. This was the question: Will you close rather than decrease the quality or the kind of management you offer? You are well aware, when you decrease your management, you increase your fire potential, you increase the destruction, you increase the litter, and so on.

Do you know how long those "closed" signs stayed up? They lasted until the first Congressman went down to a facility and could not get in.

Mr. YATES. How many people use the campgrounds in the forests annually?

Mr. HOUSLEY. Camper use in 1972 was about 50 million visitor-days.

Mr. YATES. How many will you be able to accommodate under your new allocation?

Mr. HOUSLEY. Approximately that same number.

Mr. YATES. Then why the comment about the closings?

Mr. McGUIRE. The amount we are requesting for recreation and public use for 1974 is about the same as it was in 1973, but, because of increased costs, as the chairman mentioned, we may find that those funds are not sufficient. We may have to delay the opening date or move up the closing date rather than close down.

Mr. YATES. I don't understand the answer given that you think that you will be able to accommodate as many people.

Mr. HOUSLEY. Approximately.

Mr. YATES. If you are going to delay the opening and putting off the closing, how can you do that?

Mr. HOUSLEY. We have completed some additional facilities or will complete them this fiscal year.

IMPACT OF CAMPERS ON ECONOMY

Mrs. HANSEN. I want to ask you a question as long as we are on visitor days. Isn't it true that many national forests are located in areas we call economically depressed areas?

Mr. McGUIRE. In general that is correct.

Mrs. HANSEN. Please place in the record what each camping day brings in in the way of economic impact in these areas. At the same time that we abandon our OEO and other poverty programs we are lowering the kinds of revenue available to the small store owners and other small businesses in these areas. There is a sizable impact isn't there?

Mr. HOUSLEY. That is correct.

Mrs. HANSEN. Insert a list for the record.

(The information follows:)

Expenditures by campers and other tourists are generally thought to be an important source of income for rural economies. Reliable figures on how much money campers actually spend are scattered and highy variable. Results of a few studies provide some insight into this question. The impact of spending by campers and other recreationists in the Flaming Gorge National Recreation Area generated $0.31 of personal income to each resident in the local area per dollar of camper spending. In southeastern Utah, a figure of $0.49 was found for personal income generated per dollar of spending. Family groups camping in Maine were reported to have spent an average of $19.80 per day (Maine State Park Commission, 1960). Another study of just one State Park in Maine found an average daily expenditure per camper family of $13.83 (1970). A study of Wisconsin State Park visitors (not all were campers) revealed an average daily expenditure per car of $16.38 (1961). A profile of Delaware campers showed expenditures of $2.70 per individual or $12.69 (1967) for an average party of 4.7 persons. Other studies revealed the following expenditures per camping family:

Northern New Hampshire -- $11.20 per day (1967)
Two Reservoirs in Colorado -- $5.22 - $13.73 per day (1968)
One New Hampshire State Park -- $3.98 (1966); $4.22 (1967; $5.45 (1968); $4.54 (1969)

Another study of data collected from 642 camping families in New Hampshire revealed an average daily expenditure of $11.81.

Based on these and other studies the estimated average camping day per family brings between $10 - $15 into the economy of rural areas.

Camper expenditues may benefit rural and local areas. However they are, in effect, a trade off of expenditures that might otherwise have occurred in the campers residential area. They should not be looked upon as additional or new dollars brought into the economy but rather a shifting of expenditures which is particularly beneficial to rural areas.

REGIONAL STRUCTURE

Mrs. HANSEN. Mr. McKay?

Mr. MCKAY. Thank you, Madam Chairman.

In the light of your move for reorganization, at least under "study," which appears to be going into effect, are you programing into your budget the costs of that moving?

Mr. MCGUIRE. Mr. McKay, the costs do not show in this budget. We are looking at the costs now to see what they might amount to. The cost analysis will be one of the factors we will take into account in deciding whether to go ahead. We don't have those figures yet. Certainly it will cost some money to reorganize in any event.

Mr. MCKAY. Move your headquarters?

Mr. MCGUIRE. Yes, sir.

Mr. MCKAY. Does that mean for fiscal year 1974 you will not, in fact, be moving any headquarters to regions?

Mr. MCGUIRE. We have not decided what we will do yet.

Mr. MCKAY. Have you in your budget reprogramed some funds in case you do decide to move during the fiscal year?

Mr. MCGUIRE. No, sir; there is no specific item in the budget.

TEN STANDARD REGIONS

Mrs. HANSEN. Would the gentleman yield? The President has listed 10 regions. And you are moving toward that kind of regional setup?

Mr. MCGUIRE. We would not contemplate having all 10 of the regions. These 10 standard regions are laid out on the basis of population. At the present time, to give you an example, we have a regional office in Portland. The standard region is headquartered in Seattle and includes Idaho in addition to Oregon and Washington. Our present region includes only Oregon and Washington. We are not planning to move our headquarters city necessarily. If we did act we would simply realine the boundaries so the States would all have one office to consult in every case.

Mr. MCKAY. You are proposing under the study to move the district from Ogden to Denver to aline with the 10 regions for all other agencies which does move the city.

Mr. MCGUIRE. Denver is one of the regional headquarters. If we did have a revised boundary, we would include all of Utah in the region to be headquartered out of Denver because Denver rather than Ogden is the standard headquarters.

Mrs. HANSEN. Mr. McGuire, in relation to this relocation of regions, insert in the record the number of Forest Service acres that are included under the present region alinement and the number of acres that would be included under the new regional plan.

Mr. MCGUIRE. I would be glad to do that.

(The information follows:)

Acres of National Forest within Existing

Administrative Unit Boundaries
(excludes Alaska)

Regions

1	2	3	4	5	6	8	9
26,112,000	21,952,000	20,864,000	31,040,000	19,456,000	23,424,000	12,160,000	11,200,000

Acres of National Forest within Possible Realigned

Administrative Unit Boundaries

Regions

A	B	C	D	E
44,928,000	36,608,000	53,248,000	19,904,000	11,520,000

DISEASE DESTRUCTION

Mrs. HANSEN. Mr. McGuire, place in the record at this point the number of board feet destroyed yearly through insect and disease.

(The information follows:)

Precise information on damage from forest insects and diseases is unavailable. However, we estimate that about 9.2 billion board feet of sawtimber are killed by forest pests each year and that 2.8 billion board feet of the killed timber is salvaged.

Mrs. HANSEN. In other words, we are allowing insect destruction almost equal to the annual allowable cut?

Mr. MCGUIRE. Insects and disease together. That is almost the equal of the allowable cut.

Mrs. HANSEN. Isn't that the purpose of your laboratory in Corvallis where the funds are now impounded?

Mr. MCGUIRE. Our labs in several locations are trying to find ways of coping with these insect and disease problems. However, many of the trees that are lost are scattered over a large part of the country. It is not always economical to salvage the trees that are on the verge of dying or that have just died. We may not have roads to get in.

Mr. MCKAY. Would it be possible under Forest Service policy that where that danger does exist to allow an increased cut to those areas so that some economic benefit could be derived rather than just lost to disease?

Mr. MCGUIRE. That is what we tried to do wherever it is possible. However, we have to put our timber administration money where we get the most return for it. If we spend dollars preparing these areas for sale, we may not get as much timber as if we go elsewhere because the timber is not concentrated enough. We try to do what you say wherever possible.

RESEARCH LABORATORY AT PROVO, UTAH

Mr. MCKAY. In line with that same thought, I think you impounded funds for a shrub research building in Utah, the use of which in the light of dry areas for conditioning forest-managed lands, BLM, whatever, and the need for that kind of research in the light of mining, strip mining, recoverable lands, reforestation, and so on, for areas that don't have sufficient moisture, and new types of shrubbery that could be used to cover this type of ground, and particularly in Utah, Colorado, and Nevada. There are particular problems with halogeten, which is a very poisonous weed, at certain times of the year.

We have had some poisoning programs and sprays which have not been very effective, and apparently the latest research is that in order to overcome that you have to get additional growth of other plants. It is going to take some research to find some type of shrub which will compete in that dry area. In the light of that and economic

loss and the need for all of these things, how can we cut out that research money for this?

Mr. McGUIRE. You are right, Mr. McKay. Last year the Congress provided $760,000 for a laboratory at Provo to tackle the kinds of problems that you just mentioned.

Mrs. HANSEN. Did you spend the money?

Mr. McGUIRE. No, that money was not spent. Here again it was a question of priorities.

Mrs. HANSEN. Is it not going to be spent in 1974 either?

Mr. McGUIRE. It will not be in 1974 either. Dr. Arnold may have some additional information.

Mr. ARNOLD. As Mr. McKay indicated, that laboratory had special facilities planned for genetics research in the physiology and growth characteristics of those shrubs. Along with the cooperation of the State of Utah we are using the best facilities that we can, but this does tend to slow down that research effort.

INSPECTION OF MINES

Mr. McKAY. It slows down almost to a standstill, which really needs acceleration, not standing down under the present impact of environment, disease, those things that we have talked about. I think we ought to have a reassessment. Do you do inspecting of mines under which you have a lease for safety and so on?

Mr. McGUIRE. Yes, sir. We don't inspect for safety but where there is a mining claim we would inspect it for validity, that sort of thing.

Mr. McKAY. Validity meaning what?

Mr. McGUIRE. That there is indeed ore, that sort of thing, on our land. We also work with the miners in the layout of their operations and locations of their roads and this sort of thing.

PROJECTED VISITOR DAYS

Mr. McKAY. What is your planned increase in visitation this year or projected increase?

Mr. McGUIRE. We will reach nearly 190 million visitor days this year as contrasted with about 182 million visitor days in 1972.

Mrs. HANSEN. At this point I think we should insert in the record what the charges are and what receipts you are receiving for these visitor days.

Mr. McGUIRE. We can provide that.

(The information follows:)

Admission and User Fees

The charges for use of National Forest recreation facilities vary depending upon the type and quality of improvements. The Forest Service will have five types of fees for daily use permits in 1973. These are:

(1) One applicable to campgrounds with the rate based per camp unit. The fee range is $1 - $5 but we do not have any charges in the $4 - $5 range. The average charge for use of campgrounds will be about $2 per night.

(2) One applicable to day use sites with the rate based per private noncommercial vehicle. The rate per vehicle is $.50 - $1.00.

(3) One applicable to day use sites with the rate based per person for those entering by commercial vehicle. The rate per person is $.25 - $.50.

(4) One applicable to group sites (camping and picnicking) with the rate based on the capacity of the site as follows:

Group --	0-50 persons --	$ 10/day
	51-100 persons --	20/day
	101-150 persons --	30/day
	151-200 persons --	40/day
	201-300 persons --	60/day
	301-400 persons --	80/day
	401-500 persons --	100/day

(5) One applicable to special services, facilities, or equipment with the rate to be established by Regional Foresters. In establishing a rate, the Regional Forester must consider (a) the direct or indirect cost of development and operation; (b) quality and/or variety of recreation opportunity offered; (c) amount charged to use other comparable nearby public areas (Federal, State, and local) and private areas; and (d) contribution of State and local governments and private organizations to the development and operation of the area.

Persons 62 years of age and older having a Golden Age Passport will be charged one-half of the aforementioned rates.

The total revenue from the program is expected to be at least $4.5 million in FY 1973. We expect revenues will exceed $4.9 million in FY 1974.

REDUCTIONS IN OVERHEAD OPERATIONS

Mr. McKay. In your cuts, are you pulling personnel out of these visited areas as a result of your priority cuts and leaving it in office management rather than field management?

Mr. McGuire. No, we attempt to do just the opposite, to see if we can get people on the ground and take the cuts in the offices and overhead operations.

Mr. McKay. Aren't you in fact pulling—this may not be totally correct—forest personnel in your retraction, and I can speak for my State, pulling supervisors from Manti Forest and Cache Forest and locating it all in Salt Lake or more fully in Denver?

Mr. McGuire. In that instance and in others like it we still plan to keep the people on the ground to do the work. What we are economizing on are the staffs for handling the administrative work.

Mr. McKay. In field operations?

Mr. McGuire. It would be the office end of things.

Mr. McKay. That is my concern. You are putting everything in the office but you have not the men out in the field working the area.

Mr. McGuire. Our hope is to reduce those in the office and put people out in the field on the ranger districts.

Mr. McKay. If in fact that is what you are doing, I won't fight it, but if it works the other way, as soon as you kick one off the top you put another one in the field and he sits in the office and hopes there is something to tell when asked "What do you do out in the field?"

Mr. McGuire. I hope it does not work that way. We may have two supervisor offices and feel that we can perhaps accomplish the same office job with one office staff. That is the intention.

Mr. McKay. If that is so, I cannot argue with that if you still accomplish it. If you are not pulling them out of the field, there is some concern that maybe you are pulling them out of the field and management area on the spot which is very valuable.

Mr. McGuire. I appreciate your concern. This is not what we want to do.

Mr. McKay. Thank you.

Mrs. Hansen. Mr. Evans?

GENERAL CLARIFICATION ON IMPOUNDMENTS

Mr. Evans. Let me see if I understand exactly where we were last year and where we are this year. Madam Chairman, I think you mentioned a figure of $54 million frozen from fiscal year 1973?

Mrs. Hansen. That is correct. $28 million in congressional add-ons and $26 million of their own.

Mr. Evans. Their budget for fiscal 1973 was about $562 million; is that right?

Mr. McGuire. That is about right; yes, sir.

Mr. Evans. That represents freezing of between 9 and 10 percent; would that be correct?

Mr. McGuire. That is correct.

Mr. Evans. You suffer annually 10 percent inflationary costs; is that correct?

Mr. McGuire. Approximately.

Mr. EVANS. We are facing a situation where it could be about 20 percent behind; is that right? I would like to join those who have previously questioned Mr. McGuire and express my complete dismay at cuts such as this.

Your statement itself is the best argument that I have seen against this kind of approach. On page 4 of your statement you talk about adding additional 8-million visitor days, bringing it up to somewhere in the neighborhood of 190-million visitor days a year. You are talking about hoping that you can meet additional refuse collection and disposal requirements that come out of this additional use.

On page 5 you talk about timber activities and state that:

All recent timber demand and supply studies have clearly indicated that the level of management on forest lands must be improved if the Nation is to meet its long-run timber needs at reasonable prices.

Nobody argues with you there. You do say something at the bottom of page 5 I don't understand. You say:

The cooperative forestry programs are contributing to the timber supply solution by emphasizing the extension of present timber supplies.

What does that mean?

Mr. MCGUIRE. We are working with industry on better utilization techniques to use more of the log.

Mrs. HANSEN. The thing they did was cut down the research at Madison which might have helped to eliminate the necessity for cutting additional trees.

REFORESTATION

Mr. EVANS. Over on page 6 you say:

In addition, 109,367 acres were reforested and 191,041 acres were treated with timber stand improvement cultural measures in 1972.

This is reforestation?

Mr. MCGUIRE. The first part of it. The improvement measures include thinning out stands that are too crowded or taking out——

Mr. EVANS. Improving trees?

Mr. MCGUIRE. That is right.

Mr. EVANS. The other day when we were talking about money for firefighting, I seem to recall a figure of 5 million acres behind in reforesting. At this rate, if you just talk about reforestation, it is going to take about 35 years to handle that outstanding, and on top of that we will be behind because you have also, as shown on page 7 of your statement, 117,000 acres of the National Forest System lands being burned. We are not realistically facing the real problem that we have ahead of us at all, but we are backing away from it. All these things increase as the use of your forests increase and we are taking between 9 and 10 percent and freezing the funds and suffering a 10-percent inflation factor. I must say that I am appalled at some of the decisions that have been made in cutting this budget. I am glad that I don't have to answer for it. I wish we could get the right people. I didn't get it clear, but is the gentleman seated down there from the Office of Management and Budget or your office?

Mr. MCGUIRE. Mr. Blight represents the Secretary of Agriculture's Office of Budget and Finance.

Mr. EVANS. Thank you. I thought we just about had somebody here to get our hands on.

Madam Chairman, I just at this point can't do anything more than express my——

Mrs. HANSEN. They read our hearings with great interest.

Mr. EVANS. I doubt it.

Mrs. HANSEN. Yes, they do. They send a budget amendment after each hearing.

ANNUAL VERSUS NO-YEAR APPROPRIATION

Mr. EVANS. You have all these moneys frozen. How much of these funds do we appropriate annually, appropriated on an until-expended basis?

Mr. MCGUIRE. Most of the money that you appropriate lapses at the end of the year.

Mr. EVANS. If it is not spent at the end of the year, it goes back to the Treasury?

Mr. MCGUIRE. If it is not obligated at the end of the year, it goes back to the Treasury.

Mrs. HANSEN. Your construction is no-year money?

Mr. MCGUIRE. Of the $24 million of impounded funds, $22 million was yearend and the balance no yearend, approximately.

REPROGRAMING OF FUNDS FOR FIGHTING FOREST FIRES

Mr. EVANS. Returning to the question of that cost for fires that we had the other day, did I understand you to say that you took $22 million from what would have been expended for personnel?

Mr. MCGUIRE. It would have been. It was yearend money that would be expended for personnel and other activities in going programs.

Mr. EVANS. In other words, you have the power under the appropriation of last year to take those moneys asked for for personnel and designated for personnel and reprogram them for firefighting; is that correct?

Mr. MCGUIRE. With the concurrence of the committee.

Mr. EVANS. Let me ask on this point, were you told by the legal experts in the Department that it was legally necessary for you to come here and get permission to reprogram the use of this money?

Mr. MCGUIRE. No; I don't think we were told that in a legal sense. We estimated how much money we would need for the fighting of forest fires in the current fiscal year. Then we were told to reduce that request by the amount of the funds that were impounded.

Mr. EVANS. Your visit here the other day was a matter of informing us of something you did or were you asking permission?

Mr. MCGUIRE. We were asking permission.

Mr. EVANS. Is it your belief that that permission has to be granted before you can do that?

Mr. MCGUIRE. That is right.

Mrs. HANSEN. You are under rule from the committee that you cannot reprogram money above a certain amount without the notification to the committee.

Mr. MCGUIRE. Yes; ma'am.

Mrs. HANSEN. When you propose to reprogram or transfer $22 million you must have the approval of the committee.

Mr. McGUIRE. Some of the funds we were asking permission to move were in appropriations that were not originally requested for the national forests, for example, for national forest use originally——

Mrs. HANSEN. Mr. Wyatt.

GENERAL REVENUE SHARING

Mr. WYATT. Thank you. I have one question for Dr. Cowden.

Dr. Cowden, in your statement you said:

> Revenue sharing made it possible to reduce the cooperative forest fire control program in 1973 and to be continued at the same level in 1974 with little financial impact on the States.

Do I understand that you are referring to general revenue sharing here?

Mr. COWDEN. Overall revenue sharing.

Mr. WYATT. Not referring to anticipated possible special revenue sharing?

Mr. COWDEN. Not at this time.

Mr. WYATT. What you are saying is that it is your judgment that the general revenue sharing that has gone to the States, the States should assign monies from there to fill this void. Is that what you are saying?

Mr. COWDEN. I am saying that if they choose——

Mr. WYATT. You understand there are other pressures on the States for this money?

Mrs. HANSEN. I think it would be useful if you would place in the record at this point the total amount of revenue sharing available to each State.

(The information follows:)

Allocations of Funds, General Revenue Sharing

State	First Entitlement Period, January 1, 1972 through June 30, 1972	Second Entitlement Period, July 1, 1972 through December 31, 1972	Supplement Payments, First and Second Entitlement Periods
Alabama	$44,797,385	$43,022,110	$14,476
Alaska	2,973,521	2,868,998	164,370
Arizona	23,926,392	22,960,731	1,505,836
Arkansas	26,952,892	25,923,673	32,943
California	277,156,555	265,981,176	138,931
Colorado	26,939,889	25,851,843	70,487
Connecticut	33,271,513	31,999,725	- -
Delaware	7,939,389	18,992,711	8,946
District of Columbia	11,834,502	- -	- -
Florida	72,602,547	69,676,377	26,754
Georgia	54,232,701	52,055,607	13,312
Hawaii	11,732,357	11,258,322	- -
Idaho	10,475,721	10,055,390	81,558
Illinois	135,182,213	130,027,314	400,776
Indiana	56,169,124	53,961,667	159,468
Iowa	37,353,343	35,848,952	32,351
Kansas	25,795,167	24,790,578	110,332
Kentucky	43,005,687	41,425,650	41,239
Louisiana	60,623,408	58,195,448	47,076
Maine	15,287,049	14,708,920	100,917
Maryland	53,006,184	50,882,597	- -
Massachusetts	81,717,740	78,428,839	13,341
Michigan	110,895,777	106,587,051	150,892
Minnesota	52,396,328	50,407,225	314,352
Mississippi	43,759,667	42,060,512	72,755
Missouri	48,444,153	46,547,689	137,357
Montana	9,947,520	9,464,152	479,016
Nebraska	19,155,953	18,406,291	125,342
Nevada	5,667,994	5,352,155	60,089
New Hampshire	8,167,735	7,909,456	15,460
New Jersey	82,490,765	79,155,020	5,526
New Mexico	15,518,891	14,905,346	1,378,233
New York	291,281,351	279,865,219	234,915
North Carolina	67,229,428	64,543,025	193,814
North Dakota	10,706,060	10,318,691	368,334
Ohio	105,673,646	101,616,470	162,513
Oklahoma	29,102,495	27,966,948	348,439
Oregon	26,195,165	25,149,875	59,231
Pennsylvania	137,222,167	131,877,508	358,454
Rhode Island	11,959,996	11,476,768	- -
South Carolina	35,669,385	34,256,191	22,559
South Dakota	11,650,073	11,189,186	571,019
Tennessee	48,916,516	46,982,786	10,787
Texas	122,680,956	117,742,543	83,667
Utah	15,040,553	14,454,365	154,997
Vermont	7,188,224	7,015,958	51,458
Virginia	52,628,627	50,511,435	13,204
Washington	39,448,297	36,897,811	197,108
West Virginia	25,689,557	24,675,257	36,059
Wisconsin	65,736,354	63,173,854	240,462
Wyoming	4,880,260	4,685,933	94,211

Source: Department of Treasury, Office of Revenue Sharing.

Mr. WYATT. I would have to say I cannot accept your statement that revenue sharing, meaning general revenue sharing, made it possible to reduce the cooperative forest fire program in 1973 and continue it at the same reduced level in 1974 with little financial impact on the States. I know the demands on the States for general revenue sharing and the theory behind general revenue sharing was not to replace Federal programs. It was to let local communities do things they had not been able to do before. The special revenue programs are the programs to replace Federal programs. I just want the record to be clear on that. I don't feel that this is a valid explanation of the reduction in the cooperative forest fire control programs.

Mr. COWDEN. I think you have a point on that.

RECEIPTS AND OUTLAYS FOR 1961, 1973, AND 1974

Mr. WYATT. I have some statements of Mr. McGuire and some of these I will attempt to ask you to answer for the record because I don't want to take the committee's time to answer all of them here. I would like to have in the record at this point the total receipts of the Forest Service in fiscal year 1973 and again in 1974, and besides them I would like to have the total outlays of the Forest Service.

Mrs. HANSEN. Mr. Wyatt, why don't we go back further and have them put the figures in for 1961 as well.

Mr. MCGUIRE. Yes.

(The information follows:)

The statements which reflect income and expenditures referred to include depreciation and value of roads built by timber purchasers. Following figures are furnished for 1961, and estimated 1973 and 1974:

[In thousands]

	Cash receipts and other income	Operating expenditures
Fiscal year:		
1961	$173,861	$168,534
1973	578,155	515,330
1974	541,935	497,690

RECEIPTS VERSUS EXPENDITURES

Mr. WYATT. This shows a net surplus of many millions of dollars?

Mr. MCGUIRE. Yes, sir; in relation to the National Forests.

Mr. WYATT. I think it will show the more we spend the more we return even proportionately and certainly in dollars. The reverse would be true, the less we spend the less we get back. Is that generally true?

Mr. MCGUIRE. That is generally true.

Mr. WYATT. I think this would perhaps point up the extreme foolishness of trying to cut on this renewable natural resource.

I would like to also, Mr. McGuire—and these statements are not directed to you or to your associates—but I would like to express my total disapproval and dismay at the automatic freeze of the add-ons made by Congress to the 1973 budget. If the Office of Management and Budget automatically freezes congressional add-ons, they would largely negate any purpose that we have in sitting here for 6 to 8 weeks and taking testimony carefully, shifting programs, reducing here.

eliminating here, and adding on in areas we feel are necessary. At the time we are facing an all-time high demand on the wood fiber in this country, to freeze the $3 million that this committee added to reforestation is just the absolute height of irresponsibility, in my judgment, particularly where it has demonstrated itself to be such a good investment for the Government.

HEADQUARTERS FOR NATURAL RESOURCE AGENCIES IN NORTHWEST

In connection with the testimony and the questions and your answers on the possible realinement of field organizations, are you familiar with the announcement made by Secretary Morton that—and I understand that this was made with the full approval and concurrence of the White House—that Portland, Oreg., would be the regional headquarters for natural resource agencies in the Northwest?

Mr. McGUIRE. Yes, sir. I read about that.

Mr. WYATT. The reason is because geographically it is in the center of the national resources of the Northwest. Is there anything on the drawing boards that you see, or any danger to a change of that concept?

Mr. McGUIRE. I know of nothing that would indicate any change in that instance.

Mr. WYATT. That is good news.

TIMBER CUT AND SOLD

Mr. McGuire, you gave the number of feet of timber cut in fiscal 1972 and the number of feet sold in fiscal year 1972. I wonder if you could supply the comparable figures going back about 5 years at this point in the record?

Mr. McGUIRE. We will do that.

(The information follows:)

VOLUME OF TIMBER HARVESTED AND SOLD ON THE NATIONAL FORESTS FOR FISCAL YEARS 1967 THROUGH 1972

	Thousand board feet[1]	
	Harvested	Sold
Fiscal year:		
1967	10,850,930	11,654,647
1968	12,128,225	11,651,566
1969	11,783,473	[2] 18,930,942
1970	11,526,725	13,382,025
1971	10,341,204	10,636,387
1972	11,700,364	10,339,486

[1] Volumes are in local scale log rules, and include softwoods and hardwood, and other convertible products.
[2] Includes Juneau unit pulp sale in Alaska of 8,750,000,000 board feet.

TIMBER CUT AND SOLD IN 1972

Mr. WYATT. Generally, was the amount of timber cut and the number of feet of timber sold in 1972 greater or less than 1971?

Mr. HOUSLEY. The harvest was greater.

Mr. WYATT. And how about the sales?

Mr. HOUSLEY. The amount sold was approximately the same. Slightly smaller.

Mr. WYATT. By what kind of percentage smaller?

Mr. HOUSLEY. The difference between 10,636 million and 10,339 million.

Mr. WYATT. Your sales of forest timber will probably peak along in the summer, perhaps in June. Don't they historically have a peak then?

Mr. MCGUIRE. Yes; that is the way it has been going.

TIMBER APPRAISALS AND PRICES

Mr. WYATT. The appraisals upon which this timber is sold are averaged out over the previous how many months?

Mr. MCGUIRE. It varies with the kind of data we have. Ordinarily we try to use the past 3 months.

Mr. WYATT. Does the Forest Service anticipate any dropoff in demand or lowering of prices in Forest Service sales by the peak sales period this year?

Mr. MCGUIRE. We are not sure, Mr. Wyatt. The forecasts of housing starts indicate there would be some slight decline in numbers of housing starts. Just when this might occur is not at all clear. I wouldn't be surprised—if I can put it this way—we would have some dropoff before the 1st of June.

Mr. WYATT. I am a little fearful by June there may be some dropoff and with the previous 3 months' sales being at an alltime high, the appraisals for the June sales would be very high and perhaps be so high nobody can buy them. I wonder if you have developed any contingency plans to deal with this kind of situation?

Mr. MCGUIRE. This is the same problem we faced in 1969. In the Pacific Northwest on the east side of the Cascades we have a built-in escalation and deescalation provision in the contracts that help to ameliorate this kind of problem as to at least the sale price. When you talk about appraised price, on the other hand, there seems to be no easy or certain way of taking into account the anticipated changes because we base our appraisals on things that have occurred in the recent past.

Mr. WYATT. Are your appraisals the minimum appraisals, minimum offers accepted in the sales?

Mr. McGuire. If there is only one bidder we would expect that he would obtain the sale at the appraised price. In most places these days there is quite a bit of competition and the sale goes for much above that.

Mr. Wyatt. We would not be in a position of accepting an offer or bid less than the appraised price?

Mr. McGuire. That is correct.

Mr. Wyatt. Therefore, if your appraised prices are high compared to the current market, you are not apt to get any takers unless somebody is a pretty high roller?

Mr. McGuire. That is right. That is one of the possibilities that we have been discussing with the industry. It is a technique that we used in 1969; that is, to hold up on the offerings if the market becomes pretty soft.

Mr. Wyatt. I would hope that the Forest Service watches this very carefully so that we can handle the situation better than it was handled in 1969, although in view of the emergencies and circumstances then, I cannot offer too much criticism of it.

Knowing this is a possibility, I urge you to take a careful look at it.

Mr. McGuire. We have improved our procedures since then.

BUILDING OF ROADS

Mr. Wyatt. I am disturbed by the roadbuilding program. The total of contract roads and Forest Service-built roads and trails in fiscal 1973, was 7,850. In 1974 it appears to be 7,475, the big reduction being in the Forest Service-built roads, which is the big dollar reduction. This does not indicate a full shift to the timber purchasers. I would like to have you insert at this point in the record the number of feet of timber that dies annually in the forests and if you can tie it into the lack of access roads. I think it would be pertinent at this point.

Mr. McGuire. We will try to do the best that we can. We don't have very precise data but we can give you some estimates.

(The information follows:)

National Forest Softwood Sawtimber Mortality Volume Estimates

Calendar Year	Volume of Softwood Sawtimber - Million Board Feet 1/ Projected Mortality 2/	Probable Harvest 3/	Nonharvestable - Lack of Access 4/
1970	5,024	430	2,000
1980	4,544	925	1,750
1990	4,307	1,175	1,270
2000	4,082	1,430	780
2020	3,722	1,850	-

1/ Volumes are in local scale log rule.

2/ From the Forest Service 1970 Timber Review with estimates for softwood sawtimber mortality for 1970 and projections to 2020 under current levels of management.

3/ From Chapter 3 of the Forest Service 1970 Timber Review which estimates salvable volumes probable under intensified management. Figure for 1970 is estimate of actual salvage and commercial thinning harvest. Additional expected future mortality volumes would be harvested through commercial thinning harvests on areas which benefit from intensified reforestation and timber stand improvement activities.

4/ Estimates of current and expected mortality volumes which are not harvestable due to lack of access.

REFORESTATION

Mr. WYATT. I would like to have you insert at this point in the record a statement about the rate of reforestation of commercial timberland managed by the Forest Service capable of reforestation that is not reforested. Total number of acres, current costs of reforesting this land, the length of time and number of years it would take to reforest this land at the present rate of reforestation. I think we ought to use the present rate of $18 million, since somebody near and dear to you has put $3 million into the deep-freeze. You can probably come out with a year estimate. How long will this take?

Mr. MCGUIRE. We will do that.

(The information follows:)

DEPLETION OF CURRENT ESTIMATED REFORESTATION
BACKLOG ON NATIONAL FOREST LANDS USING
CONSTANT FY 1974 BUDGET DOLLARS AND TARGET ACREAGE

Current estimated reforestation backlog	4,788,254 acres
FY 1974 budget target acreage	153,300 acres
FY 1974 budget requested appropriations	$16,429,000
FY 1974 budget average per acre cost	$107.17
Estimated number of years to complete backlog	46
Total number of acres to reforest in 46 years	7,051,800 acres 1/
Total cost in FY 1974 constant dollars and cost	$755,734,000

1/Includes an annual decreasing maintenance acreage for reforesting estimated additional acres entering backlog because of:

(a) New burns
(b) Newly acquired cutover lands
(c) Plantation or other regeneration failures
(d) Catastrophic losses from insects, disease, wind, etc.

Following completion of the backlog by year 2020 there would be an annual maintenance program of 15 to 20 thousand acres at an annual cost of $2,160,000 in FY 1974 budget constant dollars and cost.

FUNDS NEEDED TO SELL FULL ALLOWABLE CUT

Mr. WYATT. Mr. McGuire, would you place in the record an estimate as accurate as possible of what funds are required at the present time, how much a year at the present time it would take to sell the full allowable cut as it is computed in the national forests, at the same time complying with all of the applicable standards for a sustained yield and full environmental protection.

When I say "at this time," take any near time or future estimated time.

Mr. MCGUIRE. I assume you want us to include the cost of the necessary roads?

Mr. WYATT. Yes; whatever is necessary.

Mr. MCGUIRE. We will do that.

(The information follows:)

ESTIMATE OF PORTION OF FULL NATIONAL FOREST ALLOWABLE HARVEST
THAT COULD BE SOLD AT THIS TIME AND THE ADDITIONAL FUNDS
AND STAFFING REQUIRED ABOVE FY 1974 BUDGET ESTIMATES

	Million Board Feet[1/]
January 1, 1973, annual allowable harvest	13,565
Volumes not attainable under current conditions:	
a. Lack of markets and mill capacity[2/] 1,700	
b. Deferred indefinitely[3/] 430	
c. Delayed in NEPA process[4/] 350	
d. Total	-2,480
Residual portion of allowable harvest available	11,085
Current FY 1974 program target[5/]	10,000
Increases in planned program level possible with increased funding and manpower[6/]	1,085

Additional funds needed to increase sell program by above possible increases (above FY 1974 President's budget)[6/]

Appropriated Funds:

a. Timber resource management	$6,900,000
b. Support activities	1,900,000
c. Forest roads and trails	7,300,000
d. Total appropriated funds	$16,100,000

Established permanent full-time ceilings required to increase sell program by above possible increases (above established FY 1974 ceiling levels)[6/] ..... 276 man-years

1/ Volumes are in local scale log rule.

2/ There is a lack of mill capacity in some areas where allowable harvest volumes are available and in other areas there is a lack of markets for some of the species and size of trees available.

3/ Harvest of these volumes will be deferred indefinitely because of local environmental conditions, consideration of areas for wilderness classification, lack of road access, and legal restraints such as injunctions and appeals. Ultimately some of the volumes involved in this category may be removed from the allowable harvest permanently.

4/ These volumes will be temporarily deferred until environmental statements can be completed and approved.

5/ This is the regulated volume target only. In FY 1974 an estimated 800 million board feet of salvage and thinning material will also be sold.

6/ This volume is only theoretically achievable. The process of preparing and selling timber requires from 3 to 5 years lead time in most areas. If any of this possible increase were to be sold in FY 1974, the manpower would have to become available for the last quarter year of FY 1973 for training and advanced preparation work at an estimated cost of $3,000,000.

Mr. WYATT. Mr. McGuire, I represented this committee at a visitation to the Angeles National Forest.

Mrs. HANSEN. I wish to express my appreciation to you for making the trip.

FUEL MODIFICATION

Mr. WYATT. I went at the request of our chairman and Mr. Veysey and various members of the California delegation who are very interested in the management of the Angeles National Forest. I must say it was a real education for a boy from the timber country to see that forest. There were not too many trees on it. I would just like to have placed in the record at this point the total available in fiscal 1973 and requested in fiscal 1974 for the entire United States for fuel modification programs.

(The information follows:)

The forest fire protection funds available for fuels modification in fiscal year 1973 are $534,000 and $678,000 is requested for fiscal year 1974.

FUNDS NEEDED FOR FUEL MODIFICATION IN SOUTHERN CALIFORNIA

Mr. WYATT. I would like to have placed in the record at this time the amount of money that could be used for fuel modification in each of the four southern California national forests.

(The information follows:)

The funds that could be used for fuel modification in each of the four southern California national forests in fiscal year 1974 are as follows:

National Forest:	*Amount*
Angeles	$2,141,140
Cleveland	1,353,780
Los Padres	1,124,200
San Bernardino	964,880
Total	5,584,000

FIRE SUPPRESSION COSTS IN SOUTHERN CALIFORNIA

Mr. WYATT. Then I would like to have placed in the record at this time the 5-year costs for those four national forests in southern California for fire suppression which is charged to the emergency firefighting funds in these four national forests.

(The information follows:)

The 5-year costs of fire suppression charged to emergency firefighting funds for the four southern California national forests were:

	Fiscal year				
National Forest	1968	1969	1970	1971	1972
Angeles	$720,600	$1,426,000	$439,900	$983,500	$656,700
Cleveland	747,700	137,700	643,400	2,955,800	133,600
Los Padres	1,342,900	187,900	391,800	1,495,500	3,307,300
San Bernardino	353,100	992,900	520,100	4,959,800	313,000
Total	3,164,300	2,744,500	1,995,200	10,394,600	4,410,600

LETTER FROM REGIONAL FORESTER LEISZ

Mrs. HANSEN. Mr. Wyatt, may we put in the record at this point the letter sent you on February 22 by the regional forester, which is a summation of some of the material. I would also like to insert the letter you sent to me reporting on that trip.

Mr. MCGUIRE. We will be glad to provide anything additional that you ask for.

(The information follows:)

March 8, 1973

Honorable Wendell Wyatt
United States Representative
House of Representatives
Washington, D. C.

Dear Wendell:

Thanks so much for your letter of March 6 and your briefing on the Angeles National Forest.

This is such an excellent review that I am going to take the liberty of placing it in the Record at some appropriate place.

I can't begin to tell you how deeply I appreciated your visit to the Angeles National Forest and the San Dimas Forest Research Center.

With my warmest personal regards and appreciation, I am

Yours most sincerely,

Julia Butler Hansen, M. C.

JBH:erl

cc: Honorable John Rousselot
Honorable Edward R. Roybal
Honorable William S. Moorhead
Honorable George Mahon
Honorable Joseph McDade
Honorable Elford Cederberg

WENDELL WYATT
- First District
OREGON

House Office Building
Washington, D.C. 20515

APPROPRIATIONS
COMMITTEE

Congress of the United States
House of Representatives
Washington, D.C. 20515

March 6, 1973

Honorable Julia Butler Hansen
Chairman, Subcommittee on Interior
and Related Agencies
House Appropriations Committee
201 House Office Building
Washington, D.C.

Dear Madam Chairman:

At your suggestion I visited the Angeles National Forest and the San Dimas Forest Research Center on Wednesday, February 14, 1973.

The day commenced with a 7:30 A.M. breakfast with Congressmen Rousselot, Roybal and Moorhead in Pasadena and with the following persons:

Mr. M. E. (Ham) Salsbury, Chairman, Los Angeles County Watershed Commission and member California State Board of Forestry

Mr. Domingo Hardison, Ventura County, Watershed-Fire Council

Mr. Richard Houts, Chief Engineer, Los Angeles County Fire Department

Mr. Arthur Bruington, Chief Engineer, Los Angeles County Flood Control District

Mr. Bob Baker, Chief, Special Services Division, Los Angeles County, Office of Chief Administrative Officer

Mr. Douglas R. Leisz, Regional Forester, Region 5, U.S. Forest Service, San Francisco

Mr. Harry Camp, Director, Pacific Southwest Forest and Range Experiment Station

Mr. H. Donald Harper, Administrative Assistant to Congressman Rousselot

Mr. Richard Millar, Chief of Fire Control, U.S. Forest Service

Mr. Richard (Dick) Montague, Fire Control Officer, Angeles National Forest

Mr. William T. Dresser, Forest Supervisor, Angeles N.F.

Mr. Doug MacWilliams, Deputy Forest Supervisor, Angeles N.F.

We then had a briefing session on the problems of the Angeles National Forest. This was followed by a helicopter tour of the area where the foothills of the Angeles National Forest joined the developed, populated areas of eastern Los Angeles County. We then visited the San Dimas Forest Research Center, had a round-table discussion session and the day was concluded with a reception at the Hilton Hotel in Pasadena.

The principal problems I observed were the scars left from past fires, the efforts to construct fuelbreaks and the flood and mud and debris movement following fires. This is an unusual national forest for someone from the Northwest to observe since I don't believe I saw a single solitary tree growing in the forest. There is considerably low brush vegetation which during the long dry season appears to be very flammable. During the hot season the approximate ten million people living primarily west of the Angeles National Forest swarm into the forest to get away from the noise, crowds and pollution and of course create considerable fire hazard. The low vegetation, once ignited, takes off very quickly and the damage potential both to life and property is very considerable.

The Forest Service and various local cooperating agencies have made a tremendous effort to build fuelbreaks, principally at the crown of the ridges. These fuelbreaks serve two purposes. First, they slow the progress of any fire and secondly they permit firefighters to gain ready access to the necessary areas.

Constructing the initial fuelbreaks is a very substantial job and once constructed they must be maintained so that they are not over-run again with new vegetation.

Besides the direct damage caused by wildfire and the potential of its spreading to the populated adjacent areas, there is a very bad secondary effect. Once an area is burned off the soil then becomes very unstable and during and following periods of heavy rainfall quick run-offs can result in flood conditions and very large mud slides can result because of the soil instability again causing great damage both to life and property.

The Forest Service and the local agencies have been struggling to manage the fuel, that is to provide the necessary fuelbreaks, but it is obvious that a quantum increase in money is necessary from some source if the job is to be maximized.

I requested certain figures from Douglas Leisz, the Regional Forester for Region 5 in San Francisco who participated in the day's events when I was there. These figures clearly show that the four southern California forests could use many-many times the amount of money presently budgeted by the Forest Service for fuel management for the entire United States. I attach a copy of Mr. Leisz's letter to me with the requested facts and figures.

I advised those involved that our subcommittee would give serious consideration to increasing the amount of money available for fuel management in the four southern California forests but that the quantum increase in funds necessary to really do the job was so great that the initial momentum would have to come from the Office of Management and Budget and that a major effort should be made by southern California interests with the OMB.

The visit to the San Dimas center was extremely interesting. Because of research being done we are approaching a capacity to become much more efficient in firefighting through the use of computers and other innovative techniques. When this program is further perfected I would strongly recommend that it be presented for the view of all members of our subcommittee.

One additional note has to do with research being done for the development of fire retardant ground cover which I think is very promising. It is necessary to have ground cover to stabilize

the soil and if a fire retardant ground cover is developed obviously great advantages will accrue.

I will be happy to discuss this with anyone interested in considerable more detail if desired.

Sincerely,

WENDELL WYATT
Member of Congress

WW/c

cc: Honorable George Mahon, Room 2314
Honorable Joseph M. McDade, Room 2202
Honorable Elford Cederberg, Room 2303

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

1510

February 21, 1973

Honorable Julia Butler Hansen
House Office Building
Washington, D. C. 20515

Dear Mrs. Hansen:

Representatives from my office and the Southern California Forests met with Congressman Wendell Wyatt on February 14. He requested the attached information and asked that a copy be sent to you. If we can provide additional data for you or your Committee, we would be pleased to do so.

Sincerely,

DOUGLAS R. LEISZ
Regional Forester

Attachment

1510

February 22, 1973

Honorable Wendell Wyatt
House of Representatives
Washington, D.C. 20515

Dear Congressman Wyatt:

I want to thank you again for your interest and time spent looking at our Southern California wildfire problem. In response to your questions, I have compiled this information.

The fire research annual budget for the Pacific Southwest Forest and Range Experiment Station, including operation of the Riverside Fire Laboratory for the past 5 years was:

FY 1968	$ 887,000
FY 1969	903,000
FY 1970	964,700
FY 1971	1,014,700
FY 1972	1,289,300 1/

1/ Does not include grants to Aerospace and Stanford Research Institutes.

The 5-year cost of fire suppression charged to Emergency Fire Fighting Funds for the four Southern California Forests was:

FOREST	FY 1968	FY 1969	FY 1970	FY 1971	FY 1972
Angeles	$ 720,600	$1,426,000	$ 439,900	$ 983,500	$ 696,700
Cleveland	747,700	137,700	643,400	2,955,800	133,600
Los Padres	1,342,900	187,900	391,800	1,495,500	3,307,300
San Bernardino	353,100	992,900	520,100	4,959,800	313,000
Total	$3,164,300	$2,744,500	$1,995,200	$10,394,600	$4,410,600

Information given to Southern California Congressmen during the February 8, 1973, briefing in Washington, D.C., showed a difference of $5,584,000 between the California Region program level and the administration budget. Our extensive analysis indicates a high priority for the entire $5,584,000 for fuel modification.

Accelerated needs in addition to dollars presently budgeted to carry out the fire protection job for the next 5 years for the four Southern California Forests are shown below:

FY	Fuelbreak Construction and Type Conversion	Fuelbreak Maintenance	Accelerated Manpower and Equipment Needs	Total
74	$4,651,100	$ 932,900		$ 5,584,000
75	3,940,300	1,200,600	$7,200,000	12,340,900
76	5,600,400	1,152,300	7,630,000	14,382,700
77	5,534,500	1,183,800	8,900,000	15,618,300
78	5,534,500	1,183,800	9,500,000	16,218,300

The Accelerated Manpower and Equipment Needs figures are based on 1965 Fire Planning information updating to 1973 dollars.

Fire protection dollars budgeted for the Southern California Forests the past 5 years were:

FOREST	FY 1968	FY 1969	FY 1970	FY 1971	FY 1972
Angeles	$1,058,400	$1,136,700	$1,226,800	$1,291,100	$1,403,900
Cleveland	704,300	753,300	900,800	901,800	943,800
Los Padres	1,110,900	1,188,400	1,317,900	1,345,100	1,393,100
San Bernardino	946,800	1,029,400	1,161,500	1,224,100	1,223,600
Total	$3,820,400	$4,107,800	$4,606,600	$4,762,100	$4,964,400

During this 5-year period, fuels management work has been accomplished with the funds available. The following is a tabulation by Forest and types of funds:

FOREST	FUND	FY 1968	FY 1969	FY 1970	FY 1971	FY 1972
Angeles	Forest Service	53,285	20,100	22,200	42,168	22,785
	L.A. River Flood Prev.	74,200	8,900			41,075
	Cooperator Contrib.	79,000	74,000	106,500	19,552	213,590
Total Angeles		206,485	103,000	128,700	61,720	277,450
Cleveland	Forest Service	16,150	6,320	7,160	40,835	60,500
	Cooperator Contrib.	4,700	4,700	4,600	3,600	4,600
Total Cleveland		20,850	11,020	11,760	44,435	65,100
Los Padres	Santa Ynez Flood Prev.	38,626	57,400	65,737	55,300	58,000
	Forest Service	23,500	17,700	20,500	18,000	19,000
	Cooperator Contrib.	45,000	45,000	45,000	45,000	45,000
Total Los Padres		107,126	120,100	131,237	118,300	122,000
San Bernardino	Forest Service	23,925	10,250	26,300	20,815	21,135
Grand Total		358,386	244,370	298,017	245,270	485,685

If we can be of further assistance, please let us know.

Sincerely,

DOUGLAS R. LEISZ

DOUGLAS R. LEISZ
Regional Forester

cc:
LM&L - WO
CEO - WO
FM - WO
Angeles N.F.
Cleveland N.F.
Los Padres N.F.
San Bernardino N.F.
IAE
RF
Honorable J. Butler Hansen
Honorable J. Rousselot

LOSSES INCURRED AS A RESULT OF A MAJOR FIRE

Mr. WYATT. Perhaps if it could be furnished, an estimate as to the total property damage involved as a result of one of the last major fires in this area. I am talking about the loss by the fire and the subsequent loss due to the slides and mud and floods that were caused resulting from those fires within, say, a 12-month period thereafter.

[The information follows:]

LOSSES CAUSED BY MOLERA FIRE IN CALIFORNIA

The estimated damage cost resulting from the Molera fire on the Los Padres National Forest was $910,350 which includes estimates of the mud slide damages. Four mobile homes and 11 business buildings were destroyed and six homes were damaged from the water and mud slides.

Mr. WYATT. That is all I have.

Mrs. HANSEN. Again, I want to express the committee's appreciation for Mr. Wyatt taking time to go down to the Angeles National Forest. I simply didn't have time that week.

Mr. Veysey?

Mr. VEYSEY. Thank you, Madam Chairman.

Mr. McGuire, I want to congratulate you on this, your first round, before this subcommittee. I hope that we will have many pleasant times.

EMPLOYEES IN FOREST SERVICE

Mr. VEYSEY. How many employees do you have in the Forest Service as of now?

Mr. MCGUIRE. 20,490 full-time, permanent employees.

Mr. VEYSEY. Some temporary?

Mr. MCGUIRE. As of the 30th of January 1973, we had 9,609 seasonal employees, but this figure will go over 18,500 during the summer.

Mr. VEYSEY. Under the budget proposal you have for next year, what does that do to your number of employees?

Mr. MCGUIRE. A budget proposal would reduce the number of permanent employees by 1,590.

Mrs. HANSEN. Attrition?

Mr. MCGUIRE. It may take more than attrition.

Mrs. HANSEN. Are you going to fire them?

Mr. MCGUIRE. We may have to.

Mrs. HANSEN. In what areas will this occur?

Mr. MCGUIRE. We don't know yet.

Mrs. HANSEN. The committee expects that information before we give you an appropriation.

Mr. MCGUIRE. We will be glad to provide that. We try to use attrition to the extent possible, but it may not be possible. We expect an increase of 425 in all other positions, making a net reduction of 1,165 by June 30, 1974.

Mr. MCDADE. Would you yield for a question? You say that you have 20,000 permanent?

Mr. MCGUIRE. Approximately.

Mr. MCDADE. Nine thousand seasonals?

Mr. MCGUIRE. The figure I gave was a little over 20,000 permanents and 9,000 seasonals now, but in the summer it gets up to over 18,000.

Mr. McDade. It does not reflect itself in the tables that you have submitted to the committee that I have been looking at. Tell us about that later.

Mr. Veysey. If we don't have the figures here, provide them for the record.

(The information follows:)

ESTIMATED END-OF-YEAR EMPLOYMENT

	1973	1974	Increase or decrease
Permanent full time	20,400	18,810	−1,590
Other than permanent full time	18,575	19,000	+425
Total	38,975	37,810	−1,165

DECREASE IN PERSONNEL THROUGH ATTRITION

Mr. Veysey. I would like to pick up on the point that you were discussing with the chairman with respect to how this change will be accomplished. You say there may be some attrition but that may not be sufficient to bring this about. Is that your response?

Mr. McGuire. That was my response. We have been relying on attrition to bring our numbers down.

Mr. Veysey. Would you be able to estimate at this time how much reduction probably will take place through attrition?

Mr. McGuire. I don't think that I can make such an estimate. I would say that we have been relying on attrition in the past to bring our numbers down. We have about run out of opportunities. There is just so much that you can do by attrition. We will still try to use attrition to the extent possible here, but we don't know how successful we will be. I didn't want to preclude the possibility that we may have to reduce our personnel by other means.

Mr. Veysey. When you say attrition, I assume that this reduction will fall where it happens to fall by chance.

Mr. McGuire. That is the problem with attrition, yes.

Mr. Veysey. Not by design or where you need them?

Mr. McGuire. Yes; we may lose an engineer by attrition but what we really need is a geologist. Well, we cannot substitute easily one profession for another. We may lose an accountant and what we really need is an engineer.

Mr. Veysey. I am trying to get at what that really does to the effectiveness of the Service if a change takes place in that way. Would you have some other mechanism by which you try to maintain the effectiveness or achieve higher effectiveness within the Forest Service as you go along? This poses the problem of a geologist versus engineer, where you wish you had one and you have the other. What do you do about that?

Mr. McGuire. Sometimes we can retrain people in the lower grades. Younger people can be retrained. We have some opportunities for doing that sort of thing on the job or send them away for training. It may be that some of our people can find employment in another agency where their skill is needed and we can pick up people from another agency where we need that skill.

There is some opportunity for interchange.

LISTING OF EMPLOYEES BY DISCIPLINES

Mrs. HANSEN. Where is your major employment? What percent do you have in management and in research? What percent of the skills are peculiarly associated with forestry?

Mr. MCGUIRE. We employ more than 40 disciplines and we can give you a breakdown.

Mrs. HANSEN. Insert that in the record.

(The information follows:)

Major employment in the Forest Service as of January 30 is associated with National Forest System programs. Out of a total of 20,490 permanent employees on January 30, 1973, 17,350 are in this category.

As of the same date approximately 2,850, or 14 percent were associated with research programs and 290 were associated with State and private forestry programs.

Permanent employees associated with land management represents 90 percent of the total employees as of January 30, 1973.

The clerical force represents 9 percent of the total permanent employees as of January 30, 1973.

Permanent people in management-related activities, which also are primarily related to forestry, represent approximately 20 percent of the total permanent employees.

NONPROFESSIONAL PERMANENT POSITIONS

Mr. MCGUIRE. Then we can give you an estimate of the number of nonprofessional permanent positions.

Mrs. HANSEN. Insert that in the record.

(The information follows:)

There are about 11,400 nonprofessional permanent positions in fiscal year 1973.

POSSIBLE SHIFTS IN EMPHASIS

Mr. VEYSEY. Is it conceivable that with an organization that large a reduction in the size or reduction in force could actually maintain the same level of services or even an increased level of services through improved efficiency?

Mr. MCGUIRE. This is what we are trying to do by reducing the number of central offices. We try to hold the number of people doing the work on the ground and reduce those in offices.

Mr. VEYSEY. By a shift in emphasis in placing your forces you might be able to do as well or even better conceivably with a lesser amount of money and fewer positions?

CONTRACTING

Mr. MCGUIRE. That is right. We also may be able to do more by contracting.

Mrs. HANSEN. This brings up an interesting point. We have had a great deal of discussion of contracting here. It appears to me that we have not saved a dime.

I want to know about your contract details. We are not going to have any short, quick answers on contracting.

Mr. MCGUIRE. I agree there are no short or quick answers, but there may be places where we can use contracting.

Mrs. HANSEN. That is fine, but you are not going to make it a policy of putting employees on unemployment compensation during the summer while you hire contract employees.

Mr. MCGUIRE. I am well aware of that problem, Madam Chairman.

POSSIBLE REDUCTIONS THROUGH BETTER MANAGEMENT

Mr. VEYSEY. Back to my line of questioning. It seems to me that it is within the realm of possibility that a real improvement in effectiveness of the service can take place in the course of a transition of this sort. It is not necessarily a correct assumption that the level of services would be reduced; is that correct?

Mr. MCGUIRE. The reductions in some of the categories are substantial enough so that there will have to be a reduction in some services. The example that I used——

ANGELES NATIONAL FOREST

Mrs. HANSEN. What reductions can you make in the Angeles National Forest through better management?

Mr. MCGUIRE. The example of recreation that I used before may not have been the best example because the reduction in actual dollars is not there. In roads there is a substantial reduction. We are going to have to close——

Mrs. HANSEN. You are going to the timber industry for that?

Mr. MCGUIRE. In the Angeles National Forest we don't have a timber industry.

Mrs. HANSEN. In the management, what changes can you effectuate in the Angeles National Forest to give you more efficiency?

Mr. MCGUIRE. The only thing that I can think of offhand in the Angeles National Forest is to close a number of roads where we don't have the maintenance funds.

Mrs. HANSEN. Are those used for recreation?

Mr. MCGUIRE. In the Angeles National Forest they are used for recreation.

Mrs. HANSEN. If you are going to close them you must——

Mr. MCGUIRE. In order to save the maintenance dollars we may have to close roads. This may be applied elsewhere.

CLOSURE OF AREAS

Mrs. HANSEN. Take a forest in Wisconsin, Chequamegon, where you do have a lot of recreation. Would you have to close some of that area to recreational use?

Mr. MCGUIRE. We may have to close some roads in the Northern Lake States to travel by automobile. The hunters and other recreationists could still use those areas and travel on foot, but they won't be able to get in as far as they would if they could drive.

Mr. VEYSEY. Let me ask you then if you could identify for the committee for the record those items in which you feel that there will necessarily have to be serious reduction in the services offered and those items in which the changes would not be of that nature.

Mr. MCGUIRE. We will be glad to.

(The information follows:)

The effects on program outputs are major reduction in roads supporting land management alternatives. There will be no trail construction or reconstruction. There will be no new surveys for major access roads outside immediate (fiscal year 1974-1975) Sale Program needs.

There will be no reconstruction of existing system through public works contracts for timber, recreation, or other purposes.

There will be no construction of new access for long-range 1974 and after management or development purposes in timber, recreation, and other activities.

The expected effects on manpower and organization are of major concern. The total investment in roads will be unchanged. The Purchaser Credit Program of construction-reconstruction and maintenance combined with the appropriated funding still permits and requires a $235 million total program.

The impact on manpower and organization is the shift from public works contracting in fiscal year 1973 of about $45 million to zero in fiscal year 1974 and an increase in roads built through timber sale contracts of $45 million. Changes will occur in contracting workloads downward and changes in Sale Contract administration upwards.

There will be local effects on contracting organizations, particularly in trail construction.

The full impact of a fall-off of available timber (new access) will not be felt until 1976 and beyond, and until any thinning and salvage from accessible areas is exhausted. Our current inventories are not explicit in this area of accessible thinning and salvage opportunities.

INCREASES IN REVENUES GENERATED BY INCREASED BUDGETS

Mr. VEYSEY. Much of the work of the Forest Service results in substantial revenues to the Government from timber, from grazing lands, from other sources. Is it conceivable that these revenues could be increased by an amount more than or equal to the additions to be made to the budget or certain of the cuts being proposed in the budget?

Mr. MCGUIRE. Yes, sir.

Mr. VEYSEY. OMB contemplated other actions than these?

Mr. MCGUIRE. I am sure that that has been considered. The problem is that the receipts could not come in the same year the expenditures are made. It is a matter of timing. For example, increased expenditures in roadbuilding or timber sales appropriation made this year will not bring returns to the Treasury for the next 2 or 3 years, when the timber is cut or the road is built.

Mr. VEYSEY. I think some of your earlier testimony indicated that that may be a standoff over the long haul. What you spend on roads opens up some other timber, but you can go the other way and have people taking the timber provide the road construction and that reduces revenue?

Mr. MCGUIRE. That is right.

Mr. VEYSEY. You come out net the same?

Mr. MCGUIRE. You come out net about the same, yes. Whether the Government builds the road with appropriated funds or whether the timber operator builds the road with his funds, there is a net drain on the Treasury in any event—either less receipts or more direct expenditures.

Mrs. HANSEN. However, you forgot one ingredient. When you have the timber revenue down, the receipts to the counties are down, which is directly reflected in school funds.

Mr. MCGUIRE. That is right.

Mr. VEYSEY. Are there any items that you can identify in which there could be an increase in revenues in the same year by changing the impact of these cuts?

LONG-RANGE BENEFITS OF FOREST SERVICE PROGRAMS

Mr. MCGUIRE. If you are talking strictly about dollar returns, I don't think there are any. There are, of course, immediate benefits that don't show up as dollars, such as timber saved by increased fire protection or increased disease or insect protection.

Mr. VEYSEY. Those would be more long range?

Mr. MCGUIRE. Yes, sir.

Mr. VEYSEY. In the southern California area where we have had severe fire hazards for a few years with some heavy forest losses we now seem to have entered into a cycle where it rains out there again. What does this do to your calculations? How do you contemplate a change of that type?

Mr. MCGUIRE. I don't think we know enough about weather cycles. Let me ask Mr. Arnold if he has anything on research on that.

Mr. ARNOLD. No, the general studies down there show after a fire occurs it takes about 12 years for the chaparral to regrow, as we well know. The periodicity of a critical fire period seems to run in the order

of about 20 years. Then every year you can have a short period and it can come any one of the 12 months of the critical fire season, so you cannot plan on this cyclical 20-year cycle because any 1 year you can be subject for short periods of just intense fire severity.

Mr. VEYSEY. How do you handle this problem in budgeting? Do you just keep it on a steady level?

Mr. ARNOLD. The budget in fire is kept on a steady level but the availability and particularly in the whole program of fire control now we are trying to adjust to move forces from other regions. This is increasing. You take care of it by adjusting from other parts of the United States.

SMOG DAMAGE TO TREES

Mr. VEYSEY. Can you give me any information on your program of handling smog damage to trees in the forest behind the Los Angeles basin? What is your intent there?

Mr. ARNOLD. As you know, we have had a very small research program. We have identified that the smog damage is principally a salvage timber sale operation. The smog-damaged trees are more susceptible to insect attack and the only known way that we now know to handle it is by salvage.

In the long run we are starting tree-breeding experiments to breed trees more susceptible to smog damage. When those are in place a very long time we will eliminate this problem. Of course, by that time we will hope that the smog problem itself is down and that the ozone levels will be tolerable to vegetation.

EFFECTS OF RESTRICTIONS ON PESTICIDES

Mr. VEYSEY. I would hope you are right on that, but so far, our hopes have been disappointed. What has been the effect on losses due to insects and disease due to the restrictions in use of certain pesticides in recent years?

Mr. MCGUIRE. The restrictions on pesticides, have meant that we have had to try to find better ways of control through biological means or through predators, parasites, genetics, as Dr. Arnold mentioned, or the safer, less persistent pesticides. We have had mixed success so far with the substitutes. Some have worked fairly well. Others have not developed to the point where we are sure they will do the job.

Mr. VEYSEY. Did you evaluate the increased losses as a result of that?

Mr. MCGUIRE. I do not think we have any figures on that. I do not know whether we can make an estimate in the case of the spruce budworm.

Mr. NELSON. This would be extremely difficult to do. I think it is a fair statement that the loss of some of the pesticides that we were able to use a number of years ago has indeed hampered the control efforts on insects and diseases.

Mr. VEYSEY. It has increased your costs as well?

Mr. NELSON. Increased our costs and hampered our efforts, because some of the pesticides are not registered and are not available for use at this time.

Mr. YATES. What has been the result? Have you suffered losses due to insects and pesticides as a result of the cutbacks in your forests?

Mr. McGuire. We have suffered losses as a result of restrictions and hesitancy about using DDT.

Mr. Yates. Well, that is understandable.

Mr. Arnold. Gypsy moth is the perfect example.

Mrs. Hansen. The committee will recess and convene promptly at 1 o'clock.

AFTERNOON SESSION

INCREASED PAY COSTS

Mrs. Hansen. The OMB Bulletin No. 73–4, January 26, 1973, instructed all agencies to absorb the full fiscal year 1973 pay raises which went into effect in January 1973.

Please insert in the record a listing of the amount your programs will be required to absorb.

[The information follows:]

All Forest Service increased pay costs for fiscal year 1973, under Executive Order 11691, and local wage boards will be absorbed within the appropriation or through transfer from other Agriculture appropriations. Transfers are contingent upon passage of the supplemental proposal by the Congress.

Although the amounts are being absorbed, increased obligations will be incurred in all appropriations except those shown below:

Appropriation:	*100 percent absorption*
Assistance to States for tree planting	$4,600
Youth Conservation Corps	13,000
Forest fire prevention	1,000

Absorptions within other appropriations not covered by transfers are being financed within current program authorizations (forest roads and trails) and increased collections (brush disposal, working capital fund, cooperative work (trust fund), and consolidated working fund).

Pay costs for allocation accounts are also being absorbed. Eighty percent, or $482,200 of these costs are being absorbed within current obligational levels.

PAY RAISE IN 1974

Mrs. Hansen. Has any determination been made as to whether you will be required to absorb this pay raise in fiscal year 1974?

Mr. McGuire. We will try to put those amounts in the record, Madam Chairman. We do understand that there is a possibiity that we will have some relief within the Department from part of the payments in fiscal year 1973, but we are not clear yet as to how much relief there would be. As to 1974 increased pay costs, no further instructions have been received or determinations made.

Mrs. Hansen. This could amount to another cut, really.

Mr. McGuire. It could, yes.

POSITIONS FUNDED IN 1973

Mrs. Hansen. How many permanent positions were funded in your fiscal year 1973 appropriation?

Mr. Deinema. Funded in fiscal year 1973 are 21,860 permanent positions and 18,575 other than permanent positions, for a total of 40,435 positions.

Mrs. Hansen. Can you tell me, out of your funded positions, what percentage of these are summer employment for young people?

Mr. DEINEMA. Many of our seasonal employees are young people. They are not in the Youth Conservation Corps.

Mrs. HANSEN. That is not what I am asking. You are well aware there has been a long-standing tradition in the Government that we make available some positions for young people earning their way through college, high school, or what have you. How many?

Mr. DEINEMA. We can furnish that for the record.

Mrs. HANSEN. Please do. I think it is an interesting amount.

(The information follows:)

The Forest Service plans to employ 1,288 young people earning their way through college and high school in fiscal year 1973, or about 3.2 percent of the total employment.

PERSONNEL LIMITATIONS

Mrs. HANSEN. Obviously this number is going to decrease, when you reduce total employment. I believe I read the other day that 38 percent of our teenagers are unemployed. Is that correct?

Mr. DEINEMA. I am not acquainted with those figures, Madam Chairman.

Mrs. HANSEN. That figure was in the Washington Post.

It seems to me that with what you are proposing, that figure is going to go up. What is your personnel limitation for fiscal year 1973?

Mr. DEINEMA. We have three different kinds of personnel figures. I assume you are talking about personnel ceilings.

As of June 30, 1973, our end-of-year employee ceiling is 20,400 permanents and 18,575 temporaries, for a total of 38,975. For fiscal year 1974, we must reduce to 18,810 permanent and 19,000 temporary employees, for a total of 37,810 end-of-year employees.

Mrs. HANSEN. How many temporaries?

Mr. DEINEMA. 19,000.

Mrs. HANSEN. So you are up on the temporaries?

Mr. DEINEMA. Yes, ma'am.

Mrs. HANSEN. And down on your permanent?

Mr. DEINEMA. That is correct. We are down on our permanents by 1,590. We are up on the temporaries by 425.

Mrs. HANSEN. Now, in the category of your permanents, what determination in your ceiling authorizations are you making as to the kind of staff, that is the categories of staff that you are carrying under that limitation?

Mr. DEINEMA. We are attempting to shift positions into the heaviest needed priorities.

Mrs. HANSEN. Which are what?

Mr. DEINEMA. We are trying to keep a multidiscipline approach in our resources management. It could be soil scientist, landscape architects, or many other disciplines besides foresters.

PROFESSIONAL DISCIPLINES OF FOREST PERSONNEL

Mrs. HANSEN. Please provide for us a list of your disciplines with the approximate personnel allocated to each.

Mr. DEINEMA. Yes, ma'am, I would be happy to.

(The information follows:)

Permanent Employee Populations by Series
(Disciplines) as of 12/31/72

I. Series (Disciplines) Defined as Professional

Code	Title	Population
101	Social Science	5
110	Economist	22
150	Geography	3
160	Equal Employment	1
184	Sociology	1
193	Archeology	5
401	General Biological Science	26
403	Microbiology	7
414	Entomology	160
430	Botany	21
434	Plant Pathology	95
435	Plant Physiology	38
454	Range Conservation	260
460	Forestry	4,866
470	Soil Science	156
480	General Fish and Wildlife Administration	1
486	Wildlife Biology	111
510	Accounting	153
610	Nurse	5
801	General Engineering	42
806	Materials Engineering	4
807	Landscape Architecture	187
808	Architecture	25
810	Civil Engineering	1,111
819	Sanitary Engineering	17
830	Mechanical Engineering	51
850	Electrical Engineering	6
855	Electronic Engineering	19
880	Mining Engineering	23
881	Petroleum Engineering	1
890	Agricultural Engineering	1
893	Chemical Engineering	12
896	Industrial Engineering	6
899	Engineering and Architecture	1
1301	General Physical Science	3
1306	Health Physics	1
1310	Physics	11
1315	Hydrology	105
1320	Chemistry	49
1340	Meteorology	24
1350	Geology	54
1370	Cartography	20
1373	Land Surveying	49
1380	Forest Products Technology	130
1410	Librarian	11
1515	Operations Research	6
1520	Mathematics	8
1529	Mathematical Statistician	29
1530	Statistician	6
1701	General Education and Training	14
1710	Education and Vocational Training	169
1720	Educational Research Program	3
	Total, I	8,134

II. Series (Disciplines) Defined as Managerial or Administrative (Usually filled by professional type employees, college graduates)

Code	Title	Population
018	Safety Administration	11
023	Outdoor Recreation Planning	1
142	Manpower Development	5
188	Recreation Specialist	6
201	Personnel Management	172
212	Personnel Staffing	20
221	Position Classification	31
223	Salary and Wage Administration	5
230	Employee Management Relations and Cooperation	20
235	Employee Development	23
301	General Clerical and Administrative (GS-11 and above)	89
330	Digital Computer Systems Administrator	11
334	Computer Specialist	112
340	Program Management	17
341	Administrative Officer	315
343	Management Analysis	44
345	Program Analysis	17
393	Communications Specialist	1
504	Budget and Accounting	102
505	Financial Management	6
560	Budget Administration	47
1001	General Arts and Information (GS-11 and above)	16
1010	Exhibits Specialist	3
1020	Illustrating	17
1081	Public Information	81
1082	Writing and Editing	27
1083	Technical Writing and Editing	21
1084	Visual Information	13
1102	Contract and Procurement	234
1170	Realty	34
1171	Appraising and Assessing	6
1641	Building and Grounds Technical Management	3
1654	Printing Management	7
1712	Instructor	165
1715	Vocational Rehabilitation	3
1810	General Investigating	1
1811	Criminal Investigating	26
2010	Inventory Management	1
2150	Transportation Operations	1
2181	Aircraft Operation	46
	Total, II	1,760
Grand Total		9,894

AUTHORIZED POSITIONS FOR 1974

Mrs. HANSEN. Give me the information with regard to the authorized positions and personnel limitations for fiscal year 1974.

Mr. MCGUIRE. We will do that, Madam Chairman.

(The information follows:)

There are 20,900 permanent positions and 19,000 other than permanent positions for a total of 39,900 positions funded for fiscal year 1974. We plan to employ 1,050 young people earning their way through college and high school in fiscal year 1974.

1970 TIMBER SUPPLY REVIEW

Mrs. HANSEN. On December 5, 1972, Forest Service released a preliminary draft of outlook for meeting future timber demands based on the 1970 timber review. This report is done approximately every decade. The report lists 10 major timber supply findings. Would you respond to those findings, Mr. McGuire?

Mr. MCGUIRE. We would be happy to provide a list of them if you like.

Mrs. HANSEN. We have the list.

Mr. MCGUIRE. This is a factual report which includes some new estimates of the acreage of forest land and the volume of timber, the rate of growth, and the rate of cutting.

One of the major findings was that demands for industrial timber products, that is, all timber products other than firewood in the United States, rose 70 percent during the past 30 years and we are expecting very substantial increases over the next few years.

Mrs. HANSEN. Do you see now why the committee is so interested in reforestation?

Mr. MCGUIRE. Yes, I do; indeed. The size of those increases depends on your assumptions about future prices and about future investments in timber growing. But if you will project the past levels of forest management, the past levels of investment in tree planting and other cultural activities, there will be only modest increases in timber supplies in these future decades.

Mrs. HANSEN. I would like to ask at this point what percentage the total national supply of timber for housing and all other sectors is met by the National Forest supply?

Mr. McGuire. The National Forests presently supply about 25 to 30 percent of consumption in the United States.

Mrs. Hansen. Now, as you decrease this supply, what will be the result?

Mr. McGuire. The obvious result is going to be an increase in the prices of timber products, lumber, plywood, paper, and so on.

EFFECTS OF INCREASED TIMBER COSTS ON HOUSING COSTS

Mrs. Hansen. What is this going to do to housing?

Mr. McGuire. It will result in an increase in the cost of housing.

Mrs. Hansen. When you have this increase in the price of wood, and in addition interest rates increase and labor costs increase, where does this put housing costs in 1982 as against the housing of 1972?

Mr. McGuire. With higher costs of house construction, we would expect a decline in the number of houses that are purchased and decline in the number built.

Mrs. Hansen. Yet you have a rising population.

Mr. McGuire. Yes, unless we build more houses and build them more rapidly, we are going to have increasing problems with housing our population.

Mrs. Hansen. And when there are shortages of adequate housing, do you not have increasing social problems?

Mr. McGuire. That is the way I understand it, that housing and social problems are related.

Mr. McKay. Madam Chairman, would you yield at that point?

He indicated 25 percent of our lumber needs come from the forests on public lands; is that correct?

Mr. McGuire. Yes, lumber and plywood.

Mr. McKay. Where does the rest come from?

LUMBER AND PLYWOOD IMPORTED

Mr. McGuire. About 25 percent of consumption is imported.

Mrs. Hansen. Imported from Canada?

Mr. McGuire. Mainly. We get some tropical hardwoods; Philippine——

Mrs. Hansen. Please place in the record a list of the board feet of lumber imported from Canada and the other countries.

Mr. McGuire. We would be glad to provide it.

(The information follows:)

Lumber Imports - C. Y. 1966 - C. Y. 1972

Million board feet

CY	Lumber - All Species 1/		
	Total	Canada	Other
1966	5200.1	4920.9	279.2
1967	5140.7	4902.5	238.2
1968	6154.2	5899.2	255.1
1969	6300.6	5963.4	237.3
1970	6114.3	5867.6	246.8
1971	7606.8	7331.9	274.9
1972	9430.1P	9029.1P	401.0P

Hardwood Lumber by Principal Countries 2/

CY	Total	Canada	Latin America				Asia				
			Total	Mexico	Central America and West Indies	South America	Total	Japan	Asia Philippines	Taiwan	Other
1966	420.8	190.5	80.4	1.5	16.9	62.0	116.3	29.0	30.1	12.1	45.1
1967	342.7	155.4	83.1	2.5	18.3	62.4	77.8	15.0	19.6	9.4	33.8
1968	345.1	149.2	74.2	.8	14.6	58.8	101.7	16.3	23.2	12.9	49.3
1969	446.6	179.0	100.1	.8	10.0	89.2	138.7	9.5	32.1	13.1	83.9
1970	336.7	145.1	85.0	2.0	5.9	77.1	79.3	6.4	16.9	7.8	48.2
1971	357.8	142.5	92.8	1.6	6.5	84.7	94.4	2.7	16.8	12.6	62.2
1972 3/p	307.1	103.8	88.4	.2	6.2	82.0	91.2	2.2	16.0	12.3	60.6

	Africa	Africa		
	Total	West Africa	Other Africa	Europe	Other
1966	30.8	30.2	.6	1.0	1.9
1967	24.7	24.3	.4	1.2	.5
1968	18.3	18.0	.3	1.3	.5
1969	25.3	24.9	.4	3.0	.5
1970	21.3	21.0	.2	5.4	..6
1971	23.7	23.5	.1	1.9	2.5
1972	22.3	22.2	.1	.7	.6

*Totals may not add due to rounding
p=Preliminary

1/ From the Demand and Price Situation for Forest Products, 1971-1972, MP No. 1231, USDA, FS.
2/ From unpublished updated "Current and Prospective Trends in Imports of Hardwood Timber Products into the United States," May 15, 1969, D. Hair, FEMR.
3/ From Table 2 U. S. Foreign Trade Imports, Commodity by Country, U. S. Department of Commerce, Bureau of the Census, October 1972, figures for partial year, January - October 1972.

TIMBER PRODUCTS EXPORTED

Mr. McKay. At the same time, what do we export?

Mr. McGuire. We export about half as much as we import. However, we do export quite a volume of timber products—pulp, plywood, some lumber, liner board, used for making cardboard boxes, that sort of thing.

Mr. McKay. Are we not in fact shipping some lumber out on the basis that we are changing the content of it to ship it out, under some pretext or definition that it is not lumber?

LOG EXPORTS TO JAPAN

Mr. McGuire. Yes. We export logs, mainly to Japan, but we also do export lumber, plywood, and other products. The log exports from the west coast constitute an important part of our export volume.

Mrs. Hansen. You have a ceiling on those, do you not?

Mr. McGuire. Yes, ma'am.

The ceiling applies, however, only to Federal lands. Federal log exports cannot exceed 350 million board feet.

Mrs. Hansen. And this is west of a certain area.

Mr. Housley. West of the Mississippi. The 350 million includes 60 million of Department of the Interior, BLM logs.

Mrs. Hansen. Your 350 million includes BLM?

Mr. McGuire. Yes, ma'am.

Mrs. Hansen. How about Indian lands?

Mr. Housley. There is no limitation placed on these.

Mrs. Hansen. There is no limitation on that?

Mr. Housley. No, ma'am.

Mr. McKay. Do you have some standard by which you identify how you come to those board feet, whether it is logs or whether it is stripped timber? Do you have some definition as to how you identify that and where one is not identified?

Mr. McGuire. The limitation applies only to the round logs. If the logs are manufactured——

Mr. McKay. If I strip a log in half, one log in half, then it is not identified under this quota, is that right?

Mr. McGuire. The way it is usually done is to square the log up, and make a large square timber. That would be a manufactured product and would not come under this limitation of 350 million board feet.

Mr. McKay. Is that not in fact what is happening, so that we are shipping twice as much as the quota allows?

Mr. McGuire. No, not particularly.

Mr. McKay. Not particularly, but it may be?

Mr. McGuire. Maybe some of it but, you see, the limitation is only on the public timber. Private timber can go into export without any restriction.

Mrs. Hansen. Private and State?

Mr. McGuire. Yes, ma'am, and State.

Mrs. Hansen. Please continue with your discussion of timber supply.

TIMBER SUPPLY VERSUS DEMANDS

Mr. McGuire. I was saying timber supplies will fall short of projected demands. I pointed out that as a result we can expect increases in the prices of timber and timber products in the years ahead. We have looked at some of the alternatives. One would be to increase our timber imports from Canada and other countries.

Mrs. Hansen. Will Canada begin to adopt a policy curtailing exports as the supply crunch hits them too?

Mr. McKay. They are doing that already.

Mr. McGuire. Canada already has limitations on the export of logs.

Mrs. Hansen. I mean on the finished products.

Mr. McGuire. I think Canada will continue to rely on exports, because timber is one of the principal resources of the country. This is where Canada obtains most of its foreign exchange, through the export of timber.

Mrs. Hansen. Will not Canada have the same environmental pressures for recreation and so on as this country has?

Mr. McGuire. It already has those pressures, Madam Chairman. They are quite similar in Canada to those in this country.

Mrs. Hansen. Which are a limiting factor on the total production of commercial timber.

Mr. McGuire. Exactly.

Mr. Long. Would the chairlady yield?

Mrs. Hansen. Yes.

TIMBER SITUATION IN CANADA

Mr. Long. But aren't they doing a job of replanting and putting their timber situation on a crop basis so as to increase the production of wood without in any way reducing the amount of timber?

Mr. McGuire. That is correct. The opportunities in Canada are about the same as in the United States. The only difference is that Canada has some areas not yet opened up, such as northern British Columbia. There is the possibility that as roads are built into the northern part of that province, it would be possible to increase the production.

Mrs. Hansen. Is it not also true, that Canada has some lands that are akin to the Alaska lands where they do not reforest as quickly?

Mr. McGuire. That is right.

Mr. Long. When I was in the Montmorency River section of Quebec back in 1939, I was shown areas that had been cut over 40 or 50 years before and never been replanted and were just resting there. They were beginning to talk a little bit about it, but they had not done very much. Of course, they have a slow growing season in Quebec.

Are we missing any bets?

Mr. McGuire. I do not think we are missing any bets as far as Canada is concerned.

Mr. Long. So far as our own country is concerned.

Mr. McGuire. Well, the opportunities are the same in both countries.

Mr. Long. Replanting, harvesting and so on?

Mr. McGuire. Exactly, that is the problem in both countries, to find the money to make the necessary investments to increase the

growth. Physically or biologically, it can be done, but it takes money to replant, to thin, to introduce superior strains of trees, and to go back into areas at frequent intervals so you can continue to protect them.

INTENSIVE FOREST MANAGEMENT

Mr. LONG. How far along are we? I was under the impression we were doing a great job in this area. Now I get the impression from you that you are just getting started.

Mr. MCGUIRE. We are far along in some respects, not so far in others. For example, fire protection has improved greatly in this country over the past 50 or 60 years. We have made quite a bit of progress with insect and disease control.

Mr. LONG. I am talking about the big trees without destroying a lot of young ones, replanting in general putting the forests on the same basis as you would a well-run farm.

How much of our timber area in the United States is being run on that basis?

Mr. MCGUIRE. Well, I think you are referring to what we call intensive forest management. I would say perhaps somewhere between 10 and 30 percent at the most.

Mr. LONG. That is very disappointing. You hear all this propaganda. From what I had been hearing and reading, I thought we were much further along than that. I think we ought to be ashamed of ourselves that we are not further along than that.

Mr. MCGUIRE. We certainly agree with you. What it takes, however, is the necessary funds to do the planting.

REQUESTS FOR FUNDS

Mr. LONG. Have you ever come to Congress to ask for them?

Mr. MCGUIRE. Yes, sir.

Mr. LONG. And you have been turned down?

Mr. MCGUIRE. We never have obtained as much as we could use.

Mr. LONG. Who has turned you down? Has this committee turned you down?

Mr. MCGUIRE. The committee has usually been more generous to us than our budget requests.

Mr. LONG. Well then, why haven't your budget requests——

Mr. MCGUIRE. Because we have not——

Mr. LONG. You mean the Office of Management and Budget has not put it in; is that not what you are talking about?

Mr. MCGUIRE. It is not only OMB, but we have had to compete with all the other demands for funds in the Government.

Mr. LONG. That is what you are saying, the same thing.

Mr. MCGUIRE. Yes, sir.

Mr. LONG. That is your competition. It is the Budget Bureau really that has been starving you, you do not want to say that but that is it, is it not?

Mr. MCGUIRE. That is one interpretation.

Mr. LONG. I wish I understood why. Is it because they do not think there is any shortage of lumber? Lumber prices have been going up fantastically, more than almost anything else; is that not right?

AVAILABLE TIMBER

Mr. McGuire. That is right. This country, you know, had a great deal of timber to start with. We originally were quite free with it.

Mr. Long. We still have a lot of timber. It may not be in the right places, of the right kind, and so on.

Mr. McGuire. That is right. Also, it may not be possible to do much cutting in areas that have high scenic values and high recreational values, either. So that the volume of timber is not as readily available as it once was.

Mr. Long. I thought you would go through a forest area, cut a tree here and a tree there without destroying the scenic value, in fact even improving it by making it possible for people to walk through the forests and get through a little better.

Mr. McGuire. In many forests that is exactly what we do, especially in our pine forests of the West. Other forests, however, eventually have to be cleared and replanted. This is what we call clearcutting. There is considerable objection to that in some areas.

Mr. Long. Is there any impoundment by the executive branch of money for this kind of reforestation or forest management?

Mr. McGuire. Yes. In fiscal 1973, about $3 million was impounded.

Mrs. Hansen. Mr. McGuire, please proceed with your discussion of the timber supply report.

Mr. McGuire. We were talking about the possibilities of increasing imports to help pull down prices. I was pointing out that such opportunities are relatively limited.

Mrs. Hansen. Also, you have another problem involved in this, and that is balance of trade.

USE OF WOOD SUBSTITUTES

Mr. McGuire. Exactly.

There is another alternative of substituting nonwood materials for wood in construction and other uses.

Mrs. Hansen. Let me ask you about that because several years ago you made a prophecy that there would be more nonwood use in construction. But I believe the testimony we have received from you recently is that wood is the only renewable resource that you have in the construction industry; is this not correct?

Mr. McGuire. That is correct.

Also, it is the only construction material that can be produced with relatively small expenditures of energy. It takes much more energy to produce the wood substitutes than it does to produce the wood products.

Mr. Wyatt. Madam Chairman, would you yield at that point?

Mrs. Hansen. Yes.

Mr. Wyatt. Chief, in my hometown, Gearhart, Oreg., they are building a large condominium and they are using aluminum studs, which was a little shock to me. My understanding is that the industry is very tempted to go to aluminum right now because they can get a 1-year quotation on aluminum studs and no one will tell you what they have to pay for 2 by 4's tomorrow, let alone a week, or a year or so from now.

Mr. McGuire. This is happening in many places, aluminum studs and steel studs are now pretty much competitive with lumber, and with this additional uncertainty of supplies, they are becoming more attractive.

Mr. Wyatt. It is on price.

Mr. McGuire. We would anticipate more use of substitutes if the prices of timber products keep going up. But the long-run disadvantage of this substitution is the greater requirement for energy to produce these substitutes. It takes much more energy to produce cement, aluminum, or steel.

REFORESTATION ON COMMERCIAL FARMLANDS

Mrs. Hansen. I notice in your charts that you list commercial farmland forest ownership, 296 million acres. How much reforestation is going on in this relatively small ownership?

Mr. Nelson. Madam Chairman, in this area aproximately 500 million to 550 million seedlings are planted each year on the private ownerships.

In addition, there are programs, in which this committee has aegis, that involve the improvements of these stands through timber stand improvements and other cultural measures.

Mr. McKay. Is that subsidized by the Government, the Forest Service?

Mr. Nelson. Congressman McKay, I would not consider it a subsidy.

The money is appropriated by the Congress. It is used in the production of tree seed and the like. In the area of improving the forest stands, the money is used to give the necessary technical assistance to the landowner.

These particular programs are carried out through the State foresters of all the 50 States.

Mr. McKay. Do they buy their own seedlings from the Forest Service?

Mr. Nelson. Yes, sir.

Some of these seedlings I believe would come under the former REAP program that is not now operative.

Mrs. Hansen. Do you have any other comments, Mr. McGuire?

POTENTIAL FOR INCREASING TIMBER SUPPLIES

Mr. McGuire. Our report makes two other points. One is the conclusion that intensified forest management offers a major potential for increasing timber supplies in the long run while maintaining an acceptable forest environment.

Mrs. Hansen. In what ways?

Mr. McGuire. I think by planting areas that are now nonstocked, for example. You improve the scenery and at the same time grow more timber, to give you one example.

Mrs. Hansen. You cannot do that without money.

Mr. McGuire. No, not without money.

Mrs. Hansen. So the first thing you do is impound the money.

Mr. McGuire. The report does point out that in the long run this offers the major potential.

Mrs. Hansen. This is what disturbs me.

In September, if I am correct, you sent a reprograming request. You proposed to take money out of the reforestation. That did not make good sense at all, so we turned it down. Now the result is the 1973 monies, the $3 million is impounded. How many acres would this have planted?

Mr. McGuire. The amount impounded was about $3 million.

Mr. Housley. That would have covered about 9,500 acres of reforestation, 24,000 acres of advance site preparation, and 550,000 acres of silvicultural examinations and prescriptions.

Mrs. Hansen. You would make much progress even with $3 million, is this not correct?

Mr. McGuire. That is right, it would take much more than $3 million to do a substantial part of the backlog, 9,500 acres as compared to 4 million.

Mrs. Hansen. You well remember that every forest organization and every environmental organization joined in asking for stepped-up funds for reforestation. So we endeavored to give the funds to you and then they were frozen.

We will insert in the record at this point the major timber supply-demand findings summary which you have on page 2 of your report.

(The information follows:)

MAJOR TIMBER SUPPLY-DEMAND FINDINGS *

1. DEMANDS FOR WOOD PRODUCTS HAVE INCREASED 70 PERCENT IN THE LAST THREE DECADES AND SIMILAR SUBSTANTIAL INCREASES ARE EXPECTED THROUGH THE END OF THIS CENTURY.

2. DURING THE PAST THREE DECADES, LUMBER CONSUMPTION ROSE 49 PERCENT. USE OF PULP PRODUCTS CLIMBED 235 PERCENT. CONSUMPTION OF VENEER AND PLYWOOD INCREASED 475 PERCENT.

3. NET GROWTH OF SOFTWOOD INCREASED ABOUT ONE-THIRD BETWEEN 1950 AND 1970. THIS INCUDED ABOUT 40 BILLION BOARD FEET OF SOFTWOOD SAWTIMBER SUITABLE FOR LUMBER AND PULPWOOD. NET GROWTH OF HARDWOODS INCREASED NEARLY AS MUCH, WITH GROWTH OF THE HARDWOOD SAWTIMBER PORTION OF THE TOTAL AMOUNTING TO 20 BILLION BOARD FEET.

4. WITH CURRENT LEVELS OF FOREST MANAGEMENT FOR TIMBER PRODUCTION, ONLY MODEST INCREASES IN TIMBER HARVESTS WILL BE AVAILABLE IN THE NEXT FEW DECADES. INADEQUATE SUPPLIES OF TIMBER TO MEET RISING DEMANDS WILL LEAD TO CONSEQUENT INCREASES IN PRICES OF TIMBER AND TIMBER PRODUCTS.

5. INCREASING PRESSURES FOR TRANSFERRING LAND FROM COMMERCIAL FORESTS TO RECREATION AND OTHER NON-TIMBER USES, AS WELL AS INCREASED ENVIRONMENTAL CONSIDERATIONS, HAVE A DIRECT EFFECT ON TIMBER SUPPLIES.

6. RISING IMPORTS OF WOOD PRODUCTS WILL PROVIDE SOME INCREASES IN SUPPLY BUT MAY BE LARGELY OFFSET BY INCREASES IN EXPORTS.

7. GREATER USE ON NON-WOOD MATERIALS AS SUBSTITUTES CAN BE A PARTIAL SOLUTION TO FUTURE WOOD SUPPLY PROBLEMS, BUT COULD HAVE UNDESIRABLE ENVIRONMENTAL AND ECONOMIC EFFECTS.

8. THE TWO MOST PROMISING METHODS FOR INCREASING SUPPLIES AND HOLDING DOWN PRICES ARE (1) INTENSIFYING GROWTH RATES OF TIMBER IN DOMESTIC FORESTS, ESPECIALLY ON THE 296 MILLION ACRES OF NON-INDUSTRIAL PRIVATE LANDS WHICH MAKE UP THREE-FIFTHS OF THE COMMERCIAL FOREST LAND BASE, AND (2) IMPROVING PRODUCT YIELDS FROM AVAILABLE RAW MATERIALS.

9. INCREASED RESEARCH AND APPLICATION EFFORTS COULD INCREASE SUPPLIES OF TIMBER AND WOOD PRODUCTS SUBSTANTIALLY THROUGH SOLUTION OF PROTECTION, HARVESTING, PROCESSING, AND UTILIZATION PROBLEMS.

10. DUE TO THE LONG TERM NATURE OF FORESTRY, DECISIONS MUST BE CONSIDERED PROMPTLY AS TO HOW WE ARE TO MEET FUTURE DEMANDS FOR TIMBER PRODUCTS WHILE SIMULTANEOUSLY PROVIDING FOR NON-TIMBER USES OF FORESTS AND ENVIRONMENTAL PROTECTION.

*This study reflects the supply-demand situation for timber as of 1970, and the projected supply-demand situation through 2000 based on current levels of forest management throughout the Nation. It does not attempt to project increased demands that may be made for other forest outputs than timber, except in terms of estimated reductions in available commercial forest acreage.

COMMENTS ON "THE LAST STAND"

Mrs. HANSEN. Mr. Ralph Nader recently released a 413-page report entitled "The Last Stand."

Would you like to summarize briefly the highlights of this report? Give us your reactions to it.

Mr. MCGUIRE. This is quite a long report to summarize.

Mrs. HANSEN. Can you highlight some of it for us?

EMPHASIS ON TIMBER

Mr. MCGUIRE. Let me say first that the report is directed almost exclusively to timber and not to all Forest Service activities.

Mrs. HANSEN. Why was that?

Mr. MCGUIRE. I do not know. The original Nader team of seven or eight young people——

Mrs. HANSEN. How many professional foresters were on that team?

Mr. MCGUIRE. I do not think any of them were professional foresters. There were some graduate students and some undergraduates; I do not think any of them were foresters. They may have had some training in biological sciences somewhere. They looked at all aspects of the Forest Service.

However, the report deals mainly with timber.

Second, the investigation was carried out in the summer of 1969. So there was quite a delay before this draft report was released. The report does not seem to reflect the changes that have occurred in the 4-year interval.

Third, I would say that the report could be improved by a somewhat more analytical approach. By that I mean that there are a large number of recommendations that appear in the summary but which

are not discussed in the text. It is not clear where these recommendations came from or why they are made. You cannot find that out simply by reading the text.

PROPOSED ADVISORY COMMITTEE

One of the surprising recommendations that maybe I should include at this point is that an advisory committee be set up to look into and recommend upon the management of the Forest Service activities.

The Forest Service, as you know, serves many industries and user groups, but the only group that would be represented on this advisory committee would be the timber industry.

Mrs. HANSEN. That is a strange advisory committee.

Mr. MCGUIRE. In addition to some public members, and Members of Congress, a more balanced committee structure would be one that includes representation from other users of the public lands.

CLEARCUTTING

Mrs. HANSEN. I would like to discuss something rather controversial: clearcutting, particularly the clearcutting east of the Cascade Mountains. What is your policy?

What new directives have you sent out? Are you complying with the Nader report of 2-year moratorium on clearcutting in areas larger than 40 acres?

What percent of your clearcutting is done east of the Cascades and what percent is done west of the Cascades?

Mr. MCGUIRE. Can we provide those figures? I do not believe we have them with us.

[The information follows:]

CLEARCUTTING ON THE NATIONAL FORESTS

Statistics on areas harvested by different cutting methods on National Forests are available for fiscal years 1965 and 1970. Clearcutting acreages in relationship to the West Coast area and all other areas of the country are shown in the following table.

COMPARISON OF CLEARCUT AREAS ON NATIONAL FORESTS
FISCAL YEARS 1965 AND 1970

Area of Country	Thousand Acres		Percent of Clearcut Areas	
	1965	1970	1965	1970
West Coast:				
Pacific Northwest - West	71.4	44.9	16.7	7.9
California	47.6	104.2	11.2	18.5
Alaska	12.7	16.8	3.0	3.0
Summary	131.7	165.9	30.9	29.4
All Other Areas:				
Pacific Northwest - East	10.2	7.2	2.4	1.3
All Other	284.3	390.5	66.7	69.3
Summary	294.5	397.7	69.1	70.6
National Total	426.2	563.6	100.0	100.0

Mrs. HANSEN. In summary, where is the major clearcutting occurring?

Mr. MCGUIRE. Clearcutting occurs in many of our most important forest types, wherever the species is intolerant of shade. Douglas fir is an example.

Mrs. HANSEN. In other words, you use clearcutting as an ingredient to raising a new forest faster because the shade does not guarantee quick forest growth, is that right?

Mr. MCGUIRE. That is right.

Mrs. HANSEN. In the Chequamegon, you had some clearcutting practices. This was done deliberately to provide the wildlife the opportunity to browse, is this correct?

Mr. MCGUIRE. That is what we tried to do. In fact, we have a new action plan as we call it, which lays down our policy with regard to timber cutting and road building practices. Under this plan we bring together the various disciplines, such as wildlife management, soils, watershed specialists, and so on. The cutting is done in a way that complements these other forest benefits in addition to timber.

GUIDELINES FOR CLEARCUTTING

Mrs. HANSEN. Do you want to insert a set of guidelines which you have in practice now on clearcutting in the record at this point.

Mr. MCGUIRE. We would be glad to do that.

(The information follows:)

Forest Service Guidelines for Timber Harvesting,
Including Guidelines for Clearcutting

On June 14, 1972, the Forest Service adopted an "Action Plan--For National Forests in a Quality Environment." This 'Action Plan" contains guidelines prepared to deal with the 30 problem situations described in the Forest Service Report of March 1971, "National Forest Management in a Quality Environment--Timber Productivity." The "Action Plan" also incorporates and supports the timber harvesting guidelines set forth in the March 1972 report of the Senate Subcommittee on Public Lands entitled "Clearcutting on Federal Timberlands."

The guidelines suggested by the Subcommittee and supported by the Forest Service are:

"1. Allowable harvest levels

a. Allowable harvest on Federal forest lands should be reviewed and adjusted periodically to assure that the lands on which they are based are available and suitable for timber production under these guidelines.

b. Increases in allowable harvests based on intensified management practices such as reforestation, thinning, tree improvement and the like should be made only upon demonstration that such practices justify increased allowable harvests, and there is assurance that such practices are satisfactorily funded for continuation to completion.

If planned intensive measures are inadequately funded and thus cannot be accomplished on schedule, allowable harvests should be reduced accordingly.

2. Harvesting limitations

Clear-cutting should not be used as a cutting method on Federal land areas where:

a. Soil, slope or other watershed conditions are fragile and subject to major injury.

b. There is no assurance that the area can be adequately restocked within five years after harvest.

c. Aesthetic values outweigh other considerations.

d. The method is preferred only because it will give the greatest dollar return or the greatest unit output.

3. Clear-cutting should be used only where:

a. It is determined to be silviculturally essential to accomplish the relevant forest management objectives.

b. The size of clear-cut blocks, patches or strips are kept at the minimum necessary to accomplish silvicultural and other multiple-use forest management objectives.

c. A multidisciplinary review has first been made of the potential environmental, biological, aesthetic, engineering and economic impacts on each sale area.

d. Clear-cut blocks, patches or strips are, in all cases, shaped and blended as much as possible with the natural terrain.

4. Timber sale contracts

Federal timber sale contracts should contain requirements to assure that all possible measures are taken to minimize or avoid adverse environmental impacts of timber harvesting, even if such measures result in lower net returns to the Treasury."

The above guidelines are being applied equally on both sides of the Cascades. As applied currently there is no discernible difference in clearcutting practices on the National Forests by Regions of the Country, except as required by the silvics of the species and the conditions on the areas involved.

EFFECT OF 5-YEAR MORATORIUM ON TIMBER SALES EAST OF THE CASCADES

Mrs. HANSEN. After listening to a great deal of the discussion last year and in years past, I sometimes wonder what would be the impact of a moratorium on all forest sales east of the Cascades. What would that do to the supply of timber if you put a complete moratorium for 5 years on harvesting all timber in the Rockies, from the Idaho border to the Great Lakes?

Mr. MCGUIRE. This applies just to the national forests.

Mrs. HANSEN. Just to the national forests.

Mr. MCGUIRE. This would reduce the supply probably in the neighborhood of one-third to one-half—one-third might be closer.

Mrs. HANSEN. As the controversies arise, do not be surprised if there are not some limitations placed.

Mr. MCGUIRE. We have been following the guidelines laid down by the Senate Subcommittee on Public Lands.

Mrs. HANSEN. Yes. This committee, as you know, recomended that you use those guidelines. But I am saying there is still controversy because I am afraid that many people interpreted the Nader report as a current report, as of 1972 practices, which it is not.

I just have a feeling that there is going to be some consideration of a limitation of everything east of the Idaho border in the forests, a moratorium on all timber sales.

REPORT ON SILVICULTURAL SYSTEMS

Mr. MCGUIRE. We realize there is still a lot of misunderstanding. We are about to publish a new report on the silvicultural systems for all the major forest types of the United States, explaining why cutting must be carried on in certain ways in order to maintain certain species of trees.

Mrs. HANSEN. But this is not understood by the average person, it is not understood by the user of the forests. The commercial user understands it very well, but not the average citizen who is a user or viewer of the forests.

Mr. MCGUIRE. We realize that.

INSECT AND DISEASE PROBLEMS

Mrs. HANSEN. We went into pesticides this morning. Do you have anything to add to this?

Mr. MCGUIRE. I might mention we are still having some major problems in this area, particularly with insects such as the tussock moth, the gypsy moth, and the spruce budworm.

Mrs. HANSEN. Have you found any substitutes for the pesticide that was used?

Mr. MCGUIRE. We are working on some substitutes, but the work has not reached the point where we are fully certain that the substitutes will do the job. There are chemicals. There is a virus that might be used with the tussock moth.

Mr. Arnold might want to add to this.

Mr. ARNOLD. We have been doing research as rapidly as we can. There are viruses and we can probably use Zectran, a material just developed in recent years.

In terms of the actual operation against the tussock moth, Mr. Nelson might mention what will be tested this summer.

Mr. NELSON. We will have a number of operational tests this summer in the tussock moth area. We are faced with the depredation in the West this year with the tussock moth that covers hundreds of thousands of acres. We had an environmental statement prepared and will make a decision pending the completion of the final environmental statement on tussock moth as to treatment.

EFFECTS OF LOG EXPORT PROHIBITION

Mrs. HANSEN. On the log export controls which Mr. McKay touched upon, let me ask you this question: Suppose there was a prohibition against the expenditure of any funds for the National Forests for the export of logs?

Mr. MCGUIRE. This would have several effects.

First, it would tend to switch the source of supply to lands off the National Forests. How much that would affect the total export I do not know, but undoubtedly the exporters would enter the private land log markets and try to get their supply there. If they were not successful, then exports would decline. There would be less employment in that part of our industry connected with exports, such as longshoremen.

It is a little hard to estimate just how this would work. This whole subject, by the way, is being studied right now within the executive branch because it has so many complicated aspects.

We have a balance of payments problem, as you know, and if we reduce our exports we are going to aggrevate that problem. It would have an effect, as I mentioned, on various types of industries; benefit one and disadvantage another, if there is a change. So I do not know just——

Mrs. HANSEN. It is complicated.

Mr. MCGUIRE. Yes; it is complicated.

LETTER FROM GOVERNOR OF WASHINGTON

Mrs. HANSEN. I would like to read at this point a couple of paragraphs from a letter from the Governor of our State:

> If action is taken to eliminate log export, all we will have done, after the economic and political maneuvering is finished, is damage an established and vital segment of Washington's forestry. Log exports supplied needed employment during the wood industry employment declines of 1967, 1970, and 1971. When Washington was reeling under the impact of a reduction in aerospace and domestic forestry decline, longshoring, logging, and associated export activities supplied much needed employment. The idea of foreign trade restrictions greatly concerns me. Presently one job in ten in Washington State is associated with foreign trade.
>
> If we are willing to seriously consider restricting the export of one of our products (logs) this may set a precedent for similar action on other export commodities. This may have a damaging impact on future export sales of our aircraft, grain, other agricultural commodities, special biomedical equipment, light and medium machinery and such. Their net effect gave Washington State a $433 million positive balance of trade in 1972. Present threats of em-

bargo seem to be creating an additional artificial demand. Foreign interests know that wood under contract is more available to them than are future planned sales. When the issue is further complicated with our increasing awareness of possible environmental impact restrictions, a solution seems even more elusive. There does not seem to be a simple solution.

He also refers to the embargo on plywood and lumber, which is part of the entire picture. Of course the State of Washington has had grave economic problems resulting from the domestic aircraft production going down. We probably had the biggest unemployment in the Nation at one time, just last year. So this becomes an important subject for us.

Suppose the interest rate goes up and housing becomes less desirable.

The State would then be faced with restrictions in two places.

Mr. YATES. You have that happening in view of the cutback in subsidies for low-cost housing now.

Mrs. HANSEN. Yes.

EFFECT OF SUBSTITUTION OF EXPORTS

Mr. MCKAY. Madam Chairman, a question.

The question was, if you cut off sales from public lands for exports, do we have in fact the same people bidding on the public lands who are in the private land business? In effect they would actually shift their exports very easily without additional contracting?

Mr. MCGUIRE. The same——

Mr. MCKAY. Is that known?

Mr. MCGUIRE. Yes. The present law forbids substitution, and we monitor it to make sure that no firm which cuts on the public lands is substituting in any fashion.

Mrs. HANSEN. You have testified heretofore that you had relatively little, if any, substitution under the enforcement system; is this correct?

Mr. MCGUIRE. That is correct, as near as we can tell.

Mr. MCKAY. So they are different. If they are the same, there is no substitution going on.

Mr. MCGUIRE. That is our view.

Mrs. HANSEN. Of course when you get the product milled, when it is manufactured——

Mr. MCGUIRE. That is something else.

Mr. MCKAY. Would we in fact have the same thing we have with the oil people on the international situation, where they just change the substance, whether it is the finished product or raw product and they are working both shoulders?

EXPORT OF FINISHED TIMBER PRODUCTS TO JAPAN

Mr. MCGUIRE. That is a possibility.

I notice in the paper that the Japanese Ambassador said the other day that the Japanese were becoming interested in importing from the United States finished products as well as logs. So this is an alternative for Japan.

If we were to cut down on the export of logs, they then might turn to lumber and plywood.

Mr. McKay. Which might be an advantage to us?

Mr. McGuire. Might be.

Mrs. Hansen. Well, it has been recognized for years that the great hope was to sell the manufactured products, so that we maintained our employment. However, I am informed by some of the sawmill people that at the current time they are operating at capacity. In addition, I believe that some of the sawmills have little flexibility as far as capital, to shift gears to the type of equipment they need in order to manufacture products suitable for Japan. Is this correct?

Mr. McGuire. Suitable for Japan, that is the key. Japanese requirements are different from American requirements. Sizes, for example, and species preferences are different. There are problems.

Mrs. Hansen. What is most of the export now, hemlock?

Mr. McGuire. Hemlock, Port Orford cedar.

Mr. Wyatt. Chief, it might be of interest to you to know that when I was in Tokyo last week, the Japan Times had a story quoting Ambassador Ushiba, saying that Japan planned to import into Japan more lumber and logs in 1973 than in 1972. That caused quite a bit of consternation.

Incidentally, some of the Japanese Government people do confirm that they are seriously making plans to import more manufactured lumber now to get a better mix.

They also hope that maybe some of our mills will convert to their dimensions. They are also making a strong effort to change their building construction practices to go to the 2 by 4 practice.

The Miti Minister told me that he had spoken to the Construction Minister the day before in an effort to speed up the convention. So there is some real hope there, I think.

HOUSING STARTS

Mr. McGuire. Japan is having a housing boom just as we are in this country. I gather they have lowered their downpayment requirements and made their interest rates somewhat more attractive for private home ownership, so demand is very high in Japan.

Mr. Yates. I do not think we have a housing boom this year. As a matter of fact, I saw an article in Time magazine yesterday to the effect that it was expected that the number of starts would go down to 1.9 million, or 1.8 million.

Mr. McGuire. I have not seen one that low, I have been hearing 2.2, in that area.

Mrs. Hansen. The latest figure I have seen is 1.8 or 1.9 as a result of cutbacks in the budget.

MOBILE HOMES

Mr. Long. Would the gentleman yield?

Do those housing starts include mobile homes?

Mr. Yates. I do not think so.

Mr. Long. That raises an important question, because these mobile homes differ from conventional houses. Instead of going up in value, it goes down in value. The question is whether most of the present mobile housing is going to be around in 10, 15 years. So we very well may be in this mobile home business postponing a boom of some proportions for some years in advance, when that stuff finally wears out.

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Mr. McGuire. The problem is for people with lower incomes they offer about the only possibility.

Mr. Long. I am not sure they do. You know we have a new peonage developed in this country. A person buys a mobile home. When he puts his down payment they give him a place to put that home, but they do not guarantee to keep him there. There is a tremendous shortage of places that will accept mobile homeowners.

If a person lifts his eyebrow or speaks in a loud voice, he is thrown out of that area. These people are in slavery in many cases to the mobile home parks. And it is going to be a scandal, I think, one of these days.

I do not know whether the Federal Government can get into it. I guess it is strictly a local problem, but something somebody has to settle one of these days.

Mrs. Hansen. There is another problem.

I do not believe the mobile homeowner is paying a proportionate share of county taxes. The land is usually in the ownership of some entrepreneur. Then mobile homes are placed on it. I very much doubt that the assessed valuation reflects the costs that have been incurred by the municipality or the county on sewers, on streets, on outdoor lighting, and various other things.

Mr. Long. Will the gentlelady yield on that?

You are absolutely right. They have a flat charge of some sort. It is very small. So the county is not getting it. It is not cheap for the mobile homeowner. Some of those people are paying $80 a month just for the small piece of land it is on.

The mobile home, instead of going up, is depreciating in value. So in 10 or 15 years the whole value of that home is going to be largely gone. It is the most expensive kind of living for the mobile homeowner.

I think the people making money out of it are the owners of these parks, who are not paying taxes, are not giving the people a real value, and at the same time holding them in jeopardy so far as any kind of a tenure of their homes.

RESTORATION OF OLDER HOUSES

Mrs. Hansen. Mr. McGuire, we have been a very extravagant nation as far as the use of our building materials. We have not been a nation that used what we had. The fashion has been to tear down old houses rather than restore or rehabilitate them.

Representatives from Mobile, Ala., appeared here last year in support of the historic preservation program. They testified that a whole area of Mobile had become very viable again as a result of the historic preservation program.

What goals are the housing industry and the people associated with housing and urban renewal following? What are they doing to make sure that before we tear a house down or destroy it, that we are conserving it if possible? It takes a lot less lumber to restore than to build a new home.

Mr. McGuire. Madam Chairman, I am not too familiar with the housing programs. We made estimates of the requirements for rehabilitation. They are considerable. They are growing. We expect in the next 30 years that we are going to have increasing needs for wood

products to rehabilitate buildings just the way you have been talking. If you would like, we can provide some figures.

Mrs. HANSEN. I think you should provide some for the record.

[The information follows:]

It is estimated that over 4½ billion board feet of lumber, 2½ billion square feet of plywood, and 1 billion square feet of building board were used in 1970 for rehabilitation purposes.

The Forest Service is aware that housing rehabilitation has much to offer for more efficient use of our forest resources. Forest Service research engineers estimate that rehabilitation requires only 25 percent as much lumber and 50 percent as much structural plywood as does the construction of an equivalent new housing unit. Thus, we have been working with FHA and local housing groups for several years to show how forest products can best be used to rehabilitate and improve existing housing units.

Mrs. HANSEN. It seems to me that we ought to consider what this Government is doing in a managerial or advisory way to preserve the best of what we have rather than destroying it.

HOUSING IN RURAL AREAS

Mr. MCGUIRE. Another point is that a large part of our housing problem is in rural areas. It's not just in the cities.

Mrs. HANSEN. You are right.

Mr. MCGUIRE. People sometimes think the solution is to put up more structures of steel and concrete and that will take care of the need. But this won't work in rural areas. This is where we need more and better housing. For that kind of housing you are talking of single family dwellings and wood construction.

Mrs. HANSEN. You would agree that the complete log export problem and the housing problem is a very deep and controversial subject—a problem that cannot be solved with any simplistic answers?

Mr. MCGUIRE. I certainly would agree with that. Both of them are extremely complex.

LOG EXPORT STATISTICS

Mrs. HANSEN. You supplied me earlier in the year with some figures on log exports. We will place them in the record at this point.

(The information follows:)

Appendix V

CANADA

Lumber Production by Region

1951 - 1971

(million board feet)

Year	British Columbia		Prairie Provinces		Ontario		Quebec		Atlantic Provinces		Yukon and N.W.T.[a]	Total Canada		Canada Excluding B.C., Yukon & N.W.T.	
	Softwood	Total	Softwood	Total	Softwood	Total	Softwood	Total	Softwood	Total		Softwood	Total	Softwood	Total
1951	3,713	3,724	512	537	643	821	938	1,183	617	676	8	6,430	6,949	2,709	3,217
1952	3,699	3,696	518	549	661	840	860	1,094	563	621	6	6,298	6,808	2,603	3,106
1953	4,039	4,046	503	538	646	824	958	1,201	629	690	8	6,781	7,306	2,734	3,252
1954	4,375	4,379	471	497	579	722	880	1,099	504	540	7	6,817	7,244	2,435	2,858
1955	4,910	4,914	523	543	612	760	858	1,025	637	671	6	7,547	7,920	2,631	3,000
1956	4,730	4,735	425	437	612	777	947	1,178	557	605	8	7,279	7,740	2,541	2,997
1957	4,409	4,412	379	393	517	672	831	1,064	511	552	6	6,653	7,100	2,238	2,682
1958	4,847	4,850	339	359	447	583	728	911	432	471	5	6,800	7,179	1,948	2,324
1959	4,945	4,949	387	405	472	621	854	1,038	535	575	4	7,196	7,591	2,247	2,638
1960	5,302	5,305	394	410	465	629	898	1,116	505	547	6	7,570	8,012	2,262	2,701
1961	5,617	5,620	391	404	469	641	803	1,003	521	561	7	7,807	8,237	2,183	2,610
1962	5,999	6,004	418	430	480	654	976	1,172	529	562	7	8,410	8,829	2,404	2,818
1963	6,730	6,734	498	516	555	749	1,083	1,296	535	574	8	9,410	9,877	2,672	3,135
1964	7,089	7,095	409	422	576	790	1,167	1,415	578	623	9	9,829	10,356	2,731	3,252
1965	7,446	7,449	463	478	611	834	1,214	1,449	550	599	7	10,290	10,815	2,837	3,359
1966	7,314	7,319	410	424	643	910	1,142	1,380	512	561	6	10,026	10,599	2,706	3,274
1967	7,103	7,110	415	429	588	823	1,176	1,465	452	498	5	9,739	10,329	2,631	3,214
1968	7,805	7,811	459	476	658	893	1,376	1,663	457	501	7	10,762	11,351	2,950	3,533
1969[b]	7,692	7,696	584	602	671	895	1,500	1,756	539	585	6	10,991	11,538	3,293	3,836
1970[b]	7,762	7,764	619	636	605	838	1,379	1,655	470	508	6	10,841	11,407	3,073	3,637
1971[b]	8,969	8,970	622	641	738	961	1,598	1,809	462	497	6	12,395	12,884	3,420	3,908

(a) All softwood. (b) Subject to revision.

Source: Statistics Canada. Catalogue Numbers 35-204 (Annual), 35-002 (Monthly) and 35-003 (Monthly).

CANADA

Lumber[a] Exports to the United States

1971

(thousand board feet)

Census Division	B.C.	Prairie Provinces	Ontario	Quebec	Atlantic Provinces	Total Canada	B. C. % of Total
New England	383,540	7,043	8,412	262,377	101,679	763,051	50
Middle Atlantic	885,541	24,852	67,896	212,032	44,978	1,235,299	72
East-North Central	964,688	158,361	283,464	141,335	5,400	1,553,248	62
West-North Central	1,283,499	100,813	14,901	2,582	96	1,401,891	92
South Atlantic	985,505	58,696	9,063	24,424	3,240	1,080,928	91
East-South Central	256,620	21,663	6,897	5,294	115	290,589	88
West-South Central	293,455	9,353	1,195	2,341	34	306,378	96
Mountain	37,007	352	262	323	63	38,007	97
Pacific	431,664	2,578	2,156	3,444	45	439,887	98
Destination not known	727	44	33	25	-	829	88
Totals	5,522,246	383,755	394,279	654,177	155,650	7,110,107[a]	78

(a) Includes softwoods (6,978,887 Mfbm)[b] and hardwoods (131,220 Mfbm).

(b) U.S. reports state that imports of softwood lumber from Canada totalled 7.2 billion board feet in 1971.

Source: Statistics Canada.

CANADA

Appendix VIII

Exports of Lumber

1967 - 1971

(thousand board feet)

Destination	Softwoods					Hardwoods				
	1967	1968	1969	1970	1971	1967	1968	1969	1970	1971
U. S.	4,526,588	5,423,465	5,486,488	5,380,782	6,978,887 (a)	142,970	131,600	160,208	125,190	131,220
U. K.	818,854	579,505	356,161	631,561	452,774	6,045	7,003	6,232	6,659	6,774
E.E.C.	163,966	165,275	181,069	211,452	171,103	500	889	1,140	1,593	1,735
Belgium & Luxembourg	43,199	39,035	28,704	52,941	47,021	383	773	1,056	1,287	1,249
France	45,922	33,406	55,991	56,263	46,176	6	1	13	22	140
Germany	21,975	28,024	29,157	34,678	31,461	63	91	71	241	186
Italy	29,851	29,856	40,142	34,967	24,939	48	20	-	3	4
Netherlands	23,019	34,954	27,075	32,603	21,506	-	4	-	40	156
Other Europe	20,446	13,681	10,137	8,770	12,863	1,456	1,110	2,225	2,139	2,921
Denmark	4,341	32	-	2,558	30	-	-	-	-	-
Spain	6,578	9,828	4,218	1,769	5,031	-	-	5	-	10
Others*	9,527	3,821	5,919	4,443	7,802	1,456	1,110	2,220	2,139	2,911
Near and Middle East**	2,274	1,924	308	2,375	1,753	-	16	41	-	-
South Africa	54,021	50,894	50,316	70,762	30,545	54	24	9	9	1
Other Africa	22,980	24,562	22,058	50,734	76,871	5	5	4	-	-
Latin America***	21,548	19,986	18,096	15,109	20,009	163	339	156	243	331
Puerto Rico	55,562	68,011	67,767	70,225	77,128	-	-	-	-	-
Australia	134,668	141,554	117,685	150,402	129,835	86	85	154	50	15
Japan	486,138	541,509	389,109	732,481	420,037	705	744	112	423	3,461
Other Asia & Oceania	13,590	10,218	6,605	5,384	7,257	35	12	-	2	15
Totals	6,320,635	7,040,484	6,705,799	7,330,037	8,379,062	152,019	141,827	170,283	136,308	146,473

* Including Communist Bloc Countries.
** Including U.A.R. (Egypt).
*** Including West Indies.

(a) U.S. reports state that imports of softwood lumber from Canada totalled 7.2 billion board feet in 1971.

Source: Statistics Canada. Catalogue No. 65-004 (Monthly).

FIRE STATISTICS

Mrs. HANSEN. We discussed your last year's fire experience in the supplemental hearings last week. We will ask that the figures which you gave us on the supplemental be also placed in the record at this point.

Mr. MCGUIRE. All right.

(The information follows:)

FIRE STATISTICS—CALENDAR YEAR 1972

Number of fires	14,140
Number of acres burned	116,526
Value of timber and other resources burned	$34.9 million

Rehabilitation work on the 116,526 acres burned and other areas disturbed directly as a result of fire suppression, usually starts immediately. Our general policy is to begin preparations for emergency rehabilitation before the fire is controlled. As an example, on the Battle Fire, Prescott National Forest in Arizona the fire was controlled May 20. Emergency rehabilitation work was accomplished on May 21 for areas disturbed by fire suppression activities. Aerial seeding started at daylight on June 17 and was completed June 27.

On the commercial forest lands trees are often destroyed and will not reproduce without extensive tree planting. While tree planting is the major item, these areas may also need some emergency rehabilitation measures such as prompt seeding of grasses and cereals, and channel clearing. On the noncommercial forest lands water runoff can result in serious loss of soil, site deterioration, water quality, and cause downstream damage. Such runoff also affects important stream courses. To prevent this, it may be necessary to seed disturbed areas with cereals and grass, install terraces, clear channels, plug gullies, or do other measures.

COOPERATIVE PROGRAM FOR PLANTING TREES

Mrs. HANSEN. What cooperative programs do you have with industry and conservation groups? There has been a lot of controversy over your Datsun TV ads.

Mr. DEINEMA. Those ads went off radio and television approximately 6 months ago. We have approached many Members of Congress, conservation organizations and others as to the desirability of continuing with that type of a cooperative program. Almost all of the responses have been extremely favorable.

Mrs. HANSEN. May I read Mrs. Griffith's comment from a newspaper clipping: "Mrs. Griffith is upset over the idea of the Forest Service helping to promote sales of foreign automobiles."

Mr. YATES. How does that follow?

Mrs. HANSEN. Every Datsun purchaser has a tree planted.

Mr. MCGUIRE. To test drive a Datsun.

Mrs. HANSEN. She was upset about the unemployment.

The article goes on to quote the Forest Service: "Bob Hartwick, a Forest Service public information officer who helped develop the program, said that the Service has also received other critical comments and has sent out letters to conservationists and other groups to test public support for the program. Some people, mainly individuals, say we shouldn't be associated with any commercial promotion. Some have argued that we shouldn't be helping a foreign product. Since it was dreamed up in 1970 by the president of a California food company, the program has supplied the Forest Service with money for planting more than 2 million trees in the areas of the national forests which have been burned out or timbered."

Do you have some more comments on this?

Mr. DEINEMA. I was talking about the overall programs.

DATSUN CONTRACT

Mr. YATES. What was the Datsun contract? Did the Forest Service have a contract with Datsun?

Mr. MCGUIRE. Yes, sir; we started out with Hunt-Wesson. The idea was that if you bought a can of beans and sent in the label, the company would pay a few cents for purchasing a tree to be planted in a national forest.

Mr. LONG. How did Datsun get into the act?

Mr. MCGUIRE. We had a lot of applications. Some of them were just too commercial and we didn't have enough control over what was done. Datsun's proposal met our requirements, so we took them on a first-come-first-served basis.

Mrs. HANSEN. Are you out of this contract now?

Mr. MCGUIRE. Yes, ma'am.

Mr. YATES. What happened to the Datsun deal?

Mr. MCGUIRE. It ran its course and it is through. It was an advertising campaign. We have been involved with advertising people for many years. Smokey Bear is a good example.

Mrs. HANSEN. Smokey Bear wasn't quite like this.

Mr. MCGUIRE. That is right. But it was a cooperative venture with advertising experts to prevent forest fires.

Mr. YATES. Did it work?

Mr. MCGUIRE. It has worked extremely well. The thought here was that perhaps we could join forces with industry and arouse some public interest in environmental things.

Mrs. HANSEN. This wasn't one of your better ones.

Mr. MCGUIRE. It became so controversial we thought we should go slower.

Mr. YATES. How many trees are planted every year?

Mr. HOUSLEY. We can give you an acreage figure.

Mr. YATES. You earlier gave us a figure of 2 million trees.

Mr. MCGUIRE. That was about 1 year under the Hunt Wesson agreement.

NUMBER OF TREES PLANTED

Mr. YATES. How many trees were planted over the course of that year?

Mr. HOUSLEY. Our nurseries produced about 100 million seedlings last year.

Mr. YATES. Are those planted?

Mr. MCGUIRE. Yes, sir.

FOREST MANAGEMENT FUNDS

Mr. LONG. Earlier it was brought out that we have done very little, not more than 10 percent or 15 percent, toward a program of forest management of the kind you would run if you wanted a sensible farm. The basic reason is that the Budget Bureau has cut back on all these programs and has never allowed any money to get through. This year

the President has impounded several million dollars of money appropriated by this committee.

Mr. YATES. We went into that yesterday.

Mr. LONG. Bring it out again today. What is the reason why we shouldn't bring it out again today?

Mrs. HANSEN. I think also the tendency is to blame the Congress of the United States for failing to meet the obligations of prudent management. I want it plainly understood that the Congress of the United States has not been responsible for failure to provide funds to step up forest management. We think you are timid about asking sometimes. I don't believe that any present grower of trees could operate under the constraints you face and survive. He would be buying logs from Japan.

Mr. MCGUIRE. You are certainly right, Madam Chairman. The committee has always given us the amount we requested and in many cases has raised the figure for reforestation.

Mrs. HANSEN. Not only reforestation, you have never in recent years had your management funds cut either.

Mr. MCGUIRE. That is right.

Mrs. HANSEN. We have tried to provide management funds so that you could go into tree genetics, into experimental plots, fertilization and what it does, in order that you could do necessary thinning and salvage work.

That is why we take a dismal view when anybody comes along and says that we are going to have a better country if we just cut the budget for these programs.

NUMBER OF TREES PLANTED PER ACRE

Mr. MCKAY. Madam Chairman, how many trees would there be in an acre, in 10 acres, or in 50 acres?

Mr. HOUSLEY. We plant about 800 per acre.

Mr. MCKAY. 800 to an acre?

Mr. MCGUIRE. It would be whatever the appropriate species is for the site. It would be all the native major species.

Mr. MCKAY. I want an average.

Mr. MCGUIRE. A lot of them are Douglas-fir, pines, hardwoods.

Mr. MCKAY. About 800 to the acre?

Mr. MCGUIRE. Yes, or less.

Mr. LONG. You plant a lot and thin them out, don't you?

Mr. MCGUIRE. Whenever we cut an acre, usually we go in and plant or seed that area. That is where most of our trees go. It's the current areas that are being cut today.

SURVIVAL RATE OF TREES PLANTED

Mr. MCKAY. What is your survival rate of those planted? Do you have any idea?

Mr. MCGUIRE. The final crop of trees would probably only be about a hundred to the acre.

Mr. MCKAY. Out of 800?

Mr. MCGUIRE. Out of 800.

Mr. MCKAY. One-eighth would be the survival rate?

Mr. McGUIRE. Yes, but you take out others through thinning or they would die out because of crowding. Of the big trees, an acre can only hold about 100 mature trees. But you have to plant more young ones so you occupy the site and shade out the competition.

Mr. YATES. You said that your nurseries produce 100 million trees a year which you plant. My question was how many trees are planted every year by the Forest Service? Only 100 million?

Mr. HOUSLEY. Yes, sir.

Mr. YATES. How many trees should we be planting?

Mr. HOUSLEY. This would depend on the rate at which we intended to accomplish the backlog of reforestation needs.

Mr. YATES. That is what I am talking about.

Mr. LONG. But you really want to do a job and get rid of the timber shortage.

Mr. YATES. We are talking about the future generation now. How many trees should you be planting?

Mr. McGUIRE. It would be best if we could clean up this backlog, say, in a decade. You couldn't clean it all up in one year.

BACKLOG OF REFORESTATION

Mr. YATES. What is the backlog?

Mr. McGUIRE. We have a backlog of about 5 million of inadequately stocked acres. We do a lot of planting otherwise on areas that are currently being cut. We keep up to date with that. But areas that get burned, hit by an insect, or something like this, are our backlog.

Mrs. HANSEN. Or the old forests that were not replanted?

Mr. McGUIRE. Right.

Mr. YATES. How many trees are represented in your backlog?

Mr. McGUIRE. About 400 million.

Mr. YATES. What is the cost of planting those so-called cleaning up your backlog?

Mr. McGUIRE. What would the figure be on an acre basis?

Mr. HOUSLEY. About $100 to $150 an acre.

Mr. McGUIRE. That would include everything.

Mr. YATES. How many acres need it?

Mr. McGUIRE. About 5 million.

Mr. LONG. That is about 1 percent of the total forested area, isn't it? I figure you have 2 billion acres of land in the United States.

Mr. McGUIRE. Yes, sir.

Mr. LONG. About one-third of that is in timber, right?

Mr. McGUIRE. About 700 million acres is forested.

Mr. LONG. If you have 5 million acres, out of 700 million that is a little less than 1 percent.

Mr. McGUIRE. Of course, here we are just talking about the public.

Mr. LONG. So your backlog is about 1 percent?

Mr. McGUIRE. No, sir. You are talking about all land. We were talking about just the National Forests.

Mr. LONG. I am talking about timber.

Mrs. HANSEN. You have to get this in context because he is talking about 5 million acres backlog on National Forest lands. The backlog on private lands is entirely different. We are just talking about National Forests.

Mr. McGuire. There must be another 50 million acres beyond the National Forests in other ownerships.

Mr. Long. What percentage of this 5 million is on National Forest lands?

Mr. McGuire. The total acreage of the national forests is 187 million. So this would be approximately 2½ percent or less.

TREES PLANTED BY TIMBER COMPANIES

Mr. Yates. How many trees are planted annually by private interests?

Mr. McGuire. Private landowners?

Mr. Yates. Yes.

Mr. Nelson. They plant between 500 and 550 million trees a year. It fluctuates from year to year.

Mrs. Hansen. The professionals, the people who are in the timber business, to make it succeed to keep themselves from going broke by using all the techniques known to make a profitable business. However, we do not treat the U.S. forests as really any kind of a business venture; this is one of your problems, isn't that right?

Mr. Nelson. In large measure, I would agree with you.

Mr. Yates. Madam Chairman, can you tell us the difference? What does a private company do that the Government don't do?

Mrs. Hansen. Many things.

Mr. McGuire. We use the same techniques. The technology is available to both. We both use seeding techniques, planting techniques, helicopters, soil preparation, improved seed, and so on. It's just that the private companies do a larger share of the job on their own lands. They generally keep their own lands.

Mr. Yates. What do you mean by a larger share—just an acceleration of what you were describing?

Mr. McGuire. They don't have a large backlog of unplanted acreage because it wouldn't be profitable for a private company.

Mr. Yates. What is the difference in cost between what a private company does in reforestation and what the Government does?

Mr. McGuire. The cost per acre would be about the same.

Mr. Yates. But you said they put more into the acres.

Mr. McGuire. Yes, sir.

Mr. Yates. Would the cost go up if they put more into the acres?

Mr. McGuire. They don't carry a backlog of unplanted acres the way we do.

Mrs. Hansen. The private company, contrary to what many people think, cannot afford to cut and run. If they are going to stay in business they have got to manage their forests.

Mr. Yates. Are we doing that in ours?

Mrs. Hansen. No, we aren't.

Mr. Yates. Are we cutting and running in ours?

Mr. McGuire. No, we are not. We have idle acres but a private company which has to pay taxes on the acreage couldn't afford it.

STATUS OF TIMBER SUPPLY

Mr. Long. Is our total timber growing or declining? I have heard both statements made.

Mr. McGuire. It depends on the part of the country you are talking about. Total timber growth and total timber cut in cubic terms, measured in cubic feet, is about in balance.

Mr. Long. It is growing?

Mr. McGuire. It is being cut as fast as it is being grown.

Mrs. Hansen. But isn't this true, Mr. McGuire, that you have certain areas of the country which were timber producing a while back but now are no longer timber producing because they have been sold to developments of various kinds? I understand it has been necessary to step up genetic programs and growth programs in order to make up for this loss because of development.

Mr. McGuire. For many years the forest land base losses, which were mentioned by the chairman, were offset by increases as farms were abandoned and old fields came back into trees. We have about run out of that offsetting factor and our land base is beginning to decline.

DEPLETION ALLOWANCE ON TIMBER AND CAPITAL GAINS

Mr. McDade. What is the depletion allowance on timber? How does that work out in percentage?

Mr. McGuire. There is a special provision in the income tax law providing for capital gains treatment of timber income.

Mrs. Hansen. Is the purpose of that to step up planting?

Mr. McGuire. It is to encourage continuing forest management practices.

Mr. McDade. This is one side of it. What about the depletion aspects of it?

Mr. McGuire. They work out about the same.

Mr. McDade. What is the percentage permitted now?

Mr. McGuire. 25 percent.

Mr. McDade. It's 25 percent of what?

Mr. McGuire. Perhaps the simplest way to put it is that a company or an individual is entitled to deduct the cost of acquired timber from timber income in calculating taxes payable.

Mr. McDade. Against that he has an offset called depletion.

Mr. McGuire. That is right.

Mr. McDade. Which is what—25 percent of what?

Mr. McGuire. In timber you have growth occurring. You have some additional investments to acquire this timber to begin with. As timber grows you are adding to your base all along.

Mr. McDade. Would you be good enough to furnish for the record, and for me, some illustration as to how the capital gains tax affects it, and how the depletion allowance affects it?

Mr. McGuire. Yes.

(The information follows:)

The depletion allowance for timber in the Federal income tax system refers to the cost or investment in timber which is deductible from receipts from the sale or other disposition of timber in determining the amount of gain or loss subject to tax. Thus, if a timber tract were acquired for $2,000, of which $1,200 is allocated to timber, and timber is later sold, the initial cost of $1,200 is deductible from proceeds of sales in figuring taxable gains. The timber depletion allowance represents a recovery of costs and does not represent a special tax benefit or subsidy.

Capital gains treatment is provided for in taxing net proceeds from sale of timber held for more than 6 months and qualifying either as a capital asset (under sec. 1221, the general capital gains provisions of the code), or as business

property entitled to capital gains treatment (under sec. 631, and sec. 1231 of the code).

In the case of an individual taxpayer net long-term capital gains are included in taxable income only to the extent of 50 percent, and up to $50,000 are taxed at a rate of not more than 25 percent. In the case of corporate taxpayers, capital gains are subject to a tax rate ceiling of 30 percent.

TIMBER PRICES

Mrs. HANSEN. Mr. McGuire, what is your prophecy on timber prices? Are they going to go up or down?

Mr. MCGUIRE. I wish I had a better crystal ball right at the moment. There appears to be a few signs of some softening. Timber prices have been going up during the month of February, but they have been leveling off in the past week. Some of the forecasters are saying that there may be some decline in prices in the future.

Also, future's trading would indicate that at least the speculators are betting on reductions in prices late in 1973. There are no strong signs, however, that the market is going to drop very precipitously in the near future.

Mr. WYATT. Madam Chairman, would you yield?

Mrs. HANSEN. Yes.

Mr. WYATT. There was a raft of spruce sold in my home county last Thursday for $1 million, being $1,635 a thousand.

BALANCED USE OF NATIONAL FORESTS

Mrs. HANSEN. What is your comment about the balanced use of our National Forests between timber supply and recreational and wilderness requirements? You are feeling an increased pressure from people on the use of our national forests. Are you giving an adequate amount of your budget to your recreation and your wilderness programs?

Mr. MCGUIRE. We have two problems here. One is trying to allocate part of the national forest acreage to wilderness use. We have just recently completed an inventory of all of the roadless areas in the National Forest System. We found that we had 56 million acres of roadless area.

Mrs. HANSEN. That is out of the 187 million?

Mr. MCGUIRE. Yes, 56 million acres, in addition to the 11 million acres that are already in the wilderness system. We have proposed to study another 11 million acres of the National Forest System for possible wilderness classification. This would require legislation, of course.

Mrs. HANSEN. So this would make a total of how many acres?

Mr. MCGUIRE. This would make a total of 22 million acres, plus 4 million that are primitive areas and that are being studied now. The total would be something like 26 million acres.

The question is, is this enough? We have looked at this 26 million acres plus the 28 million or so that the Park Service is currently studying, plus the 29 million or 30 million acres that the Bureau of Sport Fisheries and Wildlife is currently studying. That is a total of about 84 million acres being considered for wilderness by Federal agencies.

Many feel under present conditions this is about as much as we think the country can afford to hold for possible wilderness classifica-

tion. Others feel that it should be higher. Others feel that it should be lower.

Mr. McKay. Madam Chairman, will you yield?

Mrs. Hansen. Yes.

Mr. McKay. Is it also a tendency that your recommendations for wilderness areas are being affected by your monetary cutbacks and that it's easier to manage the wilderness area rather than to manage it for either forest production or a recreation area?

Mr. McGuire. No, I wouldn't agree with that. If there is any kind of management that is difficult, I would say it's wilderness management. It's a relatively expensive operation to manage per visitor day.

Mrs. Hansen. Why?

Mr. McGuire. Because the visits are dispersed over large areas, access is difficult, motorized equipment is not used, and so forth. We certainly would not be proposing more wilderness just simply to save money. I don't think there is anything to that argument.

SEARCH AND RESCUE MISSIONS

Mrs. Hansen. What additional problems with search and rescue missions do you have in the wilderness area?

Mr. McGuire. We have all the usual problems with search and rescue. We cooperate closely with the local law enforcement agencies—the sheriff, the highway patrol, and so forth. All of us get together whenever there is an emergency. These areas are remote, regardless of whether they are wilderness or not. If there is an emergency back in the mountains, it is expensive.

CAMPGROUND VS. WILDERNESS VISITATIONS

Mrs. Hansen. Is your wilderness experience largely a family experience? Let's compare the campground and the wilderness. What kind of users do you have in both groups?

Mr. McGUIRE. We have some figures on this.

Mr. HOUSLEY. I think that it's a family experience in either case, for example, camping, whether it be in the campground or in the wilderness.

Mrs. HANSEN. Is it more expensive to visit the wilderness areas or more expensive to visit the camp areas?

Mr. HOUSLEY. This depends on travel modes and on the equipment involved as well as the timespan.

Mrs. HANSEN. Let's take a family that wants to go by horseback on a pack trip into the wilderness. What is the cost per day?

Mr. HOUSLEY. Certainly that would be more expensive than a simple camping experience or a backpacking trip into the wilderness. Backpacking would not be extremely expensive.

Mr. McKAY. Wilderness experiences, you are saying, is expensive?

Mr. HOUSLEY. If you use a pack trip approach where you use horses and guides.

Mr. McKAY. In the kind we found with the youth drifting and living off the fat of the land they were depleting the fish supply and the deer and they were really living off the fat of the land. Those were backpackers.

Mr. HOUSLEY. That is not as expensive.

WILDERNESS AND PRIMITIVE AREAS

Mr. WYATT. Madam Chairman, could I ask the Chief it it's possible for him to furnish a table showing the wilderness that is in existence today by State and also primitive areas and what was in existence 5 years ago in those States? Also, what is being studied by State, what is being studied by the Park Service and by the Fish and Wildlife Service?

Mr. McGUIRE. Yes, we will do our best. I think we can get most of that.

(The information follows:)

Wilderness and Primitive Areas
(thousands of acres)

State	As of 1/1/73				As of 6/30/67	
	Forest Service	National Park Service	Fish and Wildlife Service	Forest Service Primitive	Forest Service Wilderness	Forest Service Primitive
Alaska	- -	- -	50.6	- -	- -	- -
Arizona	495.9	50.3	- -	173.7	421,053	248,501
California	1,595.8	107.4	- -	356.6	1,265,874	627,303
Colorado	280.1	- -	- -	538.8	281,163	556,599
Florida	- -	- -	.4	- -	- -	- -
Idaho	1,205.1	43.2	- -	1,441.6	989,179	1,650,871
Maine	- -	- -	2.7	- -	- -	- -
Massachusetts .	- -	- -	2.4	- -	- -	- -
Michigan	- -	- -	25.3	- -	- -	- -
Minnesota	747.8	- -	- -	- -	1,029,218	- -
Montana	1,721.9	- -	- -	417.8	1,486,400	419,500
Nevada	64.7	- -	- -	- -	64,827	- -
New Hampshire .	5.6	- -	- -	- -	5,552	- -
New Jersey	- -	- -	3.7	- -	- -	- -
New Mexico	679.4	- -	9.6	336.6	679,776	339,370
North Carolina	20.9	- -	- -	- -	20,975	- -
Oklahoma	- -	- -	8.6	- -	- -	- -
Oregon	837.1	- -	0.04	- -	666,651	85,033
Utah	- -	- -	- -	237.2	- -	240,717
Washington	1,094.8	- -	0.2	- -	577,111	801,000
Wisconsin	- -	- -	0.03	- -	- -	- -
Wyoming	1,989.0	- -	- -	384.0	1,781,582	586,000
Total	10,738.1	200.9	103.57	3,886.3	9,269,361	5,554,894

Study Areas for Possible Wilderness Classification
(thousands of acres)

State	Forest Service	National Park Service	Fish and Wildlife Service
Alaska	2,567.0	7,535.5	22,242.2
Arizona	423.9	2,760.1	1,571.6
Arkansas	- -	95.7	123.4
California	727.9	4,044.3	15.9
Colorado	1,419.4	529.9	- -
Delaware	- -	- -	15.1
Florida	22.0	1,471.7	126.0
Georgia	- -	40.5	378.8
Hawaii	- -	256.9	304.3
Idaho	1,384.7	23.0	- -
Illinois	- -	- -	66.3
Kansas	- -	- -	50.6
Kentucky	- -	62.1	- -
Louisiana	- -	- -	40.8
Maine	- -	- -	22.7
Maryland	- -	- -	16.1
Massachusetts	- -	- -	4.6
Michigan	- -	610.4	- -
Minnesota	- -	219.4	157.5
Mississippi	- -	53.5	- -
Missouri	- -	- -	21.7
Montana	1,370.7	1,162.2	1,078.5
Nebraska	- -	- -	133.6
Nevada	284.5	786.7	2,205.1
New Jersey	- -	- -	19.4
New Mexico	323.3	244.5	57.2
North Carolina	14.9	275.8	84.1
North Dakota	- -	70.4	31.1
Ohio	- -	- -	0.08
Oklahoma	- -	- -	32.0
Oregon	285.5	160.3	437.9
Puerto Rico [1]	8.5	- -	- -
South Carolina	- -	- -	34.2
South Dakota	- -	243.5	21.4
Tennessee	- -	243.1	- -
Texas	- -	923.2	45.1
Utah	294.9	1,997.4	64.9
Vermont	- -	- -	4.7
Virginia	- -	201.1	13.6
Washington	716.1	1,812.6	58.2
Wisconsin	- -	- -	109.1
Wyoming	1,095.9	2,358.1	23.8
Total	10,939.2	28,181.9	29,611.58

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PAYMENT BOND PROCEDURE

Mrs. HANSEN. Please give us your current practice and any proposed changes on use of surety bonds or deposit of Government securities as guarantee for payment for national forest timber once that timber has been removed from national forest land and is awaiting scaling.

Mr. HOUSLEY. We plan no changes in the payment bond procedure, Madam Chairman.

Mrs. HANSEN. Would you insert a highlight of your current procedure in the record, please.

Mr. HOUSLEY. Yes, ma'am.

(The information follows:)

HIGHLIGHTS OF CURRENT (SINCE SEPTEMBER 1971) FOREST SERVICE PAYMENT GUARANTEE PROCEDURES

When a purchaser furnishes a satisfactory payment guarantee which may consist of a security bond or negotiable securities, he is not required to make advance deposits or to pay for timber which he cuts until after he has removed it from the sale area. He is billed for the timber he removes at 30-day intervals.

If, as is generally the case, the timber has been scaled promptly after removal, the billing is for payment due based upon the volume actually scaled.

If the timber goes into storage and scaling is deferred, the billing is for an advance deposit based upon the estimated volume hauled. The deposit is credited against the actual payment due as determined when the timber is scaled.

JOB CORPS CENTERS

Mrs. HANSEN. How many Job Corps centers do you have?

Mr. MCGUIRE. We have 20 Job Corps centers.

Mrs. HANSEN. Will you place in the record where they are located and how many people are in the Job Corps centers?

Mr. MCGUIRE. We would be glad to do that.

(The information follows:)

JOB CORPS CIVILIAN CONSERVATION CENTERS

CENTER	CITY	STATE	NO. OF ENROLLEES
Anaconda	Anaconda	Montana	216
Trapper Creek	Darby	Montana	216
Curlew	Curlew	Washington	180
Cottonwood	Cottonwood	Idaho	206
Boxelder	Nemo	South Dakota	208
Pine Ridge	Chadron	Nebraska	168
Heber	Heber	Arizona	210
Timberlake	Estacada	Oregon	224
Wolf Creek	Glide	Oregon	224
Angell	Yachats	Oregon	184
Arrowood	Franklin	North Carolina	112
Cass	Ozark	Arkansas	168
Flatwoods	Coeburn	Virginia	168
Jacobs Creek	Bristol	Tennessee	168
Pine Knot	Pine Knot	Kentucky	224
Ouachita	Royal	Arkansas	176
Schenck	Pisgah Forest	North Carolina	204
Blackwell	Laona	Wisconsin	200
Branchville	Branchville	Indiana	168
Golconda	Golconda	Illinois	224
		Grand Total	3,848

Mr. McKAY. Are they profitable units? That is, do you really get the service out of them, besides the human development?

Mr. McGUIRE. We got quite a bit of work out of the Job Corps. However, the main purpose here is to provide education and just a work experience for people.

Mr. McKAY. I understand that.

Mrs. HANSEN. A couple of years ago you had a pretty good record of how many miles of trails they had built, and so on. Do you want to insert that in the record?

Mr. McGUIRE. Yes, ma'am:

(The information follows:)

FISCAL YEAR 1972
CIVILIAN CONSERVATION CENTERS
WORK PROGRAM ACCOMPLISHMENT SUMMARY

Description	Appraised Value
CONSERVATION PROJECTS	
Recreation Construction	$1,071,000
Water and Soil Construction and Service	83,000
Fire and General Purpose Construction	1,229,000
Fire and General Purpose Maintenance	126,000
Wildlife and Range Construction and Service	175,000
Fire Control	20,000
Road Construction	1,129,000
Total Conservation Projects	$3,833,000
ON-SITE CENTER PROJECTS	
Center Construction	$1,021,000
Center Rehabilitation and Maintenance	282,000
Center Support Activity	224,000
Total On-Site Center Projects	$1,527,000
COMMUNITY DEVELOPMENT	
Community Support	$ 65,000
Total Community Development	$ 65,000
GRAND TOTAL	$5,425,000

NEPA COSTS

Mrs. HANSEN. You estimate that fiscal year 1974 costs to implement the National Environmental Policy Act will be approximately $28 million, an increase of $15 million over fiscal year 1972. This is about 6 percent of your budget. Please insert in the record the costs in this regard for the past 4 years and indicate what percent of your total budget this involves in the various years.

(The information follows:)

It is estimated that the costs of multiple-use analysis and National Environmental Policy Act implementation, and percent of total Forest Service budget were:

	Estimated cost	Percent of Forest Service budget
Fiscal year:		
1969	$3,030,000	0.6
1970	[1] 4,100,000	.8
1971	7,400,000	1.3
1972	13,000,000	1.9

[1] National Environmental Policy Act approved Jan. 1, 1970.

ANTIDEFICIENCY VIOLATION

Mrs. HANSEN. On September 11, 1972, Secretary Earl Butz sent a letter to the Speaker of the House reporting an antideficiency violation in the amount of $522,837. This involved excess obligations in your forest protection and utilization account. Please give the committee a brief description of what is involved and what action has been taken.

Mr. MCGUIRE. Can we provide that for the record? I don't recall that particular correspondence.

Mrs. HANSEN. Yes.

[The information follows:]

APPORTIONMENT VIOLATION OF $522,837

This violation occurred as of February 29, 1972, and was an over obligation of funds apportioned for that period by one of the regions. Seven administrative offices failed to advise the regional apportionment control officer of changes in plans which increased the work to be performed, requiring increased obligations. A mathematical error was also made in compiling estimated obligations for the period.

The apportionment control officer and administrative officers of five national forests, a research station, and a State and private forestry area were admonished for failure to follow prescribed procedures. A training session on apportionment control was held last October for all the administrative officers in the region.

SUIT BY SIERRA CLUB

Mrs. HANSEN. Please discuss for the committee the result of the Sierra Club's suit which challenged the Forest Service multiple-use roadless area review?

Mr. MCGUIRE. The Sierra Club brought suit in district court in California charging that the Forest Service was entering upon roadless areas without filing an environmental statement.

The Government disagreed with this charge on the grounds that we felt that not every intrusion on a roadless area was necessarily a major

Federal action. The court did not agree and granted a preliminary injunction.

We then had the option of continuing the litigation. We faced the prospect of long delays until this whole question of what is a major Federal action could be resolved in the Supreme Court.

Mrs. HANSEN. How many acres were involved?

Mr. MCGUIRE. 56 million acres.

Mrs. HANSEN. In what States?

Mr. HOUSLEY. Principally in the 11 Western States.

Mr. MCGUIRE. Rather than tolerate that delay, we then instructed our people to prepare the environmental statements. We notified the court of these instructions and the court threw out the case. So the status at the moment is that we cannot enter upon a roadless area with roads or logging or anything that would prohibit future classification as wilderness.

Mrs. HANSEN. How about people?

Mr. MCGUIRE. As long as they don't tear up the place.

Mrs. HANSEN. As long as they are walking, is that it?

Mr. MCGUIRE. Just so that the wilderness alternative is not precluded.

Mr. VEYSEY. May I ask a question? Does that mean you can't go in with a vehicle?

Mr. MCGUIRE. It depends on what kind of a vehicle and how much damage it would do. I think ordinarily you could go in with a vehicle and that would not preclude wilderness classification. Mainly it's roadbuilding and logging.

Mrs. HANSEN. Suppose you went in with a snowmobile?

Mr. MCGUIRE. That isn't the issue. It is doing something that would preclude wilderness classification.

Mr. WYATT. What would be the effect on your allowable cut base, chief?

Mr. MCGUIRE. It didn't change the allowable cut at all but it meant some sales we had planned to offer in these areas now could not be offered promptly because we have to stop to prepare environmental statements. I think in fiscal 1973 we had about $700 million tied up.

Mr. MCDADE. What was the cost of the environmental statements?

Mr. MCGUIRE. We expect $28 million next fiscal year to implement the provisions of the National Environmental Policy Act. It was $13 million last fiscal year.

COURT DECISION REGARDING BOUNDARY WATERS CANOE AREA

Mrs. HANSEN. Prospecting and mining of minerals in Minnesota's Boundary Waters Canoe Area has been prohibited by a U.S. district court decision. Please discuss this decision and its ramifications for other wilderness areas.

Mr. MCGUIRE. The Boundary Waters Canoe Area is a million acre tract in Minnesota north of Lake Superior on the Canadian boundary. The Government owns almost all of the surface, but a large part of the subsurface is outstanding in other owners. There are valuable minerals in the vicinity and other nongovernment parties own these minerals.

I think it was the Izaak Walton League that sued the Government and the miners in Federal court. The judge decided that the Federal

Government had authority to zone. This was a relatively new line of reasoning that we had not encountered before. We took the position that the zoning authority derives from the police power of the States and ordinarily the Federal Government could not exercise zoning authority. But in this instance he argued that there was some authority for Federal zoning, and that under this described authority, the Federal Government could prohibit mining without, in effect, taking away property rights. There was no compensation due either. This case is being appealed.

Mrs. HANSEN. Will this be a precedent for other Federal lands?

Mr. MCGUIRE. He seemed to limit this pretty much to the Boundary Waters Canoe Area. How much this might be extended I don't know. It's quite a novel line of argument that I had never seen before.

Mrs. HANSEN. Does anyone have a question?

COMMENTS ON NADER REPORT

Mr. YATES. You know about the Nader report and you have already testified with respect to it.

Mr. MCGUIRE. Yes, sir.

Mr. YATES. May I ask you a specific question about something which interests me inasmuch as I voted against the national timber supply bill.

Mr. MCGUIRE. Yes, sir.

Mr. YATES. It says on Roman page VII of the report:

> The bureaucracy entrusted with management of our national forests has clearly benefited from the consciousness raising of environmental groups, notably the Sierra Club, in the last 3 years. But its efforts to keep recreation and wildlife uses of the forests in harmony with timber production, as tardy and tentative as they have been, have been crippled further by pressure from the White House on behalf of logging interests. No agribusiness interest group has found the doors to the White House more open than the timber industry. In 1969, when a coalition of environmental groups defeated the National Timber Supply Act with its goal of increasing the timber harvest from public lands by 50 percent, the logging and forest products industry lobbyists went to Presidential assistant Charles Colson, and had the same purpose achieved through executive action.

Is that a correct statement?

Mr. MCGUIRE. No, it is not.

Mr. YATES. Will you tell me in which way it is not?

Mr. MCGUIRE. This is kind of an involved story, but the original National Timber Supply Act would have required some immediate cutting in the national forests on the premise that funds would become available later on to do the necessary planting and thinning and what have you to increase the growth. The administration opposed that original bill.

The act was later amended so that overcutting would not occur and increased cutting would not take place until the additional investments for increased growth had been made.

The bill was defeated, nevertheless, because this distinction was not widely recognized, I think. The President later on, in 1970, directed the Secretary of Agriculture to plan for additional timber production in the national forests consistent with multiple-use and sustained yield. All he directed was that we draw plans. That we have done. These plans provide that only after we have increased the growth will we

permit the increased cut because you have to stay on sustaining yield. I don't understand that statement at all.

Mr. YATES. Has the Forest Service tried to answer this report in any respect in writing?

Mr. MCGUIRE. Not particularly, no. We have made some public comments about it, about what I said here earlier in this hearing.

Mr. YATES. When such a statement appears, what you say is obviously wrong, should you not issue a statement that the report is wrong?

Mr. MCGUIRE. We should. But the same statement keeps appearing regardless of what we say. I think we are getting a little discouraged.

Mr. YATES. I thought you hadn't said anything if I understood what you just testified.

Mr. MCGUIRE. This statement is not original. This same statement has been made by the New York Times. It has been made by various witnesses before the Senate Interior Committee.

Mr. YATES. The Forest Service has tried to clear that up?

Mr. MCGUIRE. We have tried repeatedly by public announcement, by press releases, and by speeches.

Mr. YATES. I don't have any more questions today.

Mrs. HANSEN. Mr. McKay.

SHRUB IMPROVEMENT LABORATORY

Mr. MCKAY. Last year more than $700,000 was appropriated for the purpose of constructing a shrub research laboratory at Provo, Utah. What is the status of that project?

Mr. ARNOLD. The money has not been spent. Here again it was a question of priorities.

Mr. MCKAY. Do you consider the money appropriated last year to be "no year" money, or will you be asking for reappropriation of funds when it comes time to build the shrub research laboratory?

Mr. ARNOLD. The construction funds are "no year" funds. However, with a view toward holding spending to an absolute minimum to carry out essential programs, it has been decided that the $760,000 appropriated for the shrub research laboratory be made available in fiscal year 1974 for construction related to pollution abatement. When the fiscal situation permits, it will be necessary for us to ask reappropriation of funds to construct the laboratory at Provo.

Mr. MCKAY. Has an alternative site been considered for the construction of this facility? Is that why you have not begun to construct the laboratory?

Mr. ARNOLD. Several sites for the shrub research laboratory were considered before the Provo site was selected. However, the Provo location was and is considered the best location for the shrub research laboratory. The fiscal situation is the only reason that we have not begun to construct the laboratory.

Mr. MCKAY. How will rising construction costs affect the usefulness of the money appropriated last year? Will it be necessary to augment that money significantly to build the same facility?

Mr. ARNOLD. Recent experience shows construction costs are increasing as a result of inflation 7 to 10 percent per year. While $760,000 would have been adequate to construct the facility in fiscal year 1973, we now estimate that $815,000 would be required in fiscal year 1974.

Mr. McKay. What is the SEAM program? When is it to be implemented?

Mr. McGuire. SEAM is an on-the-ground problem solving research, development, and applications program that will deal with specific problems of planning mining activities, surface disturbance reclamation, rural development, and environmental stewardship. The associated mining problems throughout the interior west will be considered. The ultimate objective is to harmonize the extraction of minerals with the values of associated resources in keeping with a quality environment. We plan to implement SEAM in fiscal year 1974.

Mr. McKay. Have you made any administrative moves toward implementation of the SEAM program? Have facilities been planned? Have any people been hired in connection with SEAM?

Mr. McGuire. We have made some administrative moves toward implementation of SEAM by redirecting some research work at the intermountain station in Ogden, Utah ($150,000) and the Rocky Mountain Station in Fort Collins, Colo. ($115,000).

Rental facilities are planned to accommodate four employees at Billings, Mont.

No personnel have been specifically hired in connection with SEAM although we do plan to place three and possibly four employees in specific positions between now and July 1.

Mr. McKay. Have you asked for any money this year for SEAM?

Mr. McGuire. No, sir.

Mr. McKay. Why not?

Mr. McGuire. We arranged our budget requests in priority order to meet administration goals. The resulting priorities did not include SEAM.

FOREST SERVICE REGIONAL OFFICE, OGDEN, UTAH

Mr. McKay. At the present time, are there any plans to move the Ogden, Utah, office of the Forest Service to Denver?

Mr. McGuire. Preliminary analyses at the present time indicate program direction and support carried out in the Ogden, Utah, regional office, could be absorbed by the existing Denver, San Francisco, and Portland offices.

Mr. McKay. I understand that a study was made to determine the feasibility of bringing the Forest Service offices into conformity with the 10 standard Federal regions. Is that study available to this committee?

Mr. McGuire. From the Forest Service point of view, such information would be of little practical value to this committee since the Secretary of Agriculture has not yet decided what the USDA stance on conformance will be. He should be allowed that discretion before such information releases are made.

Mr. McKay. I understand that during any year in which such a move were made, additional money would be required to cover the costs of such a move. Have you asked for any such appropriation in fiscal year 1974? Or, is any such money programed into the appropriations requested for the Forest Service in fiscal year 1974?

Mr. McGuire. No, to both questions. Our assumption has been that the Forest Service would be required to absorb the one-time costs of such moves within available funds when, and if, a decision were reached to conform with standard regions.

Mr. McKay. If you have not programed any operating money for the purpose of moving the Forest Service regional office from Ogden to Denver, then I can assume that you would not ask for a supplemental appropriation for that purpose. May I also assume that you would not spend money programed for other purposes on such a move, and that you would not then ask for supplemental appropriations to augment the program from which you had taken funds?

Mr. McGuire. Your first assumption is verified by my response to the previous question. As to the second part of your question, if the decision were made to make such moves, it follows we would use available funds to the extent appropriate. In preliminary analyses we have not recognized a need for supplemental appropriations. Annual cost savings estimates substantially exceed the one-time closing costs, making moves, et cetera. Following the year of consolidation we expect more funds to be freed for on-the-ground accomplishment.

Mrs. Hansen. We will adjourn until tomorrow morning at 10 o'clock.

Wednesday, February 28, 1973.

STATE OF WASHINGTON FOREST PROGRAMS

Mrs. Hansen. The committee will come to order.

Last night at our Washington State dinner we had a discussion of forest problems. We discussed the Clark-McNary funds. I can assure you that they did not anticipate using revenue sharing for this. Later we got into a discussion of the State of Washington's program of management on their State lands. Out of $100 million worth of timber they sell, $25 million goes back into increased management. What is your equivalent return to management from the sale of timber to the owners?

Mr. McGuire. We are authorized to require the purchaser to deposit certain funds for rehabilitation of the land.

Mrs. Hansen. What is the percentage?

Mr. McGuire. There are several components. One is a deposit for reforestation and timber stand improvement. Secondly, we require a deposit for brush disposal, slash disposal. Third, we have access to 10 percent of receipts for roads and trails, which is taken into account when you look at our program.

Mrs. Hansen. They are using a large portion of their revenues for stepped-up management practices such as fertilization so that they can increase their harvest. The State also has a deep obligation for funding the State schools from these revenues.

Interestingly enough, I was a member of our legislature for many years and the first State school building program began when I was there. We had the problem of finding revenue all the time for this State building program.

Now they do not have to go to the legislature anymore for these school building funds because the money is avilable as a result of better management of timber.

What do you have that is akin to that?

Mr. McGuire. One distinction between the State of Washington program and the national forest program is this: As I understand it, in the State of Washington Mr. Bert Cole and his people are authorized to take part of overall receipts and apply them wherever they will do the most good.

Mrs. Hansen. That is right, 25 percent.

Mr. Yates. Who is Bert Cole?

Mrs. Hansen. He is an elected official in Washington. He heads the natural reasource department.

Mr. McGuire. Whereas in the national forests, the funds received from the timber purchaser can only be spent on the sale area where the timber is sold. So that if there is a better opportunity for planting elsewhere, those funds cannot be used for that better opportunity.

Mrs. Hansen. What is your evaluation of such a policy?

Mr. McGuire. We have been looking at different ways of funding. There would be the usual objection to back-door financing if we asked for a different authority, I think. It wouldn't go through the appropriation process. There would be that objection.

Mrs. Hansen. Not necessarily. You could provide that it went through the appropriation process.

Mr. McGuire. I think the State of Washington doesn't go through the appropriation process, does it?

Mrs. Hansen. That is right. But it's approved by their legislature.

INCOME FOR FOREST MANAGEMENT

Mr. McGuire. I see. The other problem we have here is that our income for forest management would be tied to timber receipts. There could be the temptation to overcut in order to have more income, or at least the public suspicion might be that that is what we might be doing. We would have a problem that way.

Most of the receipts do come from timber. There is need for intensified management for recreation, watershed, wildlife, and so on. I think critics would argue that it's unfair to give timber preference in this fashion as to available moneys.

Mrs. Hansen. Isn't it true that when you step up the management of your forests, you also provide sizable recreation opportunities?

Mr. McGuire. That is true.

Mr. Yates. Madam Chairman, to an outsider much of this doesn't make sense. Can you tell us what the difference is between the Washington practices that you are talking to the witness about and the Oregon practices? What is the distinction?

Mr. McGuire. The State of Washington has proportionately much more State-owned land than other States. I think Minnesota is the only other State that has as much State-owned land as the State of Washington.

Mrs. HANSEN. If the gentleman will yield. When the constitution was set up in the State of Washington we did two things as far as land management. Every two sections in every township belonged to the State of Washington for schools. That is the school lands.

The second provision set aside a certain number of sections for the Capitol building. We therefore do not have to go to the general treasury in the State of Washington for funds to buy land for public buildings.

Mr. WYATT. We have a State plan but not near as much as the State of Washington. Of course, Syd, what we are talking about, most of this land is timber. There is a lot of timber on that land.

Mr. YATES. On State-owned land?

Mr. MCGUIRE. Yes, sir.

Mr. WYATT. Yes.

Mr. YATES. How does that relate to the national forests?

Mrs. HANSEN. Because of the practices which they have used in managing timber resources. It used to be that there was a temptation to cut and get out. It was a bad management procedure.

The Department of Natural Resources was created by the legislature and handles total natural resources problems. The land commissioner is a member of the State school finance committee so there is an interlock watching policy.

Mr. MCGUIRE. The chief differences, as I see it, are two. One is that the State of Washington operates its publicly owned State forest lands pretty much as you would a private venture. That is, some of the receipts from the sale of timber are automatically plowed back into growing more timber.

Mrs. HANSEN. Twenty-five percent of them are automatically returned for the management of the Washington State-owned forests.

Mr. YATES. The national forests don't do it?

Mrs. HANSEN. No.

Mr. MCGUIRE. In the national forests we do have authority to plow back an average of 10 percent of our receipts for an individual sale of a tract of timber.

Mrs. HANSEN. For reseeding and rehabilitation?

Mr. MCGUIRE. Yes, on that tract. Another distinction between the State of Washington and the Federal lands is that the Washington State lands, as I recall, are mostly timber-covered lands, whereas the national forests——

Mrs. HANSEN. West of the mountains, yes.

Mr. MCGUIRE. In the national forests only about half of the acreage, or about 92 million acres, are commercial forest lands. We have a lot of land that is not timber-growing land, like the southern California forests. Those lands are not available for expenditure of timber receipts under our present arrangements. We have to come up here to ask for the money to do whatever planting or other activities are required on those lands.

Mr. YATES. Madam Chairman, we were talking about the revenues from forest lands last night when the hearing adjourned. I am not sure I understand what is happening. May I ask the witness a few questions with respect to that?

Mrs. HANSEN. Yes.

REVENUES FROM NATIONAL FORESTS

Mr. YATES. How does the Government get its revenues from its national forests? It gets them by selling stands of trees, doesn't it?

Mr. MCGUIRE. Primarily by selling timber.

Mrs. HANSEN. There are also grazing receipts.

Mr. MCGUIRE. If I can give you a breakdown, in 1973 we will get about $400 million from the sale of timber. Then we will also receive about $6 million from grazing. We permit private ranchers to graze on these lands and they in turn must pay a fee for each head of livestock per month.

Mr. WYATT. Syd, on page 10 of the Forest Service explanatory book at the bottom you have a whole list for future reference.

Mr. YATES. I know that. I was wondering about the procedures. Do we have timber lands in the State of Illinois, national forests?

Mr. MCGUIRE. You have a national forest there, the Shawnee National Forest.

Mr. YATES. Do we do the same thing there that you do in Oregon and Washington?

Mr. MCGUIRE. Yes, but the situations are vastly different. In the States of Washington and Oregon there were large volumes of timber on the land when they were made national forests. In the State of Illinois, we acquired lands that were old fields, cutover sites, old farms. The timber has not yet come up in much quantity. The receipts are much lower per acre in Illinois than they are in Washington or Oregon.

Mr. YATES. What happens to that money? Does it all go to the Treasury?

Mr. MCGUIRE. Yes, sir.

PAYMENTS TO STATES

Mr. YATES. None of it goes to the States?

Mrs. HANSEN. Yes, 25 percent.

Mr. MCGUIRE. Having received it at the Treasury, the Treasury then disburses, annually, 25 percent of these receipts to the States for distribution to the counties where the national forest lands are located to be used by the counties for schools and roads.

Mrs. HANSEN. In other words, creation of the national forests removed them from the tax rolls of the county. So, this is the Federal in-lieu tax.

The revenue can be used in three ways. It can go to schools and roads, all schools, or all roads. This is determined by the county.

Mr. YATES. Do you follow the same procedure with respect to the cuttings from privately owned land? Do they pay 25 percent, too?

Mr. MCGUIRE. No; we have nothing to do with that.

Mrs. HANSEN. He has no jurisdiction over private lands.

Mr. YATES. Do private lands pay 25 percent?

STATE TAXES

Mr. McGUIRE. No, sir. The typical situation is for the private land owner to pay an ad valorem tax on real estate.

Mr. YATES. What does that amount to? Is it as much as the Government pays?

Mr. McGUIRE. In some places it's more and in some places it's less. In Illinois it would be more. In Washington it would be less.

Mrs. HANSEN. It has increased.

Mr. McGUIRE. I expect that is right.

Mrs. HANSEN. The tax on second growth that isn't harvested has tripled this year.

Mr. YATES. What does tripled mean? What amount is it when it's tripled? Is it anywhere near what a Government forest pays?

Mr. McGUIRE. I don't recall. We could take a look at the record and provide some figures.

Mrs. HANSEN. It would depend on the land.

Mr. McGUIRE. Yes, ma'am.

Mr. YATES. I would assume they were comparable, wouldn't you? Presumably the sale of taxation should be the same for the Government lands as it is for private lands.

Mr. McGUIRE. It isn't.

Mr. YATES. My question is whether the Government forests are having to pay more for the cuttings than a private owner. Suppose you have two identical plots with two identical stands of trees and both of them go to the sale market, and they receive the same price for the cuttings. Will the Federal Government pay more to the State than the private owner?

Mrs. HANSEN. It depends on the State.

Mr. McGUIRE. It could be more or less. It's not going to be the same because the system is completely different.

Mr. YATES. Have you made any study of what the comparison is?

PAYMENTS IN LIEU OF TAXES

Mr. McGUIRE. This is a continuing issue in States like Illinois particularly, because assessed values have been going up on the private land but the provision for payments in lieu of taxes on the Federal land is such that they are not keeping pace.

Mr. YATES. Because there are no cuttings?

Mr. McGUIRE. Yes, sir. It's hard to make a comparison because the Federal Government has also been investing in activities which the State or local government would otherwise have to finance—fire protection, road construction, recreation development, and so forth.

Mr. YATES. That is in addition to the amount you pay for the timber?

Mr. McGUIRE. Exactly, sir.

Mr. YATES. If I understand your previous answer correctly, you say there is some criticism in the State of Illinois by private owners against the federally owned lands because the amounts such lands pay are not equal to those paid by the private owners. The valuation is done on the basis of an ad valorem valuation.

Mr. McGUIRE. On the private land only.

Mr. YATES. How can you make a comparison then? Shouldn't both pay by an equal standard?

Mr. McGUIRE. Perhaps we should. But the law does not provide for that.

INEQUITIES IN SYSTEM

Mrs. HANSEN. This was one of the things that the Public Land Law Review Commission was supposed to come up with some answers to. There are inequities within the 25 percent because the State of Washington, for instance, picks up their forest money and they put it in the common school distribution fund.

Mr. McGUIRE. There are inequities between the Government agencies. Some Federal lands pay nothing. Some pay 75 percent.

Mr. YATES. There ought to be a single standard. I don't think the Federal Government ought to pay more than a private person and I don't think a private person ought to pay more than the Federal Government.

Mr. McGUIRE. I think there is general agreement that there is lack of equity. Something ought to be done, but no one has figured out how to do it. You have problems of equalization, for example, among the States. You probably will need some kind of national board of equalization.

Mrs. HANSEN. In the first place, isn't it true there are great inequities between the States as to taxes?

Mr. McGUIRE. Yes, ma'am.

Mr. YATES. What is happening? Does the State of Washington receive more from the Federal Government than the State of Illinois?

Mr. McGUIRE. From the Forest Service receipts, yes.

Mrs. HANSEN. They have more timber.

Mr. YATES. But the payment is supposed to be in lieu of taxes. I would have thought that the standard for that would be on the basis of the land holdings and not an ad valorem tax. If private holdings are being assessed on that basis, it seems to me the Government holdings should have the same standard. I assume the same thing is true with respect to Mr. Long's State of Maryland. Do you have any national forests there?

Mr. McGUIRE. None, sir.

Mr. YATES. Then he is out of the discussion. That answers my question. Thank you very much. It has been educational. I would like to get that study.

Mr. McGUIRE. We will do that.

FOREST PROTECTION AND UTILIZATION

Mrs. HANSEN. We will insert pages 1 through 19 of the justifications at this point in the record.

(The pages follow:)

FOREST SERVICE

Purpose Statement

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 engaged in three main lines of work, as follows:

1. Management, protection, and development of the National Forests and National Grasslands. The 154 National Forests and 19 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.

   Direct as well as generated employment for rural residents contribute to community development and to environmental protection and improvement. Gross area within unit boundaries encompasses about 226 million acres in 44 States and Puerto Rico, of which some 187 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 development, maintenance, and protection of sites and facilities for the millions of people who visit the National Forests each year for recreation purposes. Emphasis is given to protecting scenic quality while at the same time assuring availability for forest users. 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 percent 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 percent serves four purposes in varying combinations. Of the remainder, 21 percent of the total serves three purposes with only 1 percent 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 to most effectively serve the Nation's people.

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. Each of these activities contributes to the local economy and in many areas serves to improve incomes of the rural poor.

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 1972 of $350 million. Approximately 65 percent 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 percent to the States or counties in which lands are located, and 10 percent 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. Recreation, wildlife and water result in important economic activity in local, State, and national economies. There are also important intangible values of water, recreation, and wildlife such as the esthetic enjoyment of natural beauty.

(b) The area within National Forests boundaries is equivalent to some 10 percent of the area of the continental United States. Over 40 percent 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. These resources offer the most favorable basis for developing prosperous and vigorous local economies and communities.

(c) The National Forests supplied 11.7 billion board feet of timber in fiscal year 1972 to the Nation's forest products industries. This is expected to increase to 12.2 billion board feet in 1973. 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. In some areas, the dependence of local industry on National Forest timber is almost 100 percent. Without this supply some small communities could not exist.

(d) About 3.3 million head of domestic livestock (mature animals) are grazed on the National Forests and Grasslands. In many local areas this is a major industry. Without such Federal rangelands the economic activity would be drastically curtailed from currently depressed levels.

(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. A dependable water supply is an important prerequisite for economic and community development.

(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. Hunting and fishing constitute an important supplementary source of income for numerous communities, many of which are economically depressed.

(g) They provide opportunities for healthful outdoor recreation, with a minimum of restrictions. Outdoor recreation is an important source of supplementary income in most areas as well as providing recreational opportunities for local residents. In some relatively depressed communities it becomes even more important.

2. Forestry research. The Forest Service conducts research in the entire field of forestry and the management of forest and related lands. 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 and that will not have undesirable consequences on environmental quality and productivity.

(b) To develop new and improved practices that will lead to sounder uses of forests in other public and private ownerships, more efficient and profitable utilization and marketing of forest products, and improvement of the environment on these lands.

Results of research are made available to owners of private forest and rangelands, to public agencies which administer such lands, to forest product industries, and to consumers. Research in the growing, harvesting, processing, and marketing of forest products results in increased competitiveness for forest products. Contribution of the forest resource to the economic and social welfare is made more effective. Research in the management of resources for water, forage, wildlife, and recreation has similar effects as a basis for community development and satisfaction of national demands.

3. Cooperation with State and private forest landowners. The Forest Service cooperates with State agencies and private owners to improve multiple use management of non-Federal forest lands. Technical help is also provided by the Forest Service in cooperation with the State agencies to the processors of forest products. Opportunities exist for greatly increasing the contribution of these lands in enhancing the environment and to the social and economic welfare of the Nation as a whole and more particularly through rural development activities to improve the economic levels, employment opportunities, and general welfare of the people living in these areas. Specific programs are designed to:

(a) Better protect the 574 million acres of State and privately owned forests and critical watersheds against fires, insects, and diseases.

(b) Encourage better forest practices, for resource conservation, betterment, and profit, on the 393 million acres of non-Federal forest land.

(c) Aid in the distribution of planting stock for forest and windbarrier plantings on non-Federal lands.

(d) 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.

(e) The Forest Service also provides assistance to States for forestation and tree improvement under Section 401 of the Agricultural Act of 1956 (16 USC 568e-568g), through the State forester, including advice, technical assistance, and financial contributions.

(f) Provide assistance to State and local communities in an intensified development planning effort to improve both the economic situation and environmental quality in rural America and to enhance environmental values associated with use of trees in urban and community areas.

Other work related to forestry includes:

4. Insect and disease control. Activities to suppress and control destructive forest insects and diseases to protect timber, recreation, scenic and other environmental values. Protection is provided to Federal lands and, in cooperation with the States, to non-Federal forest lands.

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 (16 USC 1001-1007) 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 the Water Resources Planning Act (42 USC 1962) and 16 USC 1006 mentioned above. Such studies can form part of the basis of plans for regional and community economic development.

   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 (33 USC 701), 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.

   The Forest Service cooperates with the Soil Conservation Service and other Federal, State, and local agencies or groups in the emergency treatment of watersheds impaired by fire or other similar disasters to prevent the loss of life or serious flood and sediment damages. This work is performed under the authority of Section 216 of the Flood Control Act of 1950 (33 USC 701b-1) with funds allotted to the Forest Service by the Soil Conservation Service. This section of the Act provides that not more than $300,000 of the regular appropriations for Flood Prevention may be expended during any one fiscal year for emergency measures.

   Generally, this work is performed with funds allotted to the Forest Service by the Soil Conservation Service. Forest Service funds are used to finance land treatment and certain other measures on small watershed projects located on National Forest lands.

6. Job Corps Civilian Conservation Centers. The Forest Service operates 20 Job Corps Civilian Conservation Centers on National Forests throughout the United States under agreement with the Department of Labor. 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 Department of Labor. There are 41 to 60 permanent staff assigned to each Center based upon enrollee capacity of 112 to 224. Total capacity of all Centers is 3,848 corpsmen and Centers operate on a 24-hour, seven-day week basis. Both human and natural resources are being upgraded through these Civilian Conservation Centers, as young men improve their education and job skills in preparation for a more productive life.

7. Youth Conservation Corps. The Forest Service and the Department of the Interior share equally in a program authorized by the Act of August 13, 1970, as amended, (84 Stat.1319). This work-education program provides: Gainful employment of America's youths from a variety of economic, racial and social backgrounds, ages 15 through 18, during the summer months in a healthful outdoor atmosphere; further development and maintenance of the natural resources of the United States; and an opportunity for understanding and appreciation of the Nation's natural environment and heritage. The work projects include recreation facilities maintenance and construction, wildlife habitat improvement, timber stand improvement, trail maintenance and construction, and visitor information services. The residential program includes both urban and rural youth who reside away from, as well as adjacent to, public lands. The non-residential program includes those youth who reside adjacent to public lands.

8. 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 trees 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.

9. 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.

10. 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 requires that the lands and waters acquired be primarily of value for outdoor recreation. Means are provided for expanding outdoor recreation opportunities and protecting and improving environmental quality including natural beauty.

11. 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 or a nuclear accident in rural areas of the United States.

IMPLEMENTATION OF NATIONAL ENVIRONMENTAL POLICY ACT

Federal agencies are authorized and directed by the National Environmental Policy Act of 1969 (PL 91-190) to use all practical means and measures, consistent with other essential considerations of national policy, to carry out the purposes of the Act to protect and enhance the quality of the environment. The Forest Service is an environmental agency and most activities, in the broadest sense, are directed towards the protection and enhancement of the environment. The Act supplements and reinforces previous authorities. Section 102(2)(C) of the Act requires environmental statements on proposed major Federal actions significantly affecting the environment. The objective of this section is to build into all decisionmaking processes an appropriate and careful consideration of the environmental aspects of the proposed action. It assists and encourages agencies to implement not only the letter, but the spirit of the Act.

In addition to consideration of environmental factors in the planning and decisionmaking process in a wide array of Forest Service activities NEPA also provides a formalized procedure for informing and taking account of comments from other agencies, individuals, and groups having expertise on the subject area under consideration.

The Forest Service has recently completed a study of the cost and manpower requirements of implementing the Act. The study shows that in fiscal year 1972, the Forest Service spent approximately $13 million implementing NEPA. It is estimated that $5 million would have been spent on impact surveys and related activities normally taken by the Forest Service that would have been done even without passage of NEPA. In fiscal year 1972, the costs for implementing NEPA were approximately 2 percent of the Forest Service budget. However, continued need for increased quality as well as quantity will cause the costs to at least double in fiscal year 1974, according to careful projections and estimates. Complexity is increasing, the

volume of cases is sharply upward, and the scope and quality of statements must be improved. The entire planning and decisionmaking process of the Forest Service is involved.

Cost Summary

Fiscal Year 1972:	Amount (in millions)	Man-Years
Cost of implementing NEPA	$13	712
Related costs and man-years incurred without NEPA	5	273
Increased cost to implement NEPA	8	439
Fiscal Year 1974:		
Estimated cost to implement NEPA	$28	1,533
Related costs and man-years incurred without NEPA	6	273
Increased cost to implement NEPA	22	1,260

The fiscal year 1974 estimated cost for various categories of work is as follows:

Environmental analysis and reports	$16,240,000
Draft and final environmental statements	3,080,000
Input to other Federal agencies, review and comment on other agency statements, and assistance to State and local people	2,800,000
Training, monitoring, inspecting, reporting, and other related activities	5,880,000
Total	28,000,000

To accomplish the purposes of the Act and to meet Agency responsibilities and objectives, Forest Service policy is that the responsible official will not make a decision on a proposed action until the environmental impacts are assessed in detail. Alternative actions that will reduce adverse impacts or enhance environmental quality will be thoroughly explored. In the implementation of this policy, an environmental analysis will be made for proposed uses, activities, and plans concerning or involving National Forest System lands. The Forest Service is also following the same procedures for other activities where there are potentially major and significant environmental impacts or public controversy.

These analyses address the points required in NEPA. Along with established criteria, guidelines, and knowledge of potential or existing controversy, the analysis helps the responsible official determine if the proposal is a major Federal action affecting the environment significantly enough to require an environmental statement.

NEPA principles and requirements are being built into the land use planning and other planning processes. In addition, careful monitoring and evaluation is essential to fulfill the requirements of the task.

Prior to NEPA, the Forest Service prepared "impact" reports on proposed actions; these examined environmental impacts and mitigating measures of proposals. However, NEPA requires agencies to examine a wider range of alternatives, explores cumulative and secondary effects to a greater extent, and further formalize reviews with other agencies and the public.

ORGANIZATIONAL STRUCTURE

The Forest Service maintains its central office in Washington with program activities decentralized to 9 regional offices, 129 forest supervisors' offices, 726 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

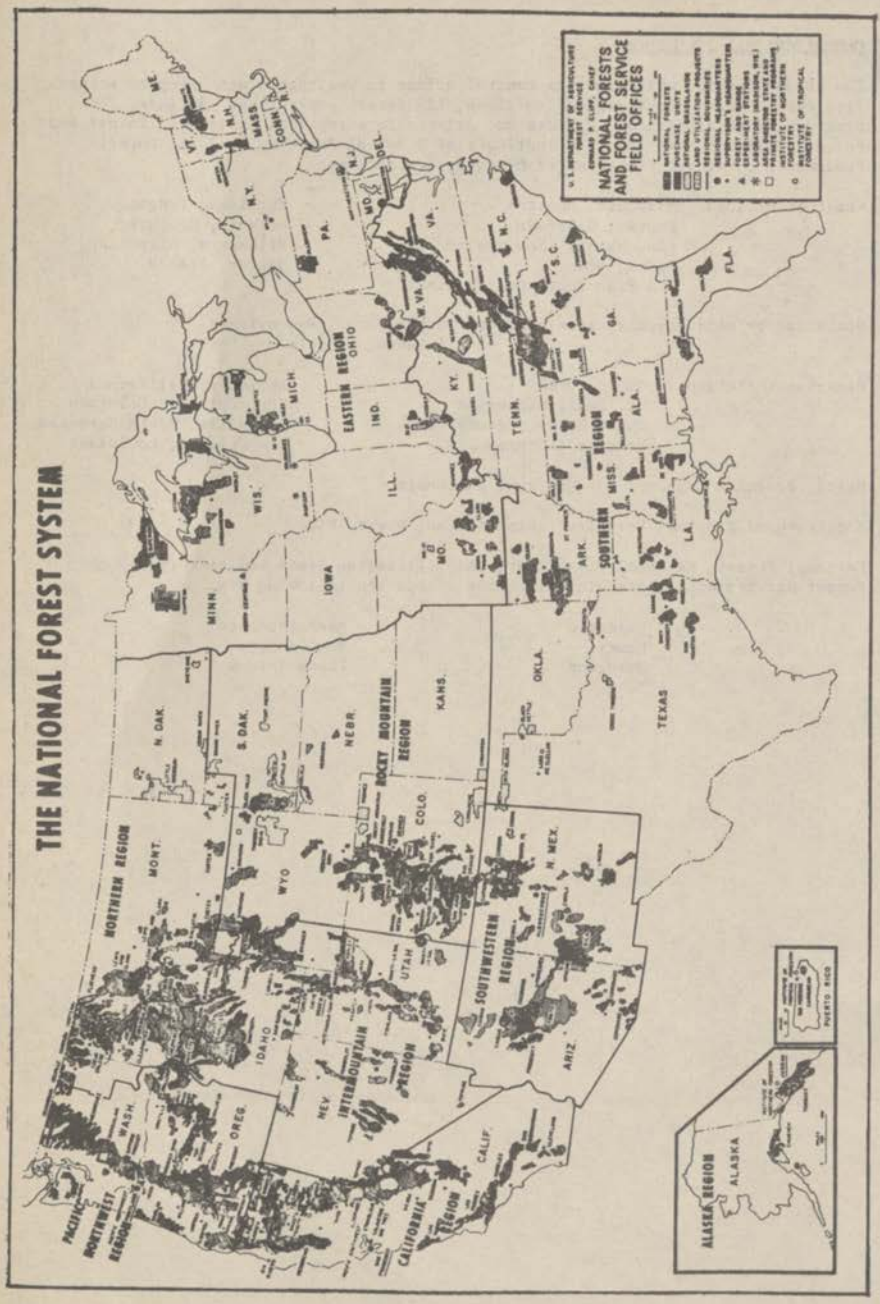
Experiment stations: Ogden, Utah
St. Paul, Minnesota
Upper Darby, Pennsylvania
Portland, Oregon
Berkeley, California
Fort Collins, Colorado
Asheville, North Carolina
New Orleans, Louisiana

Forest Products Laboratory: Madison, Wisconsin

Institute of Tropical Forestry: Rio Piedras, Puerto Rico

National Forest, National Grasslands, and Utilization lands administered by the Forest Service are located in all States except the following six:

Delaware
Hawaii
Maryland
Massachusetts
New Jersey
Rhode Island


THE NATIONAL FOREST SYSTEM
NATIONAL FORESTS AND FOREST SERVICE FIELD OFFICES
NORTHERN REGION
ROCKY MOUNTAIN REGION
EASTERN REGION
SOUTHERN REGION
PACIFIC NORTHWEST REGION
INTERMOUNTAIN REGION
SOUTHWESTERN REGION
CALIFORNIA REGION
ALASKA REGION
ALASKA
PUERTO RICO
VIRGIN ISLANDS
MONT.
N. DAK.
S. DAK.
MINN.
WYO.
NEBR.
KANS.
COLO.
OKLA.
TEXAS
IOWA
WIS.
ILL.
MO.
ARK.
MICH.
IND.
KY.
TENN.
MISS.
ALA.
GA.
FLA.
S.C.
N.C.
VA.
W. VA.
PA.
N.Y.
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DEL.
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R.I.
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ME.
WASH.
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IDAHO
NEV.
UTAH
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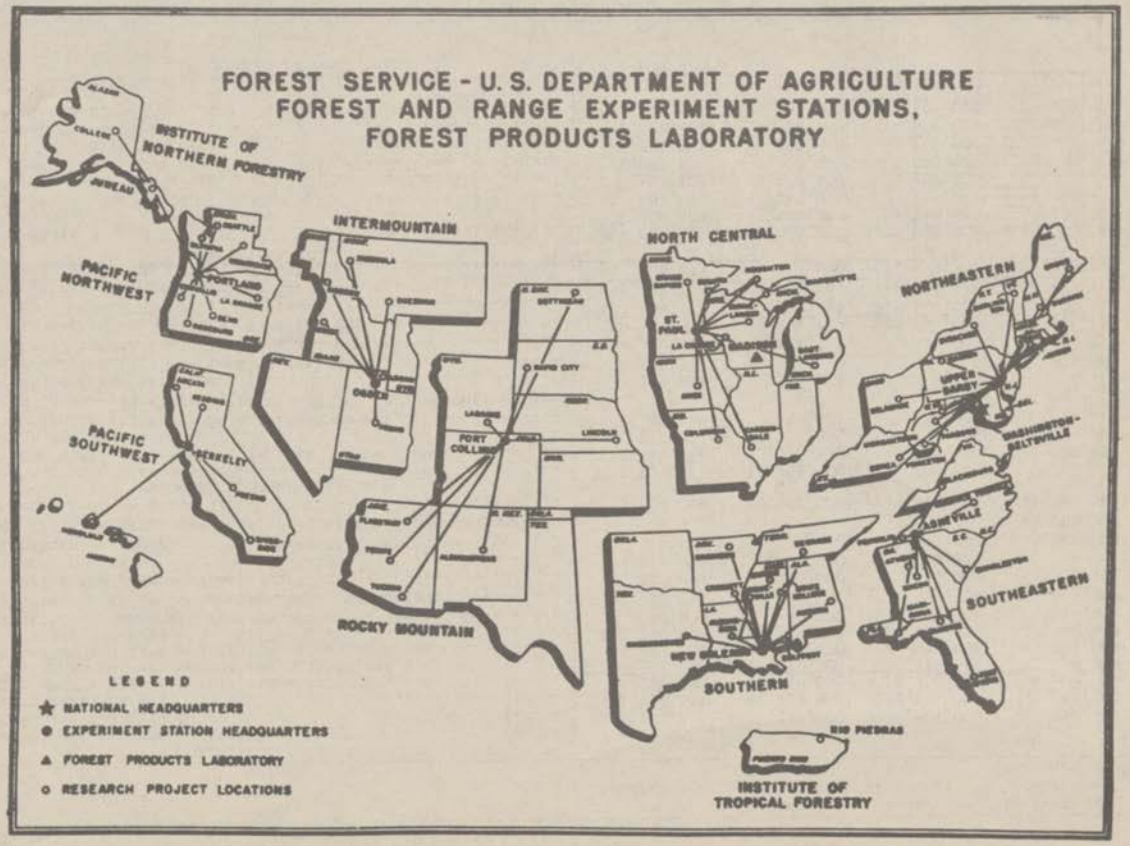
CALIF.


FOREST SERVICE - U. S. DEPARTMENT OF AGRICULTURE
FOREST AND RANGE EXPERIMENT STATIONS,
FOREST PRODUCTS LABORATORY
INSTITUTE OF NORTHERN FORESTRY
PACIFIC NORTHWEST
INTERMOUNTAIN
NORTH CENTRAL
NORTHEASTERN
PACIFIC SOUTHWEST
ROCKY MOUNTAIN
SOUTHERN
SOUTHEASTERN
INSTITUTE OF TROPICAL FORESTRY
LEGEND
NATIONAL HEADQUARTERS
EXPERIMENT STATION HEADQUARTERS
FOREST PRODUCTS LABORATORY
RESEARCH PROJECT LOCATIONS

Summary of Estimated Appropriations and Receipts

Page No.	Item	Available 1972 1/	Estimated available 1973 2/	Budget estimates 1974	Increase or decrease 1974 over 1973
	Appropriated Funds				
	Forest protection and utilization:				
20	Forest land management	$301,182,617	$255,179,000	$246,324,000	-$8,855,000
73	Forest research	54,581,422	61,140,000	57,275,000	-3,865,000
102	State and private forestry cooperation	27,759,000	32,760,000	23,760,000	-9,000,000
	Total, Forest protection and utilization	383,523,039	349,079,000	327,359,000	-21,720,000
116	Construction and land acquisition 3/	35,703,200	48,581,900	25,498,000	-23,083,900
132	Forest roads and trails 3/	148,740,000	158,840,000	87,700,000	-71,140,000
137	Acquisition of lands for National Forests, Special Acts	80,000	80,000	94,000	+14,000
139	Acquisition of lands to complete land exchanges	26,035	- -	55,300	+55,300
115	Cooperative range improvements	700,000	700,000	700,000	- -
140	Assistance to States for tree planting 3/	1,028,000	1,020,000	1,020,000	- -
142	Construction and operation of recreation facilities	- -	- -	3,546,000	+3,546,000
143	Scientific activities overseas (special foreign currency program)	- -	- -	1,000,000	+1,000,000
145	Youth conservation corps 3/	3,500,000	3,500,000	10,000,000	+6,500,000
	Permanent Appropriations				
157	Expenses, brush disposal 3/	18,008,351	18,000,000	18,000,000	- -
156	Roads and trails for States, National Forests Fund	22,661,542	33,871,106	40,900,000	+7,028,894
158	Forest fire prevention 3/	211,071	215,000	250,000	+35,000
159	Restoration of forest lands and improvements 3/	12,220	50,000	50,000	- -
160	Payment to Minnesota (Cook, Lake, and St. Louis Counties) from the National Forests Fund	259,038	259,038	259,038	- -
161	Payments to counties, National Grasslands	529,502	523,750	548,750	+25,000
162	Payments to school funds, Arizona and New Mexico	69,316	114,043	115,000	+957
163	Payments to States, National Forests Fund	56,648,064	84,676,129	102,012,000	+17,335,871
	Total	671,699,378	699,509,966	619,107,088	-80,402,878
	Deduct permanent appropriations shown above	98,399,104	137,709,066	162,134,788	+24,425,722
	Total (excluding permanent appropriations)	573,300,274	561,800,900	456,972,300	-104,828,600
	Receipts 4/				
	Timber sales	$330,026,026	$398,000,000	$355,000,000	-$43,000,000
	Grazing	4,858,709	5,960,000	6,240,000	+280,000
	Power	205,473	210,000	210,000	- -
	Recreation	3,561,279	4,100,000	4,100,000	- -
	Land uses	1,093,083	1,200,000	1,200,000	- -
	Mineral leases and permits	4,984,141	5,700,000	5,700,000	- -
	Admission and user fees	3,198,184	4,500,000	4,900,000	+400,000
	National grasslands and land utilization	2,079,805	2,095,000	2,195,000	+100,000
	Total receipts	350,006,700	421,765,000	379,545,000	-42,220,000

(Footnotes on next page)

1/ Includes Second Supplemental Appropriation Act, 1972 (PL 92-306, 5/27/72)--increased pay costs, $3,751,000; increased health benefits, $1,166,000; fighting forest fires, $46,280,000; forest fire protection, $5,000,000; cooperative law enforcement, $2,500,000; $4.6 million of trust funds used for fighting forest fires repaid in fiscal year 1973.

Includes personnel savings in Forest land management of $4,720,000 applied to fighting forest fires; $88,000 in Forest research and $31,000 in State and private forestry applied to emergency work associated with fire and flood damages.

Excludes GSA space transfers of $518,261.

2/ Excludes following: GSA space transfers of $428,000 (Forest land management, $425,000 and Forest research, $3,000) and proposed supplemental for fighting forest fires, $34,895,000.

Includes $22,105,000 in Forest protection and utilization proposed for transfer to fighting forest fires.

3/ In addition, prior year balances are available.

4/ Amounts include:

	1972	1973	1974
Suspense account, Alaska a/	$768,654	- -	- -
Suspense account, O&C lands b/	9,039,558	$11,000,000	$10,000,000

a/ Account established pending settlement of Indian rights on Tongass National Forest, Alaska. Settlement made as of April 1, 1972.

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 August 28, 1937, June 24, 1954, and August 3, 1961 (43 USC 1181f-g).

JOB CORPS CIVILIAN CONSERVATION CENTERS

(Funds transferred to Forest Service by Department of Labor)

	Available 1972		Estimate 1973		Estimate 1974	
	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)	No. of Permanent Positions	Amount (in thousands)
Center capital	4	$2,035	4	$1,400	4	$1,400
Center operations	874	23,905	887	24,505	887	24,505
Program direction	99	2,430	99	1/ 1,936	99	1/ 1,936
Total	977	28,370	990	27,841	990	27,841

NOTE: Fiscal years 1973 and 1974 estimates are based on best information available to the Forest Service as of January 8, 1973.

1/ Includes administration of union contracts.

FOREST PROTECTION AND UTILIZATION

	Forest Land Management	Forest Research	State and Private Forestry Cooperation	Total
Appropriation Act, 1973	$255,604,000 a/ b/	$61,143,000 b/	$32,760,000 b/	$349,507,000
Budget estimate, 1974	246,324,000	57,275,000	23,760,000	327,359,000
Decrease in appropriation	-9,280,000	-3,868,000	-9,000,000	-22,148,000
Adjustments in 1973:				
Appropriation Act, 1973	$255,604,000 a/ b/	$61,143,000 b/	$32,760,000 b/	$349,507,000
Transfer to General Services Administration for rental of space	-425,000	-3,000	- -	-428,000
Adjusted base for 1974	255,179,000	61,140,000	32,760,000	349,079,000
Budget estimate, 1974	246,324,000 a/	57,275,000	23,760,000	327,359,000
Decrease in appropriation	-8,855,000	-3,865,000	-9,000,000	-21,720,000

a/ In addition, $700,000 is available by transfer from Cooperative Range Improvements.

b/ Includes $22,105,000 proposed for transfer to fighting forest fires (Forest land management, $8,855,000; Forest research, $4,250,000; and State and private forestry cooperation, $9,000,000).

SUMMARY OF INCREASES AND DECREASES
(On basis of adjusted appropriation)

	1973 estimate	1974 estimate	Increase or decrease
Forest land management:			
Sales administration and management--To continue normal ten-year timber inventory cycle and continue to implement shift toward updating annual plans ($882,000); to provide silvicultural examinations of an additional 396,000 acres ($313,000); and to finance increased costs of timber sales administration ($200,000)	$68,074,000	$69,469,000	+$1,395,000
Wildlife habitat management--Increase is for the coordination of timber activities with the biological needs and requirements of fish and wildlife species inhabiting the areas of work activity	7,724,000	7,802,000	+78,000
Soil and water management--To provide scientific soils, geology, and hydrology services support for timber management, transportation planning, recreation, fire rehabilitation, range management, and pollution abatement program	9,734,000	10,123,000	+389,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1973 estimate	1974 estimate	Increase or decrease
Forest land management--continued			
Mineral claims, leases, and special uses--Increase of $414,000 for minerals management and $596,000 for action on new applications, amendments, transfers, and inquiries from prospective or present special uses permittees	5,657,000	6,667,000	+1,010,000
Land classification, adjustments, and surveys--Increases as follows: $553,000 for landline location and status to provide for searching, remonumentation and establishing corners, marking and posting of property lines, and preparation and maintenance of status records; $292,000 for land classification to permit study and adjustment of land use patterns; $98,000 for land exchange; and $104,000 for mapping needs on the Sawtooth National Recreation Area in Idaho and areas in Alaska pursuant to the Alaska Native Claims Settlement Act	8,038,000	9,085,000	+1,047,000
Forest fire protection--To increase prevention and initial attack activities and for intensified protection of Sawtooth National Recreation Area in Idaho	32,001,000	32,127,000	+126,000
Maintenance of improvements for fire and general purposes (including communications)--For maintenance of water and sanitation systems constructed under the pollution abatement program, and other improvements which support all Forest Service activities	7,795,000	8,576,000	+781,000
Payments to Employees' Compensation Fund--To increase amount needed to reimburse Employees' Compensation Fund	2,131,000	2,300,000	+169,000
Reforestation and stand improvement--A decrease of $8,566,000 in this appropriation item is proposed. There will be an increase for reforestation and stand improvement in the Cooperative Work, Forest Service trust fund of $2,821,000	31,702,000	23,136,000	-8,566,000
Recreation-public use--Decrease of $10,000 is proposed. This amount was appropriated in 1973 over the budget request, but will not be obligated. The 1974 program will be carried out at the same level planned for 1973. In addition, there is a request of $3,546,000 for Construction and Operation of Recreation Facilities	41,353,000	41,343,000	-10,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1973 estimate	1974 estimate	Increase or decrease
Forest land management--continued			
Rangeland management--Decrease of $274,000 is proposed.	14,561,000	14,287,000	-274,000
Forest advanced logging and conservation--This program is not proposed to be carried out in 1973 or in 1974.	5,000,000	- -	-5,000,000
Water resource development related activities	4,022,000	4,022,000	- -
Fighting forest fires	4,275,000	4,275,000	- -
Insect and disease control	10,585,000	10,585,000	- -
Cooperative law enforcement program	2,527,000	2,527,000	- -
Subtotal, Forest land management	255,179,000	246,324,000	-8,855,000
Forest research:			
Timber management research	12,606,000	11,746,000	-860,000
Watershed management research	6,616,000	6,266,000	-350,000
Wildlife habitat and range research	4,588,000	3,473,000	-1,115,000
Forest recreation research	1,353,000	1,103,000	-250,000
Fire and atmospheric sciences research	7,878,000	7,378,000	-500,000
Forest insect and disease research	10,520,000	9,830,000	-690,000
Forest products utilization research	9,231,000	9,131,000	-100,000

In fiscal year 1973 the above amounts shown as proposed decreases in fiscal year 1974 were appropriated over the budget request. These funds are proposed for transfer to Fighting forest fires in 1973 and are not being requested in fiscal year 1974.

Forest engineering research	1,478,000	1,478,000	- -
Forest survey	3,433,000	3,433,000	- -
Forest products marketing research	2,030,000	2,030,000	- -
Forest economics research	1,407,000	1,407,000	- -
Subtotal, Forest research	61,140,000	57,275,000	-3,865,000

SUMMARY OF INCREASES AND DECREASES--continued
(On basis of adjusted appropriation)

	1973 estimate	1974 estimate	Increase or decrease
State and private forestry cooperation:			
Cooperation in forest fire control--A decrease of $9 million is proposed to bring the 1974 program to the same level as carried out in 1973.	25,000,000	16,000,000	-9,000,000
Cooperation in forest tree planting	325,000	325,000	- -
Cooperation in forest management and processing	5,000,000	5,000,000	- -
General forestry assistance	2,435,000	2,435,000	- -
Subtotal, State and private forestry cooperation	32,760,000	23,760,000	-9,000,000
Total	349,079,000	327,359,000	-21,720,000

PROJECT STATEMENT
(FY 1973-1974--on basis of adjusted appropriation)
(FY 1972--on obligation basis)

Project	1972	1973 estimate	1974 estimate	Increase or decrease
FOREST LAND MANAGEMENT:				
National Forest protection and management:				
(1) Timber resource management:				
(a) Sales administration and management	$62,241,230	$68,074,000	$69,469,000	+$1,395,000
(b) Reforestation and stand improvement	28,147,587	31,702,000	23,136,000	-8,566,000
(2) Recreation-public use	41,788,387	41,353,000	41,343,000	-10,000
(3) Wildlife habitat management	6,447,612	7,724,000	7,802,000	+78,000
(4) Rangeland management	15,282,047	15,261,000	14,987,000	-274,000
(5) Soil and water management	9,687,315	9,734,000	10,123,000	+389,000
(6) Mineral claims, leases, and special uses	7,602,897	5,657,000	6,667,000	+1,010,000
(7) Land classification, adjustments, and surveys 1/	7,954,944	8,038,000	9,085,000	+1,047,000
(8) Forest fire protection	30,378,530 4/	32,001,000	32,127,000	+126,000
(9) Maintenance of improvements for fire and general purposes (including communications)	8,656,700	7,795,000	8,576,000	+781,000
(10) Payments to Employees' Compensation Fund	1,622,187	2,131,000	2,300,000	+169,000
(11) Forest advanced logging and conservation	- -	5,000,000	- -	-5,000,000
Subtotal	219,809,436	234,470,000	225,615,000	-8,855,000
Amount advanced from Cooperative Range Improvements	-700,000	-700,000	-700,000	- -
Subtotal, National Forest protection and management	219,109,436	233,770,000	224,915,000	-8,855,000
(12) Water resource development related activities	3,806,094	4,022,000	4,022,000	- -
(13) Fighting forest fires	60,508,114 2/	4,275,000	4,275,000	- -
(14) Insect and disease control 3/	9,496,445	10,585,000	10,585,000	- -
(15) Cooperative law enforcement program	84,484 4/	2,527,000	2,527,000	- -
Total, Forest Land Management	293,004,573	255,179,000	246,324,000	-8,855,000
FOREST RESEARCH:				
Forest and range management research:				
(16) Timber management research	12,078,443	12,606,000	11,746,000	-860,000
(17) Watershed management research	6,321,657	6,616,000	6,266,000	-350,000
(18) Wildlife habitat and range research	3,640,707	4,588,000	3,473,000	-1,115,000
(19) Forest recreation research	1,127,625	1,353,000	1,103,000	-250,000
Subtotal, Forest and range management research	23,168,432	25,163,000	22,588,000	-2,575,000

Project	1972	1973 estimate	1974 estimate	Increase or decrease
FOREST RESEARCH--continued				
Forest protection research:				
(20) Fire and atmospheric sciences research	4,936,204	7,878,000	7,378,000	-500,000
(21) Forest insect and disease research	9,231,773	10,520,000	9,830,000	-690,000
Subtotal, Forest protection research	14,167,977	18,398,000	17,208,000	-1,190,000
Forest products and engineering research:				
(22) Forest products utilization research	9,006,966	9,231,000	9,131,000	-100,000
(23) Forest engineering research	1,442,270	1,478,000	1,478,000	- -
Subtotal, Forest products and engineering research	10,449,236	10,709,000	10,609,000	-100,000
Forest resource economics research:				
(24) Forest survey	3,388,680	3,433,000	3,433,000	- -
(25) Forest products marketing research	2,013,315	2,030,000	2,030,000	- -
(26) Forest economics research	1,255,871	1,407,000	1,407,000	- -
Subtotal, Forest resource economics research	6,657,866	6,870,000	6,870,000	- -
Total, Forest Research	54,443,511	61,140,000	57,275,000	-3,865,000
STATE AND PRIVATE FORESTRY COOPERATION:				
(27) Cooperation in forest fire control	19,941,818	25,000,000	16,000,000	-9,000,000
(28) Cooperation in forest tree planting	311,927	325,000	325,000	- -
(29) Cooperation in forest management and processing	4,973,893	5,000,000	5,000,000	- -
(30) General forestry assistance	2,314,563	2,435,000	2,435,000	- -
Total, State and Private Forestry Cooperation	27,542,201	32,760,000	23,760,000	-9,000,000
Total obligations or estimate	374,990,285	349,079,000	327,359,000	-21,720,000
Unobligated balance brought forward	-11,765 4/	- -		
Unobligated balance carried forward	7,297,072	- -		
Unobligated balance lapsing	1,247,447	- -		
Total available or estimate	383,523,039	349,079,000		
Transfer to General Services Administration for space rental	518,261	428,000		
Transfer from other accounts	-4,600,000	- -		
Total, appropriation or estimate	379,441,300	349,507,000		

1/ Includes allocations to the Department of the Interior, Bureau of Land Management: 1972, $270,000; 1973, $270,000; 1974, $270,000

2/ Excludes proposed supplemental for fighting forest fires.

3/ Includes allocation to the Department of the Interior, Bureau of Land Management: 1972, $693,000; 1973, $656,000; 1974, $642,000

4/ Excludes 1972 unobligated balances carried forward--Forest fire protection $4,881,556
Cooperative law enforcement 2,415,516
7,297,072

RECEIPTS

Mrs. HANSEN. Please insert in the record a tabulation of the receipts your activities have generated by various classifications for fiscal year 1972 and 1973 and what you project for fiscal year 1974.

Mr. MCGUIRE. All right.

(The information follows:)

Receipts

	FY 1972 Actual	FY 1973 Estimated (in thousands)	FY 1974 Estimated
National Forests Fund:			
Timber sales	$321,015	$387,000	$345,000
Grazing	4,856	5,960	6,240
Power	205	210	210
Recreation	3,561	4,100	4,100
Land uses	1,068	1,200	1,200
Mineral leases and permits	4,984	5,700	5,700
Admission and user fees	3,198	4,500	4,900
Subtotal	338,887	408,670	367,350
Oregon and California Grant Lands (primarily timber)	9,040	11,000	10,000
National Grasslands and Land Utilization:			
Timber sales	4	15	15
Grazing	656	660	660
Power	2	2	2
Land uses	22	22	22
Mineral leases and permits	1,391	1,391	1,491
Admission and user fees	5	5	5
Subtotal	2,080	2,095	2,195
Total receipts	350,007	421,765	379,545

TIMBER SALES RECEIPTS

Mrs. HANSEN. I notice you estimate $355 million in timber sales receipts in fiscal year 1974. This is a reduction of $43 million from fiscal year 1973. Please discuss for the committee the current general situation with regard to your revenue-producing activities.

More particularly, is this reduction one which you attribute to requiring the operator to be responsible for the roadbuilding? As I pointed out to you yesterday, 25 percent of this $43 million is what will be the reduction in the revenue to the counties which receive them in lieu of taxes. So you are literally robbing Peter to pay Paul.

Mr. MCROREY. Madam Chairman, the values and prices are projected on a comparable basis in the past year for the future year. You are perfectly right that with respect to our roads program, where we are proposing to shift some $40 million to $50 million of road construction to the timber purchaser, this would be a direct reflection in terms of reduced receipts into the Treasury in a like amount over the next several years.

Mrs. HANSEN. Did you consult the various school authorities in the States before you prepared this budget?

Mr. MCROREY. No, we did not.

Mrs. HANSEN. Has anybody done it?

Mr. MCROREY. Not to my knowledge.

Mr. WYATT. Would you yield at that point?

Mrs. HANSEN. Yes.

EFFECTS OF SHIFT TO TIMBER PURCHASER BUILT ROADS

Mr. WYATT. I would like to ask the Chief at this point in the record—and this is appropriate—if the reduction in the budgeted amounts for forest roads and trails, which is based on the assumption that the cost of the road construction can be transferred from the Federal budget to the purchasers, can be done without any adverse effect on the supply for 1974?

Mr. MCGUIRE. We are not certain to what extent we can actually make the switch. As you know, we have a number of rather remote areas where road construction costs are high and where timber volumes are low. They are marginal producing areas.

If the main roads, particularly, must be built by the timber purchaser, it seems to us likely that in many instances there will not be enough value in the timber to carry the cost of the road.

Mr. WYATT. In other words, some areas won't support the road costs that are being transferred. Is that the problem?

Mr. MCGUIRE. That is the problem.

Mr. WYATT. So it would seem to me that it's not very realistic to expect that you are going to be able to really transfer the road costs

to the purchasers and proceed with your sales program on the basis that you hope to.

Mr. McGuire. That is the problem, Mr. Wyatt.

Mrs. Hansen. Would you call this a budgetary dream?

Mr. McGuire. We don't know precisely what the effect will be because the effects will be drawn out over possibly a 2-year period. Some effects will begin to show up in fiscal 1974, but the full effects won't be felt until the later years.

Mr. Wyatt. Is this new policy not apt to reduce the amount of the allowable cut that you can sell?

Mr. McGuire. It will not change the allowable cut. It will change the volume of timber that we can offer.

Mr. Wyatt. In other words, it makes it less certain that you can cut the allowable cut?

Mr. McGuire. That is correct.

Mr. Wyatt. I would be interested, and I think the chairman would, too—as the year progresses—if you see specific evidence of this transfer affecting your sales program, we would like to know about it.

Mrs. Hansen. I want to point out to Mr. McGuire another thing that Mr. OMB in his inefficient wisdom has no knowledge of. Most of the timber sales are in very rural areas. The operators are not going on to State highways with their timber. They are going on to county roads and these county roads aren't generally in very good shape.

Take Jefferson County in the State of Washington where you have a sizable harvest in the Olympic National Forest. Two things are going to happen. Their schools revenues are going to go down. Secondly, the road revenues will be reduced, in spite of heavy loads month in and month out in climate and terrain where road building is not easy and is not inexpensive. The maintenance costs are going to escalate and there is going to be no provision for this increased cost.

What the budget is doing is shifting another burden—that has nothing to do with revenue sharing—onto the counties that are rather ill-equipped in certain areas to deal with them.

Mr. Wyatt. Chief, was the possible effect on the sales program pointed out to the OMB examiners? Was this switch of the road costs from the Federal budget to the purchasers pointed out to them?

Mr. McGuire. Yes, it was.

COUNTY DISTRIBUTION OF 25 PERCENT PAYMENTS

Mrs. Hansen. Will you provide for the committee a list of the counties in the United States receiving 25 percent Federal forest funds and the amounts for the past 5 years?

Mr. McGuire. We would be glad to provide that.

(The information follows:)

Forest Service
Payments to States from National Forests Fund
(Note: Year shown is year of payment to State based on receipts during the prior year)

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Alabama:					
Bibb	26.4	21.1	16.1	21.0	18.7
Calhoun	6.7	5.3	4.0	5.3	4.7
Chilton	9.2	7.4	5.7	7.4	6.6
Clay	29.0	23.1	17.4	22.9	20.5
Cleburne	34.4	27.5	21.3	27.9	24.7
Covington	6.8	33.4	43.6	50.4	51.4
Dallas	2.2	1.7	1.3	1.7	1.5
Escambia	3.6	17.9	23.3	26.9	27.4
Franklin	.5	.5	.5	.8	.5
Hale	12.4	9.9	7.5	9.9	8.8
Lawrence	27.7	28.7	27.6	45.6	29.9
Macon	3.9	3.3	8.8	2.1	3.5
Perry	14.4	11.5	8.7	11.4	10.2
Talladega	18.1	14.5	11.1	14.5	13.1
Tuscaloosa	3.7	3.0	2.3	3.0	2.6
Winston	27.3	28.4	27.3	45.1	29.6
Total, Alabama	226.2	237.2	226.4	295.9	253.6
Alaska	517.6	574.8	1,080.9	1,052.2	882.1
Arizona:					
Apache	46.8	149.5	101.7	72.2	114.2
Cochise	16.2	18.1	18.5	24.5	24.9
Coconino	191.2	510.3	463.7	378.0	814.6
Gila	38.2	43.3	46.6	60.6	82.3
Graham	12.9	14.4	14.7	19.8	20.1
Greenlee	68.1	229.1	142.0	96.6	154.7
Maricopa	15.2	17.1	18.5	23.7	32.3
Mohave	1.3	3.8	3.2	2.1	6.0
Navajo	70.0	150.0	190.5	164.6	247.7
Pima	12.4	13.9	14.1	19.1	19.4
Pinal	5.2	5.9	6.3	8.3	10.8
Santa Cruz	13.7	15.4	15.7	21.0	21.3
Yavapai	47.9	99.1	83.9	94.6	148.1
Total, Arizona	538.6	1,269.8	1,119.1	985.0	1,696.5
Arkansas:					
Baxter	6.5	9.0	8.7	8.3	8.9
Benton	.8	1.1	1.1	1.0	1.1
Conway	.7	1.0	1.0	.9	1.0
Crawford	8.9	12.2	11.8	11.2	12.1
Franklin	10.8	14.8	14.3	13.6	14.7
Garland	44.5	43.5	42.7	35.5	54.9
Hot Springs	.2	.1	.1	.1	.2
Howard	.5	.5	.5	.4	.6
Johnson	18.7	25.7	24.7	23.6	25.3
Lee	5.1	4.2	7.9	6.6	9.3
Logan	15.7	18.6	18.0	16.2	20.5
Madison	4.9	6.9	6.7	6.4	6.9
Marion	.2	.4	.6	.6	.7
Montgomery	127.0	124.2	121.5	101.0	156.4
Newton	20.8	28.5	27.5	26.2	28.2
Perry	40.5	39.6	38.8	32.2	49.9

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Arkansas (cont'd.)					
Phillips	4.3	3.5	6.7	5.6	8.0
Pike	1.0	1.0	.9	.8	1.2
Polk	81.7	80.0	78.2	65.1	100.9
Pope	19.5	26.8	25.8	24.6	26.5
Saline	22.0	21.6	21.1	17.5	27.2
Scott	149.8	146.6	143.7	119.4	185.2
Searcy	3.2	4.3	4.2	4.0	4.4
Sebastian	4.8	4.7	4.6	3.8	6.0
Stone	6.3	8.6	8.3	8.0	8.6
Van Buren	3.4	4.6	4.5	4.2	4.6
Washington	2.5	3.4	3.3	3.1	3.3
Yell	81.9	81.2	79.5	66.5	101.4
Total, Arkansas	686.0	716.8	706.6	606.4	867.8
California:					
Alpine	109.4	221.5	211.6	190.0	358.5
Amador	53.7	101.6	100.0	99.6	195.6
Butte	120.4	208.0	174.3	113.2	325.7
Calaveras	45.3	95.8	89.8	74.4	136.1
Colusa	19.8	40.9	21.2	17.2	45.6
Del Norte	563.8	992.3	662.9	782.3	899.9
El Dorado	369.0	697.7	687.7	685.1	1,348.7
Fresno	265.0	437.5	430.2	308.8	544.1
Glenn	56.0	115.8	60.0	49.7	131.4
Humboldt	305.5	739.7	479.7	535.1	668.5
Inyo	30.9	36.2	39.6	52.7	87.5
Kern	58.7	146.7	115.0	95.9	153.4
Lake	74.9	155.1	80.3	66.6	176.1
Lassen	549.3	1,050.9	825.3	474.9	1,262.8
Los Angeles	46.0	48.9	46.3	67.1	74.7
Madera	101.0	156.6	159.5	113.6	203.8
Mariposa	52.4	133.3	128.0	101.8	185.5
Mendocino	50.7	105.0	54.5	45.3	119.7
Modoc	104.3	591.8	300.4	381.9	488.8
Mono	36.0	43.7	45.4	60.2	101.5
Monterey	3.9	4.4	4.5	5.8	7.1
Nevada	113.1	198.6	196.6	148.9	262.5
Orange	2.1	1.8	2.9	4.1	5.3
Placer	220.0	390.5	384.9	299.1	493.5
Plumas	985.1	1,630.0	1,416.8	1,022.4	2,975.8
Riverside	20.0	21.3	27.1	37.3	44.3
San Bernardino	38.9	43.1	52.9	72.3	84.3
San Diego	11.4	9.4	15.5	22.0	28.2
San Luis Obispo	2.7	3.0	3.1	3.9	4.4
Santa Barbara	8.9	9.9	10.2	13.1	14.7
Shasta	533.5	956.5	1,004.0	532.4	1,057.0
Sierra	277.7	482.7	471.6	355.6	605.7
Siskiyou	1,294.0	2,013.5	1,964.3	1,593.9	2,682.7
Tehama	355.0	632.2	497.5	337.6	765.7
Trinity	1,228.5	2,062.6	1,772.1	1,651.0	2,716.6
Tulare	148.0	362.8	286.5	242.5	390.2
Tuolumne	304.4	687.6	644.5	532.1	972.5
Ventura	8.0	8.9	9.1	11.7	13.2
Yuba	37.9	63.2	58.6	44.0	103.6
Total, California	8,605.1	15,701.0	13,534.4	11,245.1	20,735.0

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Colorado:					
Alamosa	.5	1.6	.2	1.0	3.4
Archuleta	20.6	40.9	37.8	27.7	43.6
Boulder	2.2	3.5	3.0	5.4	5.1
Chaffee	2.8	7.3	7.3	3.7	6.7
Clear Creek	6.9	11.4	9.4	6.8	11.3
Conejos	5.1	17.1	2.5	11.1	36.1
Costilla	- -	.1	.1	- -	- -
Custer	1.0	2.7	2.6	1.3	2.4
Delta	3.8	6.6	5.1	5.5	6.0
Dolores	16.9	35.0	33.2	23.7	36.0
Douglas	1.7	2.0	1.8	2.8	3.6
Eagle	13.4	23.2	23.5	20.7	29.6
El Paso	1.2	1.4	1.3	2.0	2.5
Fremont	.6	1.6	1.6	.8	1.5
Garfield	11.5	20.9	19.4	18.9	26.2
Gilpin	1.0	1.6	1.4	1.6	1.9
Grand	23.6	40.6	31.6	24.0	38.5
Gunnison	20.3	51.8	30.8	30.5	33.5
Hinsdale	15.5	37.4	24.1	24.2	48.8
Huerfano	.8	2.2	2.2	1.2	2.1
Jackson	7.7	22.5	7.3	17.3	16.9
Jefferson	1.3	1.6	1.4	2.0	2.6
Lake	1.0	2.5	2.5	1.3	2.3
La Plata	19.5	39.1	37.1	26.5	40.2
Larimer	9.7	15.7	13.4	24.3	23.1
Las Animas	.1	.3	.3	.2	.3
Mesa	13.3	22.7	21.9	18.9	25.2
Mineral	14.2	37.4	15.9	23.5	60.9
Moffat	.9	2.7	1.0	2.1	2.1
Montezuma	13.3	24.1	22.9	16.3	24.8
Montrose	7.8	18.4	16.1	11.0	16.3
Ouray	3.1	7.5	6.4	4.2	6.6
Park	8.0	9.7	8.7	12.9	16.5
Pitkin	10.8	18.7	18.9	17.3	24.7
Pueblo	.2	.5	.5	.3	.5
Rio Blanco	8.0	17.0	12.0	14.6	18.2
Rio Grande	5.0	16.6	2.4	10.2	33.1
Routt	13.4	39.2	12.7	30.1	29.5
Saguache	16.3	51.2	11.7	30.1	83.0
San Juan	8.6	16.0	13.9	10.6	17.7
San Miguel	4.2	10.5	9.1	6.0	9.4
Summit	13.0	21.8	18.0	12.7	21.1
Teller	1.5	1.8	1.6	2.5	3.2
Total, Colorado	330.4	706.7	494.6	507.8	817.1
Florida:					
Baker	54.2	65.3	80.3	100.1	99.7
Columbia	53.3	64.1	78.9	98.2	97.9
Franklin	6.5	6.7	6.1	10.9	9.7
Lake	14.9	21.7	37.6	22.6	25.7
Leon	30.8	31.6	28.9	51.9	45.8
Liberty	79.2	81.2	74.1	133.3	117.7
Marion	52.8	72.3	125.5	75.1	85.0
Putman	4.7	6.4	11.1	6.6	7.5
Wakulla	49.5	50.8	46.4	83.4	73.8
Total, Florida	345.9	400.1	488.9	582.1	562.7

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
Georgia:					
Banks	.1	.1	.1	.1	.2
Chattooga	3.6	4.3	3.8	3.2	4.4
Dawson	1.5	1.7	1.5	1.3	1.8
Fannin	29.7	33.7	29.6	25.4	28.5
Floyd	1.9	2.1	1.8	1.6	1.7
Gilmer	8.2	10.1	12.9	11.4	14.0
Gordon	2.0	2.2	2.0	1.9	2.2
Greene	25.9	13.0	18.3	35.7	33.0
Habersham	11.3	12.8	11.3	9.7	10.9
Jasper	28.5	14.4	20.1	39.4	36.3
Jones	18.1	9.1	12.8	24.9	23.0
Lumpkin	16.4	18.6	16.2	13.9	15.4
Morgan	.5	.2	.3	.7	.6
Murray	11.1	12.8	11.9	10.7	13.3
Oconee	.3	.1	.2	.4	.4
Oglethorpe	4.1	2.1	2.9	5.7	5.3
Putnam	35.6	18.3	25.6	50.2	46.5
Rabun	41.0	46.3	40.4	34.7	38.3
Stephens	6.2	7.1	6.2	5.3	5.9
Towns	16.0	18.2	15.9	13.7	15.1
Union	26.8	30.6	26.7	23.0	25.5
Walker	4.4	5.3	4.6	4.1	5.1
White	12.1	13.7	12.0	10.3	11.4
Whitfield	5.8	6.2	5.4	4.6	3.4
Total, Georgia	311.0	283.1	282.5	331.9	342.0
Idaho:					
Ada	.3	.8	.7	.5	1.1
Adams	40.8	70.5	64.4	62.3	87.3
Bannock	2.6	2.8	2.9	3.1	3.5
Bear Lake	5.7	6.3	6.8	7.9	10.1
Benewah	17.9	36.2	36.6	29.0	40.5
Blaine	14.2	11.7	10.4	18.7	29.9
Boise	44.0	141.1	116.3	84.5	181.6
Bonner	104.1	232.6	186.1	149.9	279.5
Bonneville	10.2	13.3	16.0	15.0	20.6
Boundary	96.4	213.5	169.7	136.6	262.9
Butte	2.3	3.2	3.7	3.4	4.6
Camas	9.1	7.5	6.7	12.0	19.2
Caribou	8.1	8.8	9.3	10.6	12.1
Cassia	11.2	9.3	8.2	14.8	23.7
Clark	7.5	13.0	17.5	13.6	22.9
Clearwater	183.7	327.3	303.4	233.8	321.7
Custer	18.9	17.8	17.7	24.6	29.6
Elmore	36.1	105.9	87.5	67.1	141.2
Franklin	3.0	3.4	3.7	4.5	6.1
Fremont	11.1	19.3	25.8	20.0	33.8
Gem	3.1	9.8	8.1	5.9	12.6
Idaho	465.3	1,077.9	853.3	553.4	966.3
Kootenai	109.3	262.6	201.2	169.1	191.3
Latah	36.1	74.2	76.6	62.4	87.3
Lemhi	33.1	43.4	24.3	28.4	45.2
Madison	.9	1.5	2.0	1.6	2.7
Oneida	2.1	2.1	2.2	2.7	3.3
Power	1.0	.8	.8	1.3	2.0
Shoshone	447.4	985.3	879.9	726.4	926.7
Teton	1.9	3.3	4.3	3.4	5.7
Twin Falls	2.7	2.2	1.9	3.5	5.6
Valley	127.8	300.8	258.6	215.6	380.4
Washington	10.5	18.2	16.6	16.0	22.5
Total, Idaho	1,868.4	4,026.6	3,423.4	2,701.7	4,183.6

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
Illinois:					
Alexander	3.8	5.3	3.8	3.9	4.1
Gallatin	1.5	2.0	1.5	1.6	1.6
Hardin	3.1	4.3	3.3	3.4	3.6
Jackson	5.0	7.4	5.4	5.6	6.1
Johnson	1.9	2.9	2.2	2.4	2.5
Massac	.4	.6	.4	.4	.5
Pope	11.8	15.9	11.7	11.9	12.5
Saline	1.7	2.3	1.7	1.7	1.9
Union	4.9	6.6	4.8	4.9	5.2
Williamson	- -	.1	- -	- -	- -
Total, Illinois	34.3	47.4	35.0	36.0	38.1
Indiana:					
Brown	1.9	1.3	1.4	2.5	1.5
Crawford	1.3	.9	1.0	1.9	1.4
Jackson	2.5	1.7	1.8	3.2	1.9
Lawrence	1.7	1.2	1.2	2.2	1.3
Martin	.8	.6	.6	1.2	.8
Monroe	2.1	1.4	1.6	2.7	1.6
Orange	2.5	1.7	2.0	3.6	2.2
Perry	6.6	4.5	4.8	8.4	5.0
Total, Indiana	19.4	13.1	14.6	25.8	15.7
Kentucky:					
Bath	2.4	2.4	2.4	2.8	3.1
Bell	.1	.1	.1	.1	.1
Clay	5.6	4.7	6.4	8.0	8.8
Estill	.8	.7	.7	.8	.8
Harlan	.1	.1	.1	.1	.1
Jackson	9.2	7.9	7.8	9.5	9.5
Laurel	8.4	7.5	7.4	8.7	9.2
Lee	1.2	1.0	1.0	1.2	1.2
Leslie	6.5	5.5	6.8	8.0	8.2
Letcher	- -	- -	.1	.1	- -
McCreary	26.5	22.7	22.2	26.0	26.2
Menifee	5.3	4.5	4.5	5.4	6.8
Morgan	1.0	.9	.8	1.0	1.6
Owsley	.7	.6	.6	.7	.8
Perry	- -	- -	- -	.1	.1
Powell	2.1	1.8	1.8	2.1	2.1
Pulaski	4.2	3.6	3.8	4.5	4.5
Rockcastle	2.0	1.7	1.7	2.0	2.0
Rowan	9.0	8.0	7.9	9.4	10.5
Wayne	.1	.1	.1	.1	.1
Whitley	6.0	5.1	5.0	6.1	6.4
Wolfe	2.5	2.1	2.1	2.5	2.5
Total, Kentucky	93.8	81.2	83.3	99.0	104.7
Louisiana:					
Claiborne	20.6	23.7	18.6	20.4	41.5
Grant	150.3	172.9	134.7	148.0	301.0
Natchitoches	136.9	157.5	122.8	135.8	276.2
Rapides	109.4	126.2	98.8	108.6	220.9
Vernon	90.7	104.3	81.3	89.3	181.7
Webster	13.0	15.0	11.7	12.8	26.1
Winn	119.4	137.3	107.1	117.6	239.2
Total, Louisiana	640.2	736.9	575.1	632.7	1,286.6

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
Maine:					
Oxford	8.4	5.3	8.6	7.6	9.9
Michigan:					
Alcona	7.4	10.2	12.7	11.1	13.3
Alger	6.6	6.4	10.2	9.6	12.8
Baraga	4.5	5.2	5.3	3.3	4.9
Chippewa	12.7	12.2	19.3	18.0	24.6
Crawford	3.3	4.5	5.4	4.7	5.6
Delta	14.1	13.6	21.4	20.2	27.1
Gogebic	33.3	33.7	34.6	21.6	31.8
Grand Traverse	.1	.1	.1	.1	.1
Houghton	16.6	16.8	17.2	10.8	15.8
Iosco	7.4	10.1	12.1	10.5	12.5
Iron	19.7	19.9	20.5	12.8	18.8
Lake	13.5	9.6	11.8	10.8	12.3
Mackinac	8.5	8.3	13.0	12.1	16.2
Manistee	7.9	5.6	6.9	6.3	7.2
Marquette	.3	1.7	2.0	1.4	2.0
Mason	7.0	5.0	6.2	5.8	6.6
Mecosta	.3	.2	.3	.3	.3
Montcalm	.2	.1	.2	.1	.2
Muskegon	1.2	1.1	1.4	1.2	1.4
Newaygo	13.2	9.4	11.6	10.7	12.3
Ogemaw	1.4	2.0	2.4	2.1	2.5
Oceana	5.6	4.1	5.1	4.7	5.5
Ontonagon	27.8	29.3	30.1	18.8	27.6
Oscoda	10.2	14.0	16.8	14.6	17.5
Roscommon	-	.1	.1	.1	.1
Schoolcraft	7.2	6.9	10.9	10.3	13.6
Wexford	11.6	8.3	10.1	9.2	10.6
Total, Michigan	241.8	238.5	287.4	231.0	303.0
Minnesota:					
Beltrami	5.1	4.2	6.4	6.3	8.3
Cass	23.3	19.3	29.4	29.1	38.4
Cook	20.1	21.4	22.2	19.2	20.7
Itasca	24.6	20.4	31.0	30.7	40.0
Lake	20.9	22.3	23.3	19.9	21.6
St. Louis	28.5	30.4	31.6	27.1	29.4
Total, Minnesota	122.3	118.0	144.0	132.3	158.5
Mississippi:					
Adams	49.3	51.3	43.7	45.7	54.3
Amite	112.5	117.2	99.8	104.2	135.1
Benton	10.2	23.5	17.8	22.1	21.0
Chickasaw	22.6	20.5	27.6	22.0	18.6
Choctaw	10.0	9.1	12.2	9.7	8.2
Copiah	22.9	23.9	20.3	21.2	27.8
Forrest	37.2	27.2	46.2	36.6	48.3
Franklin	306.4	319.2	271.9	284.8	363.6
George	6.7	4.8	8.1	6.4	8.4
Greene	24.7	18.0	30.7	23.9	31.6
Harrison	45.5	33.2	56.4	44.8	59.0
Jackson	14.2	10.0	17.0	13.5	17.8
Jasper	22.4	25.3	18.9	19.0	22.8
Jefferson	25.4	26.4	22.5	23.5	29.6
Jones	24.4	17.8	30.3	24.1	31.8
LaFayette	7.2	16.7	12.6	15.9	15.1
Lincoln	25.2	26.3	22.4	23.4	29.9
Marshall	4.1	9.4	7.1	8.8	8.3

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
Mississippi (cont'd.)					
Newton	4.1	4.6	3.4	3.5	4.2
Oktibbeha	.1	.1	.1	.1	.1
Pearl River	3.9	2.8	4.8	3.8	5.0
Perry	118.4	86.4	146.8	116.9	154.2
Pontotoc	.4	.4	.5	.4	.3
Scott	113.8	128.4	95.9	96.3	115.5
Sharkey	30.4	45.0	33.1	50.9	48.8
Smith	89.2	102.3	76.5	77.1	92.9
Stone	29.4	21.4	36.4	28.9	38.1
Tippah	1.5	3.6	2.7	3.3	3.2
Union	1.6	3.6	2.7	3.4	3.2
Wayne	66.4	48.4	82.3	65.6	86.4
Wilkinson	67.3	70.0	59.6	62.4	82.3
Winston	25.0	22.7	30.4	24.4	20.5
Yalobusha	4.0	9.3	7.0	8.7	8.2
Total, Mississippi	1,326.3	1,328.8	1,347.7	1,295.2	1,594.3
Missouri:					
Barry	3.4	3.6	3.2	4.8	4.2
Bollinger	.3	.6	.9	1.1	1.1
Butler	9.8	19.5	27.8	34.8	32.9
Carter	8.5	12.4	15.6	20.5	19.0
Christian	3.3	3.5	3.1	4.5	4.0
Crawford	9.3	19.4	28.1	35.3	33.5
Dent	13.2	26.3	37.6	47.2	45.4
Douglas	2.6	2.8	2.5	3.6	3.2
Howell	3.2	3.4	3.0	4.4	3.9
Iron	19.3	38.8	55.6	69.9	66.2
Laclede	5.4	11.1	16.0	20.0	18.9
Madison	8.6	18.1	25.9	32.7	30.9
Oregon	6.2	6.6	5.8	8.5	7.6
Ozark	2.5	2.7	2.3	3.5	3.1
Phelps	10.7	21.7	31.6	41.7	41.0
Pulaski	8.2	16.4	23.9	30.1	28.9
Reynolds	18.2	36.3	51.8	65.1	60.7
Ripley	6.0	6.5	5.7	8.3	7.4
Saint Francois	.2	.3	.5	.6	.6
Saint Genevieve	2.0	4.0	5.7	7.1	6.7
Shannon	8.7	13.6	17.1	22.3	20.8
Stone	1.0	1.1	1.0	1.5	1.3
Taney	4.1	4.4	3.8	5.7	5.0
Texas	9.2	18.4	26.5	33.3	31.6
Washington	15.3	31.9	45.7	57.4	55.0
Wayne	16.7	33.4	47.9	60.2	57.2
Wright	1.4	2.8	4.1	5.1	4.8
Total, Missouri	197.4	359.4	492.7	629.4	594.8
Montana:					
Beaverhead	19.5	17.8	20.8	22.1	23.2
Broadwater	9.2	11.2	6.0	2.0	2.1
Carbon	8.6	8.8	8.9	10.0	11.2
Carter	2.6	2.7	2.6	3.0	3.3
Cascade	1.8	2.3	2.5	2.4	1.7
Chouteau	.3	.4	.4	.4	.3
Deer Lodge	2.5	2.2	3.2	2.3	3.4
Fergus	1.0	1.2	1.3	1.3	.9
Flathead	426.1	872.8	415.1	387.5	816.2
Gallatin	5.8	6.5	9.2	6.3	10.1

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
Montana (cont'd.)					
Glacier	.3	.3	.4	.3	.2
Golden Valley	.2	.3	.3	.3	.2
Granite	44.5	141.0	114.1	38.8	123.4
Jefferson	12.8	12.6	14.9	5.6	13.0
Judith Basin	3.1	3.8	4.1	4.0	2.9
Lake	36.6	74.1	33.6	32.4	72.2
Lewis and Clark	50.5	100.6	64.6	30.9	64.8
Lincoln	510.7	1,184.1	1,052.0	779.1	1,425.1
Madison	12.3	11.3	13.5	12.0	14.8
Meagher	7.0	8.6	7.4	5.9	4.6
Mineral	106.0	400.7	298.3	99.5	325.0
Missoula	123.4	392.7	271.5	114.7	326.1
Park	8.6	9.6	13.0	9.4	14.4
Pondera	1.1	1.4	1.5	1.5	1.1
Powder River	10.0	10.2	10.0	11.6	12.7
Powell	91.9	218.3	128.3	76.8	189.6
Ravalli	62.0	223.7	194.5	42.0	174.1
Rosebud	2.8	2.8	2.8	3.3	3.6
Sanders	166.1	491.7	373.7	197.4	481.2
Silver Bow	3.8	3.1	5.5	2.5	5.7
Stillwater	5.4	5.5	5.4	6.3	6.9
Sweet Grass	4.4	4.7	5.6	5.0	6.4
Teton	2.5	3.0	3.3	3.2	2.3
Wheatland	.7	.9	.9	.9	.7
Total, Montana	1,744.1	4,231.0	3,089.2	1,920.9	4,143.5
Nebraska:					
Blaine	.8	1.0	.9	1.0	1.1
Cherry	8.6	10.6	10.2	10.4	9.1
Dawes	2.9	3.6	3.5	3.6	4.2
Sioux	- -	.9	.9	.9	1.0
Thomas	6.0	7.3	7.0	7.2	8.3
Total, Nebraska	18.4	23.3	22.5	23.1	23.7
Nevada:					
Clark	.7	1.1	.8	1.1	2.0
Carson City	- -	- -	.1	.1	.3
Douglas	.6	.8	.6	.9	2.0
Elko	12.0	13.4	13.9	17.9	18.5
Esmeralda	1.8	2.1	2.3	3.0	5.0
Eureka	1.8	2.7	2.0	2.7	5.0
Humboldt	3.1	3.5	3.6	4.6	4.7
Lander	3.6	5.5	4.1	5.6	10.3
Lincoln	.4	.4	.4	.5	.5
Lyon	2.2	3.3	2.5	3.4	6.2
Mineral	3.8	5.5	4.5	6.0	10.8
Nye	21.3	31.0	24.3	32.5	56.4
Ormsby	.1	.1	- -	- -	- -
Washoe	.3	.4	.3	.4	.8
White Pine	10.9	12.2	12.5	15.9	16.5
Total, Nevada	62.4	81.9	71.8	94.6	139.1

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
New Hampshire:					
Carroll	22.6	16.9	27.6	24.4	31.9
Coos	32.6	23.3	37.7	33.2	43.4
Grafton	53.6	38.3	62.2	55.3	72.3
Total, New Hampshire	108.8	78.5	127.6	112.9	147.6
New Mexico:					
Bernalillo	1.7	1.9	1.4	1.7	3.1
Catron	86.2	277.8	184.9	147.8	215.7
Chaves	1.0	1.5	2.3	1.6	1.9
Colfax	.2	.6	.4	.5	.8
Eddy	3.5	5.1	7.6	5.5	6.3
Grant	14.8	49.5	38.7	38.3	48.3
Hidalgo	2.5	3.0	3.0	3.8	4.0
Lincoln	10.2	14.5	21.1	15.7	18.4
Los Alamos	- -	- -	1.7	2.3	4.1
McKinley	4.0	4.4	3.2	4.2	7.5
Mora	3.2	9.8	5.8	7.7	13.6
Otero	14.1	20.7	31.6	23.0	26.2
Rio Arriba	40.7	113.5	72.4	93.1	158.7
Sandoval	12.3	36.7	20.0	27.3	48.4
San Miguel	11.1	35.2	20.7	28.2	50.1
Santa Fe	6.4	20.3	11.3	15.4	27.2
Sierra	6.5	20.9	16.3	16.4	20.9
Socorro	14.4	15.6	11.2	14.5	26.1
Torrance	3.5	3.9	2.8	3.6	6.4
Taos	14.1	34.2	24.2	26.8	44.1
Valencia	7.0	7.7	5.6	7.3	13.1
Total, New Mexico	257.4	676.7	486.0	484.8	744.8
North Carolina:					
Ashe	- -	.1	.1	.1	- -
Avery	2.5	4.4	4.4	3.4	3.0
Buncombe	3.4	6.2	6.2	4.7	4.1
Burke	5.2	9.4	9.2	7.1	6.3
Caldwell	5.4	9.7	9.6	7.4	6.5
Carteret	16.8	20.6	18.8	5.7	16.1
Cherokee	8.8	15.0	15.4	16.2	18.3
Clay	6.4	11.0	11.3	11.9	13.4
Craven	17.8	22.0	20.0	6.2	17.5
Davidson	.2	.3	.4	.6	.6
Graham	11.8	20.3	20.9	22.0	24.7
Haywood	7.4	13.3	13.2	10.2	9.0
Henderson	1.9	3.5	3.5	2.6	2.3
Jackson	3.0	5.2	5.3	5.6	6.3
Jones	10.9	13.4	12.2	4.0	11.2
Macon	15.8	27.2	28.0	29.6	33.3
Madison	5.1	9.2	9.1	7.1	6.2
McDowell	7.2	13.1	12.9	10.0	8.8
Mitchell	1.8	3.2	3.2	2.5	2.2
Montgomery	7.9	10.2	13.2	23.1	20.6
Randolph	1.9	2.5	3.2	5.5	4.8
Swain	1.7	3.0	3.0	3.2	3.6
Transylvania	9.5	17.1	17.0	13.4	12.0
Watauga	- -	.1	.1	.1	.1
Yancey	3.4	6.2	6.1	4.7	4.1
Total, North Carolina	155.8	246.2	246.2	206.7	234.8

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
		(thousands of dollars)			
North Dakota:					
McHenry	.5	- -	- -	- -	- -
Ohio:					
Athens	.6	.9	.7	.8	1.4
Gallia	.4	.6	.6	.6	1.2
Hocking	1.4	2.1	1.7	1.6	2.9
Jackson	- -	- -	- -	- -	.1
Lawrence	3.2	5.0	4.2	4.0	7.5
Monroe	.4	.7	.6	.7	1.6
Morgan	.2	.3	.2	.2	.4
Perry	1.2	1.8	1.5	1.4	2.6
Scioto	.4	.6	.7	.7	1.2
Vinton	.1	.2	.2	.2	.3
Washington	1.0	1.6	1.4	1.4	2.9
Total, Ohio	8.8	13.7	11.8	11.6	22.0
Oklahoma:					
LeFlore	83.1	81.4	80.1	67.1	104.2
McCurtain	18.1	17.7	17.4	14.4	22.4
Total, Oklahoma	101.2	99.1	97.4	81.5	126.6
Oregon:					
Baker	198.8	387.3	420.4	220.6	328.5
Benton	99.9	130.7	90.0	83.7	104.7
Clackamas	1,432.3	1,736.9	1,773.3	1,255.0	1,618.6
Coos	158.8	175.5	148.9	127.4	166.3
Crook	225.8	433.0	429.1	290.2	369.6
Curry	1,253.7	1,267.1	1,213.3	986.4	1,288.1
Deschutes	519.0	812.5	738.6	490.6	1,247.8
Douglas	3,186.7	3,652.9	3,395.9	2,564.9	3,869.6
Grant	543.3	1,110.3	819.8	627.2	1,113.6
Harney	214.9	438.9	362.8	260.2	426.8
Hood River	596.8	723.4	738.7	522.7	673.6
Jackson	846.2	1,031.7	749.9	789.5	1,456.1
Jefferson	100.1	151.9	141.1	94.8	224.1
Josephine	675.2	688.5	649.9	536.2	711.3
Klamath	1,353.0	1,742.1	1,767.6	1,165.8	1,894.9
Lake	719.6	950.6	854.9	559.6	997.1
Lane	5,013.8	6,952.3	6,215.2	4,944.9	7,564.3
Lincoln	1,067.1	1,367.2	941.5	874.9	1,095.5
Linn	1,520.1	2,231.8	2,166.5	1,655.2	2,696.0
Malheur	1.2	2.3	2.4	1.3	2.0
Marion	642.7	894.3	880.6	659.3	1,015.1
Morrow	54.0	81.3	75.3	62.6	56.7
Multnomah	201.8	244.6	249.8	177.6	228.9
Polk	- -	1.3	1.8	1.6	2.0
Tillamook	577.4	739.8	509.4	473.4	592.8
Umatilla	157.0	239.6	224.3	180.8	168.6
Union	195.6	362.4	395.4	219.2	290.9
Wallowa	173.9	469.2	545.3	282.1	418.0
Wasco	584.9	709.0	723.9	512.6	660.7
Wheeler	81.7	150.7	148.2	103.4	125.4
Yamhill	159.2	204.0	140.5	130.6	163.5
Total, Oregon	22,554.3	30,083.2	27,514.1	20,854.2	31,571.2

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Pennsylvania:					
Elk	60.8	52.3	63.5	44.0	69.8
Forest	62.1	53.3	65.0	45.1	71.6
McKean	71.2	62.5	76.0	52.6	83.7
Warren	68.5	64.4	78.3	54.3	86.1
Total, Pennsylvania	262.6	232.5	282.7	196.1	311.2
Puerto Rico	1.9	2.0	2.0	2.0	2.4
South Carolina:					
Abbeville	22.5	28.2	19.7	11.8	15.8
Berkeley	148.4	232.3	210.0	233.7	268.6
Charleston	47.1	73.7	66.6	73.6	84.0
Chester	12.4	15.6	10.9	6.5	8.7
Edgefield	30.0	37.6	26.3	15.7	20.9
Fairfield	12.8	16.1	11.2	6.7	9.0
Greenwood	10.9	13.7	9.6	5.7	7.7
Laurens	21.2	26.6	18.6	11.1	15.0
McCormick	49.5	62.0	43.3	25.8	34.5
Newberry	57.3	71.7	50.4	30.2	40.2
Oconee	76.0	97.4	69.0	41.5	56.3
Saluda	4.4	5.5	3.9	2.3	3.1
Union	60.2	75.4	52.6	31.3	41.9
Total, South Carolina	552.8	755.9	592.1	496.0	605.7
South Dakota:					
Custer	21.6	37.3	26.5	32.5	37.3
Fall River	3.0	5.1	3.7	4.5	5.1
Harding	2.1	2.2	2.2	2.5	2.7
Lawrence	18.6	32.0	22.8	27.9	32.0
Meade	2.4	4.2	3.0	3.7	4.2
Pennington	27.1	46.7	33.2	40.7	46.7
Total, South Dakota	74.9	127.4	91.4	111.8	128.0
Tennessee:					
Carter	12.4	15.3	14.0	17.7	12.3
Cocke	6.3	8.2	7.4	9.4	6.6
Greene	5.7	6.9	6.2	7.8	5.4
Johnson	7.6	9.5	8.6	10.7	7.4
McMinn	.3	.4	.4	.5	.3
Monroe	22.5	27.6	24.8	31.0	21.4
Polk	24.0	29.4	26.4	32.7	22.6
Sullivan	5.9	7.3	6.5	8.1	5.6
Unicoi	8.2	10.1	9.1	11.3	7.8
Washington	2.6	3.2	2.9	3.7	2.6
Total, Tennessee	95.6	118.0	106.2	133.0	92.0
Texas:					
Angelina	30.6	38.7	38.6	76.9	65.1
Houston	84.4	62.2	76.5	159.2	184.1
Jasper	10.9	13.8	13.7	27.4	23.2
Montgomery	33.2	41.0	37.7	35.4	62.8
Nacogdoches	1.2	1.6	1.6	3.1	2.6
Sabine	70.6	106.8	85.6	88.2	71.9
San Augustine	34.3	44.1	43.1	82.8	70.1
San Jacinto	42.1	51.9	47.7	44.8	79.5
Shelby	42.5	64.3	51.7	53.5	43.9
Trinity	61.2	45.2	55.5	115.6	133.6
Walker	38.4	47.3	43.5	40.9	72.5
Total, Texas	449.4	516.9	495.2	727.9	809.3

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Utah:					
Beaver	1.8	2.1	2.3	2.7	2.8
Box Elder	2.5	2.4	2.2	3.6	5.7
Cache	4.1	6.9	6.4	8.6	13.9
Carbon	.6	.9	1.2	1.2	.8
Daggett	2.7	7.7	2.7	3.1	4.8
Davis	1.2	1.1	.9	1.3	1.5
Duchesne	8.6	21.8	8.0	9.3	14.1
Emery	4.5	6.2	8.7	8.4	5.7
Garfield	8.9	14.4	14.5	17.3	15.9
Grand	1.2	1.7	2.4	2.3	1.5
Iron	2.1	3.3	3.4	4.0	3.7
Juab	2.1	2.4	2.3	2.8	3.5
Kane	1.1	1.7	1.8	2.1	1.9
Millard	4.1	4.7	5.1	6.1	6.3
Morgan	.4	.4	.3	.5	.6
Piute	2.5	2.9	3.2	3.8	3.9
Rich	.8	1.3	1.2	1.7	2.7
Salt Lake	2.9	2.8	2.3	3.2	3.5
San Juan	9.6	13.3	18.5	17.8	12.1
Sanpete	8.2	11.3	15.5	15.0	10.6
Sevier	9.7	11.3	12.6	14.7	14.8
Summit	16.3	15.4	12.4	17.5	19.1
Tooele	4.8	4.5	3.6	5.1	5.6
Uintah	3.0	8.1	2.8	3.2	5.1
Utah	10.0	11.8	12.5	14.1	14.7
Wasatch	7.5	9.0	7.8	9.5	11.1
Washington	3.4	5.4	5.5	6.5	6.0
Wayne	1.8	2.4	2.5	2.9	2.9
Weber	1.0	1.7	1.6	2.1	3.5
Total, Utah	127.4	179.0	164.2	190.5	198.3
Vermont:					
Addison	58.0	52.9	47.5	38.3	47.2
Bennington	47.1	45.3	39.9	32.3	39.9
Rutland	39.1	35.7	31.4	25.2	30.9
Washington	2.4	2.2	1.9	1.5	1.9
Windham	11.0	10.1	8.8	7.1	8.7
Windsor	14.5	13.2	11.6	9.3	11.4
Total, Vermont	172.1	159.3	141.2	113.7	140.0
Virginia:					
Alleghany	9.5	7.1	7.1	6.3	7.1
Amherst	3.8	2.8	2.8	2.5	2.8
Augusta	13.6	10.0	10.0	8.9	9.9
Bath	12.0	8.9	8.9	7.9	8.8
Bedford	1.3	.7	1.5	1.2	.7
Bland	1.7	.9	2.0	1.5	.9
Botetourt	5.7	3.3	6.2	4.9	3.2
Carroll	.4	.2	.4	.3	.2
Craig	8.7	4.8	10.0	7.7	4.6
Dickenson	.7	.4	.8	.6	.4
Frederick	.3	.2	.2	.2	.2
Giles	4.2	2.5	5.2	4.0	2.4
Grayson	1.5	.9	1.9	1.5	.9
Highland	3.8	2.8	2.8	2.5	2.8
Lee	.8	.5	1.0	.8	.5
Montgomery	1.4	.8	1.6	1.3	.8
Nelson	1.0	.7	.7	.6	.7
Page	1.7	1.3	1.3	1.2	1.3

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
			(thousands of dollars)		
Virginia (cont'd.)					
Pulaski	1.4	.8	1.7	1.3	.8
Roanoke	.2	.1	.2	.2	.1
Rockbridge	4.7	3.2	4.1	3.4	3.2
Rockingham	9.8	7.2	7.2	6.4	7.1
Scott	2.4	1.3	2.7	2.1	1.4
Shenandoah	5.4	4.0	4.0	3.6	4.0
Smyth	5.0	2.8	5.9	4.6	2.8
Tazewell	.4	.2	.5	.4	.2
Warren	.4	.3	.3	.3	.3
Washington	1.4	.8	1.8	1.4	.8
Wise	2.3	1.2	2.6	2.0	1.2
Wythe	4.0	2.2	4.6	3.5	2.1
Total, Virginia	109.5	72.9	100.1	83.1	72.2
Washington:					
Asotin	21.6	32.5	29.6	24.6	22.3
Chelan	273.6	606.2	463.6	207.0	263.7
Clallam	552.3	679.4	808.6	672.3	639.7
Clark	4.7	7.2	7.8	4.3	5.3
Columbia	62.8	94.5	87.7	72.9	66.1
Cowlitz	61.6	85.4	92.6	53.2	65.2
Ferry	125.6	221.3	259.1	145.1	232.3
Garfield	39.0	58.7	52.5	43.6	39.6
Grays Harbor	173.8	213.7	249.0	207.0	196.9
Jefferson	747.1	920.0	1,092.7	909.3	865.2
King	275.5	469.8	601.9	560.6	514.2
Kittitas	113.4	226.0	217.8	146.5	152.9
Klickitat	30.2	40.1	43.5	22.8	27.9
Lewis	1,222.2	1,644.0	1,805.2	1,061.1	1,262.3
Mason	177.7	218.5	257.4	213.9	203.5
Okanogan	387.6	629.4	394.8	125.1	562.7
Pend Oreille	122.9	240.8	236.6	156.4	275.8
Pierce	108.9	185.3	233.8	218.1	200.0
Skagit	274.9	443.3	300.9	176.0	211.7
Skamania	2,577.9	3,421.2	3,707.0	2,050.8	2,511.8
Snohomish	394.4	647.8	587.2	449.8	459.3
Stevens	59.0	105.4	120.6	68.9	111.9
Thurston	.3	.5	.6	1.0	1.0
Walla Walla	1.0	1.5	1.4	1.1	1.0
Whatcom	481.4	776.4	527.1	308.2	370.7
Yakima	565.1	893.0	1,103.7	929.9	833.1
Total, Washington	8,854.5	12,861.9	13,282.5	8,829.5	10,096.1
West Virginia:					
Grant	3.8	3.9	3.7	3.1	1.8
Greenbrier	25.7	25.9	24.5	20.6	11.9
Hampshire	.2	.1	.1	.1	.1
Hardy	3.4	2.5	2.5	2.2	2.5
Monroe	.4	.7	1.6	1.2	.8
Nicholas	6.0	6.1	5.8	4.8	2.8
Pendleton	19.2	19.1	18.4	16.2	10.8
Pocahontas	72.3	73.0	69.4	58.7	33.9
Preston	1.0	1.0	1.0	.8	.5
Randolph	44.4	45.0	42.6	36.0	20.8
Tucker	24.0	24.3	23.0	19.3	11.2
Webster	16.6	16.8	15.9	13.3	7.7
Total, West Virginia	217.0	218.5	208.4	176.5	104.7

State and County	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
	(thousands of dollars)				
Wisconsin:					
Ashland	11.0	12.5	15.0	12.9	14.7
Bayfield	16.3	18.6	22.3	19.1	21.9
Florence	8.4	10.5	11.6	12.0	16.3
Forest	34.7	43.6	48.0	49.9	67.6
Langlade	3.3	4.1	4.6	4.7	6.4
Oconto	14.2	17.7	19.6	20.3	27.5
Oneida	1.1	1.3	1.5	1.6	2.1
Price	8.8	10.2	12.3	10.5	12.1
Sawyer	7.6	8.6	10.3	8.8	10.1
Taylor	7.5	8.6	10.3	8.8	10.1
Vilas	5.1	6.5	7.2	7.4	9.9
Total, Wisconsin	117.9	142.4	162.6	156.2	198.7
Wyoming:					
Albany	9.2	12.8	18.6	9.0	22.8
Big Horn	14.9	18.4	11.1	16.6	14.1
Carbon	15.3	21.3	31.0	15.1	38.0
Converse	1.8	2.5	3.7	1.8	4.5
Crook	11.5	19.8	14.1	17.5	20.1
Fremont	10.0	18.3	15.9	13.6	16.2
Hot Springs	.5	1.0	.7	.7	.6
Johnson	13.7	16.9	10.4	15.5	13.2
Lincoln	14.3	24.0	22.8	39.3	21.8
Natrona	.1	.2	.3	.1	.3
Park	16.7	31.0	27.0	21.7	27.6
Platte	- -	- -	.1	- -	.1
Sheridan	16.6	20.4	12.6	18.8	15.9
Sublette	17.6	27.7	29.8	44.7	32.3
Sweetwater	- -	2.7	1.0	1.1	1.7
Teton	20.4	27.0	54.3	25.2	85.2
Uinta	1.2	1.1	1.0	1.3	1.5
Washakie	1.5	1.8	1.1	1.7	1.5
Weston	.4	.7	.5	.7	.8
Total, Wyoming	165.7	247.7	256.0	244.3	318.2

NOTE: Columns may not add due to rounding. Payments of less than $50 to a county are not shown.

Above payments made pursuant to 16 USC 500 (all States) and 70 Stat. 605 (Alaska). Additional payments were made as follows:

	FY 1969	FY 1970	FY 1971	FY 1972	FY 1973
36 Stat. 562,573					
Arizona	$89.6	$123.3	$83.6	$68.8	$113.2
New Mexico	.6	1.4	.7	.5	.8
16 USC 577c-577h					
Minnesota	146.2	258.0	258.0	259.0	259.0

Mrs. HANSEN. Please insert justification pages 20 through 72 at this point in the record.

(The pages follow:)

Projects (1)-(11)

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

National Forest Protection and Management

State	1973 estimate	1974 estimate	Change
Alabama	$1,854,800	$1,866,000	+$11,200
Alaska	5,177,200	5,209,000	+31,800
Arizona	9,707,700	9,768,000	+60,300
Arkansas	4,787,400	4,816,000	+28,600
California	39,226,000	39,463,400	+237,400
Colorado	10,237,500	10,300,000	+62,500
District of Columbia	10,255,400	10,319,000	+63,600
Florida	1,902,800	1,915,000	+12,200
Georgia	1,686,100	1,696,000	+9,900
Idaho	18,775,800	18,891,000	+115,200
Illinois	747,700	753,000	+5,300
Indiana	571,200	575,000	+3,800
Kansas	21,200	21,200	- -
Kentucky	1,509,300	1,518,000	+8,700
Louisiana	1,834,100	1,845,000	+10,900
Maine	73,300	73,300	- -
Maryland	125,200	126,000	+800
Michigan	4,120,500	4,146,000	+25,500
Minnesota	4,413,200	4,440,000	+26,800
Mississippi	2,596,000	2,612,000	+16,000
Missouri	3,104,000	3,123,000	+19,000
Montana	13,517,000	13,600,000	+83,000
Nebraska	281,100	283,000	+1,900
Nevada	1,834,800	1,846,000	+11,200
New Hampshire	1,146,900	1,154,000	+7,100
New Mexico	8,138,400	8,188,000	+49,600
New York	52,100	52,100	- -
North Carolina	2,980,300	2,998,000	+17,700
North Dakota	244,600	247,000	+2,400
Ohio	496,800	500,000	+3,200
Oklahoma	386,300	388,000	+1,700
Oregon	29,583,000	29,760,000	+177,000
Pennsylvania	1,335,500	1,343,000	+7,500
Puerto Rico	99,600	100,000	+400
South Carolina	1,510,500	1,520,000	+9,500
South Dakota	2,166,100	2,179,000	+12,900
Tennessee	1,745,900	1,757,000	+11,100
Texas	2,136,300	2,149,000	+12,700
Utah	7,166,500	7,211,000	+44,500
Vermont	561,500	565,000	+3,500
Virginia	2,698,600	2,716,000	+17,400
Washington	13,455,400	13,538,000	+82,600
West Virginia	1,923,100	1,935,000	+11,900
Wisconsin	2,567,300	2,583,000	+15,700
Wyoming	5,493,000	5,527,000	+34,000
Proposed for transfer 1/	10,223,000	- -	-10,223,000
Total	234,470,000	225,615,000	-8,855,000

1/ Proposed for transfer as follows:

Fighting forest fires	$8,855,000
Insect and disease control	1,368,000

Project (1a)

TIMBER RESOURCE MANAGEMENT - Sales administration and management

1972	$65,312,000 1/ 3/
1973	68,074,000 2/ 3/
1974	69,469,000
Increase	+1,395,000

An increase of $1,395,000 is proposed as follows:

(1) $200,000 for timber sales preparation and harvest administration due to increased costs.
(2) $882,000 for timber inventories to continue the normal 10-year inventory cycle and continue to implement the shift toward annual updating of timber management plans.
(3) $313,000 for silvicultural examinations of an additional 396,000 acres.

On the basis of planned program level for 1973 there will be an increase of $2,289,000 in 1974 since $894,000 of the 1973 appropriation is proposed for use for fighting forest fires and insect and disease control

The total program for fiscal year 1974, compared with 1972 and 1973, follows:

	1972	1973	1974	Increase or decrease
		(in thousands)		
Sale preparation				
Standard and special components	$28,566	$28,184	$28,686	+$502
Marginal and unregulated components	2,591	4,273	3,616	-657
Harvest administration	27,447	28,645	29,000	+355
Subtotal, Preparation and harvest	58,604	61,102	61,302	+200
Enforcement of Log Export Act	550	560	560	- -
Timber inventory and stand management control	4,048	4,193	5,075	+882
Silvicultural examination 3/	430	2,219	2,532	+313
Savings applied to fighting forest fires	1,680	- -	- -	- -
Total	65,312	68,074	69,469	+1,395

It is expected that the demand for National Forest timber will remain at a high level. The greatly increased cost and complexity of timber sale preparation has reduced the capacity of the Forest Service to prepare and sell timber.

The Forest Service and its local forest administrators are subject to ever-increasing scrutiny by an action-minded American public which is demanding environmentally-sound and quality management of its forest resources.

The principal increases in cost per thousand board feet in timber sale preparation are associated with the effort expended for coordinated resource inputs and detailed examination and inventory of the land and resources to assure full consideration and enhancement of the local environment. For example, on the Monongahela National Forest in West Virginia, the average number of man-hours used for preparing one thousand board feet of standing timber for sale has risen from 1.51 to 2.28, an increase of over 50 percent in the last three years. This increase is due to:

(1) Comprehensive inventories to obtain detailed information on soil, water, wildlife, recreation, and timber.
(2) Environmental analysis based on the above information and involving interdisciplinary review to provide coordination of timber harvest with other resource activities.
(3) Public involvement through public hearings, field trips, and correspondence.

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1/ Includes $1,680,000 personnel savings applied to fighting forest fires.
2/ Includes $479,000 proposed for transfer to fighting forest fires and $415,000 travel reduction savings proposed for transfer to insect and disease control.
3/ For comparability, silvicultural examination is shown here, rather than as appropriated in 1972 and 1973 under Reforestation and stand improvement.

These actions often result in the need to revise road construction plans and timber sales programs.

Protection and enhancement of the environment and response to public concerns are evidenced in timber harvest through increased frequency of inspections and closer administration to achieve quality performance:

(1) That minimizes or eliminates adverse impacts on the environment.

(2) Protects the soil.

(3) Insures more complete utilization and cleanup.

(4) Promotes an improved, healthy forest cover.

To achieve a quality timber resource management program requires the assistance of specialists in soil analysis, landscape layout, and ecology as well as well-trained, competent silviculturists, sales layout foresters, logging systems engineers, and sales administrators. Workload and cost information, including the specialty mix, manpower and dollar resources, is shown in the following tabulation for fiscal years 1972, 1973, and 1974:

	1972	1973	1974
Sale preparation			
Standard and special components			
Million board feet (local scale)	9,825	10,000	10,000
Cost per thousand board feet	$2.91	$2.82	$2.87
Total cost (in thousands)	$28,566	$28,184	$28,686
Marginal and unregulated components			
Million board feet (local scale)	514	900	800
Cost per thousand board feet	$5.04	$4.75	$4.52
Total cost (in thousands)	$2,591	$4,273	$3,616
Harvest administration			
Expected harvest level in million board feet (local scale)	11,700	12,200	11,800
Total cost (in thousands)	$27,447	$28,645	$29,000

Harvest of National Forest timber is dependent on:

(1) The national demand for timber products (which may be represented by softwood lumber price indices and the expected level of housing starts).

(2) The amount of National Forest timber sold in recent years.

(3) Producers' expectations of future volumes available (represented by the portion of the programed allowable harvest sold).

Based upon these factors, the Forest Service estimates that the timber harvest in fiscal year 1974 will be 11.8 billion board feet (local scale). The Forest Service plans to sell 10.8 billion board feet of timber (local scale).

The above represents the immediate measurable outputs of the timber resource program. The timber harvest program is administered through timber sale contracts to achieve:

(1) Protection and enhancement of the environment.

(2) Harmonization with indigenous ecosystems and other resource uses.

(3) Utilization to the fullest extent possible of all timber harvested.

(4) A healthy forest cover, improved and structured as specified in the timber management plan and individual stand prescriptions.

Log export controls were extended through calendar year 1973 by the Housing and Urban Development Act of 1970 (PL 91-609, December 31, 1970). Part IV of the Foreign Assistance Act of 1968 included a section specifying that not more than 350 million board feet of unprocessed timber may be sold for export from the United States from Federal lands located west of the 100th meridian. Program costs for the enforcement of the Act on National Forest lands will be maintained at the same level for fiscal year 1974 as for fiscal year 1973.

Adequate supplies of National Forest timber are important to continued strength in the Nation's housing program and to the Nation's economic program. The orderly progress of timber harvesting across a forest is determined from inventories conducted for timber management planning. Stand management control designed to organize and monitor efficient forest age-class distribution and to promote optimum timber growth also depends on adequate and timely inventory information.

The $882,000 appropriation increase for timber inventories will enable the Forest Service to continue the normal 10-year inventory cycle. In addition, the Forest Service will continue to implement the shift towards annual updating of the programed allowable harvest in all timber management plans to incorporate increases resulting from silvicultural activities and changes resulting from multiple use decisions.

The increasing demands for goods and services from the National Forests have changed the pattern of land management. No longer is it sufficient to prescribe management of each resource independently of the other resources nor is it sufficient to prescribe silvicultural measures over broad areas and forest types. It is now necessary to identify, map, measure, and prescribe treatment for each timber stand, in-place, to supplement the extensive, forest-wide statistical sample inventories and the management plans prepared therefrom. Before managers make decisions concerning the extent and pattern of timber harvest, reforestation, or timber stand improvement measures they must know:

(1) Where potential harvest volumes are located.

(2) The current growth and potential growth.

(3) The relationship to other resources and the forest as a whole.

(4) Potential or current problems such as fragile soils.

(5) Public needs and desires.

The need for in-place information and individual stand silvicultural prescriptions in the young forests of the South and North has been met over the past decade through the silvicultural examination program. In addition, there has been a modest beginning of silvicultural examination in the western forest regions. The $313,000 appropriation increase for silvicultural examination will permit an increase of 396,000 acres above the level funded in fiscal year 1973.

The above program permits managers to move ahead vigorously with the job of applying scientific forestry and multiple use planning to all commercial forest land including:

(1) Inventory and in-place delineation of timber stands by age class.

(2) Identification of problem areas and management opportunities.

(3) Preparation of silvicultural prescriptions for each stand and action programs to remedy problem areas.

(4) Selling of that timber volume prescribed for harvest.

Returns to the Treasury from the harvest of National Forest timber are summarized in the following tabulation:

Fiscal Year	Receipts (in millions)
1967	$172.8
1968	205.6
1969	306.8
1970	283.9

Project (1a)

Fiscal Year	Receipts (in millions)
1971	217.0
1972	330.0
1973	398.0 (estimated)
1974	355.0 (estimated)

Harvesting and processing of National Forest timber is not only important to the Nation's economy but is also vital to the economic health and stability of many local communities. For example, a 1972 economic study of the primary impact area for the Flathead National Forest in Montana, Flathead and Lake Counties, found that the timber industry provided 37.2 percent of the total basic employment and 51.3 percent of the total basic income for the impact area.

Examples of Recent Accomplishments

The record of timber harvested and sold during the past 5 years is compared with the programed allowable harvest in the following table:

Fiscal Year	Annual Allowable Harvest 1/	Actual Volume Harvested	Percent of Allowable Actually Harvested	Actual Volume Sold	Percent of Allowable Actually Sold
	(Volumes in billion board feet, local scale)				
1968	12.7	12.1	95	11.6	91
1969	12.8	11.8	92	18.9 2/	148
1970	12.8	11.5	90	13.4	105
1971	12.9	10.3	80	10.6	82
1972	12.9	11.7	91	10.3	80

1/ As of the January 1 midpoint of the fiscal year. Programed allowable harvest 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.

2/ Includes Juneau Unit Pulp Sale in Alaska of 8.75 billion board feet.

Project (1b)

TIMBER RESOURCE MANAGEMENT-Reforestation and Stand Improvement

1972	$32,205,000	1/ 3/
1973	31,702,000	2/ 3/
1974	23,136,000	
Decrease	-8,566,000	

A decrease of $8,566,000 is proposed. This is a decrease of $5,825,000 from the program level planned for 1973 since $2,741,000 in the 1973 appropriation is proposed for use for fighting forest fires and insect and disease control work. The program for fiscal year 1974, compared with 1972 and 1973, follows:

	1972	1973	1974	Decrease
		(in thousands)		
Reforestation	$17,591	$19,386	$16,429	$2,957
Timber stand improvement	11,212	10,206	4,732	5,474
Genetic tree improvement	1,396	1,718	1,622	96
Nursery operation and development	566	392	353	39
Savings applied to fighting forest fires	1,440	- -	- -	- -
Total	32,205	31,702	23,136	8,566

The proposed reforestation and stand improvement program will contribute to the long-range goal of improving the total net growth and sustainable harvest volume on the National Forests. Growth resulting from this program will not only help to offset the decrease in available yield brought about by changes in land use but will also help to raise both the short-term and long-term sustainable harvests from National Forests. The reforestation program, utilizing funds authorized by the Knutson-Vandenberg Act, is being accelerated in the amount of $2,821,000 to reforest cutover areas more promptly.

A decrease of $2,957,000 is proposed in reforestation. The increase of 21,820 acres shown in tabulation below is the net result of including 26,200 acres of site preparation for natural reseeding, a type of reforestation not included in the acreage in previous years, and a decrease of 4,380 acres of planting and seeding. The inclusion of site preparation for natural reseeding more accurately indicates the planned accomplishments.

The decrease of $5,474,000 in timber stand improvement will result in a program of 108,600 acres.

Genetic tree improvement is decreased $96,000, the net result of decreases in the East where first generation conifer seed orchard establishment has been essentially completed and increases in the West where the program is being expanded.

Nursery operation and development, covering minor betterment projects at the 12 existing nurseries in seven regions and operation of a seed extractory at Santa Fe, New Mexico, is decreased $39,000.

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1/ Includes $1,440,000 personnel savings applied to fighting forest fires.
2/ Includes $2,566,000 proposed for transfer to fighting forest fires and $175,000 travel reduction savings proposed for transfer to insect and disease control.
3/ For comparability, silvicultural examination is shown under Sales administration and management rather than as appropriated under Reforestation and stand improvement.

Project (1b)

A comparison of proposed fiscal year 1974 outputs with fiscal years 1973 and 1972 follows:

	1972	1973 (estimate)	1974 (estimate)
Reforestation (acres)	109,367	131,480	153,300
Timber stand improvement (acres)	191,041	227,870	108,600
Genetic tree improvement (acres of seed orchards)	1,406	1,430	1,450
Nursery operation and development (No. of nurseries)	12	12	12

The average annual growth increase from the total 153,300 acres to be reforested is estimated at 15.3 million cubic feet (approximately 77 million board feet).

The average annual growth increase from the total 108,600 acres to be treated by stand improvement measures is estimated at 5.4 million cubic feet (approximately 27.2 million board feet).

It is estimated that the total program will provide 314,000 man-days of employment to semi-skilled workers, generally in low-income rural areas.

An estimate of the acreage to be treated in each State is shown in Table 1 at the end of this section.

Examples of Recent Accomplishments

Reforestation. An area of 109,367 acres of National Forest land was reforested with appropriated funds in 1972--92,578 by planting and 16,789 by seeding. In addition, 15,881 acres of plantations were established by preparing the ground to promote regeneration from natural seed-fall. Other reforestation accomplishments in 1972 include:

(1) Procurement of 88,578 pounds of clean tree seed. Forest Service seed extractories processed 72,592 pounds of seed and 15,986 pounds of seed were purchased from commercial seed companies or extracted by contracting.

(2) Production of 102.3 million trees in 12 Forest Service nurseries.

(3) Establishment of 235 acres of new seed production areas and 90 acres of new seed orchards. About 30 percent of the Southern pine seedlings outplanted were grown from the better quality seed produced in seed orchards or seed production areas.

In addition to reforestation done with appropriated funds, the following reforestation was accomplished with funds collected under the authority of the Knutson-Vandenberg Act:

	Acres
Tree planting	132,907
Seeding	23,086
Reforestation by nautral seed-fall on prepared sites	38,976
	194,969

An additional 6,540 acres of National Forest land were reforested by other Federal and cooperative programs.

The total area reforested where some treatment such as planting, seeding, or site preparation was applied in 1972 was 326,757 acres.

Timber stand improvement. An area of 191,041 acres was treated by the following cultural measures with appropriated funds in 1972:

	Acres
Thinning	121,977
Release	58,490
Pruning	456
Fertilizing	10,118
	191,041

Timber stand improvement was also done for the same purpose with Knutson-Vandenberg funds on the following acreage in 1972:

	Acres
Thinning	116,460
Release	51,726
Pruning	1,075
Fertilizing	559
	169,820

Project (1b)

TABLE 1 - Estimate of Reforestation - Timber Stand Improvement to be Done Fiscal Year 1974 -- Appropriated Funds

State	Reforestation (Acres)	Timber Stand Improvement (Acres)
Alabama	8,000	1,700
Arizona	5,500	8,000
Arkansas	9,000	6,100
California	10,700	10,000
Colorado	4,200	600
Florida	8,500	4,200
Georgia	1,500	400
Idaho	11,200	2,200
Illinois	2,700	600
Indiana	800	500
Kentucky	1,900	2,500
Louisiana	2,600	200
Michigan	7,200	5,300
Minnesota	9,700	3,500
Mississippi	6,300	1,100
Missouri	5,600	3,500
Montana	8,700	6,400
New Hampshire	- -	800
New Mexico	2,500	2,000
North Carolina	3,200	3,000
Ohio	500	200
Oklahoma	1,600	200
Oregon	18,900	23,100
Pennsylvania	300	100
South Carolina	1,100	1,000
South Dakota	- -	700
Tennessee	1,100	1,100
Texas	3,800	800
Utah	1,000	- -
Vermont	- -	1,200
Virginia	1,400	2,500
Washington	7,200	9,500
West Virginia	200	1,300
Wisconsin	4,300	3,500
Wyoming	2,100	800
Total	153,300	108,600

Project (2)

RECREATION-PUBLIC USE

1972	$41,008,300 1/
1973	41,353,000 2/
1974	41,343,000
Decrease	-10,000

A decrease of $10,000 is proposed. The 1974 request for this item is the same as the total planned for 1973 since $10,000 of the 1973 appropriation is proposed to be used for fighting forest fires. In addition, the budget proposes an appropriation of $3,546,000 for Construction and operation of recreation facilities.

The requested funding will provide for continued recreation use in the National Forests while allowing for the following:

(1) Provide and maintain essential operation, including cleanup and sanitation services for an expected 4.2 percent increase in recreation use.

(2) Meet additional refuse collection and disposal costs associated with operating and maintaining sanitary landfill dumps developed in 1973 and in accordance with E.O. 11507 and 11514.

(3) Comply with E.O. 11593 to identify and initiate a program of management in connection with sites selected for the National Register of Historical Places.

(4) Implement requirements of E.O. 11644 to regulate off-road vehicle use.

(5) Initiate studies of areas identified as wilderness candidate areas.

(6) Provide quality management and operation for two National Recreation Areas established by Congress in 1973--the Oregon Dunes NRA in Oregon and the Sawtooth NRA in Idaho.

The Forest Service manages recreation use through the National Forest System. The following tabulation shows the total planned financing for 1974 as compared with funds available in 1972 and 1973:

	FY 1972	FY 1973	FY 1974	Change
		(in thousands)		
Administration of concessions and recreation use permits	$1,322	$1,542	$1,542	- -
Operation and maintenance	32,073	32,938	31,885	-$1,053
Planning and inventories	1,249	1,269	1,249	-20
Wilderness administration	2,850	2,887	2,887	- -
Visitor Information Service	3,044	2,717	3,780	+1,063
Personnel savings applied to fighting forest fires	470	- -	- -	- -
Total	41,008	41,353	41,343	-10

A total of $41,343,000 is needed to allow a coordinated and balanced program for managing recreation use in the National Forests as an integral part of the overall Forest Service program. The funding will allow for basic services for the increasing number of recreation visitors to the National Forests. Basic services will be provided to cope with an expected 198.2 million visitor-days of use to prevent adverse environmental effects and infringement on other resource use of the National

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1/ Includes $470,000 personnel savings applied to fighting forest fires.

2/ Includes $10,000 proposed for transfer to fighting forest fires and $253,000 travel reduction savings proposed for transfer to insect and disease control.

Forests. The use is a 4.2 percent increase over fiscal year 1973 and an increase of about 15 percent over use of 172.5 million visitor-days use in 1970.

The funding will provide visitor safety, enforcement of occupancy and use regulations, signing, and general services for operations, cleanup, sanitation, maintenance and management to protect the environment while offering recreation opportunities.

The National Forest recreation program includes many activities. These are classified into activities occurring in developed sites (such as campgrounds and ski sites) and dispersed areas (such as back country areas or wilderness). More than 60 percent of the use occurs in undeveloped areas. The following illustrates the variety of activities and the use occurring in 1971:

Activity	Public Use	
	Visitor-Days	Percent
Camping	48,254,300	27.1
Picnicking	7,360,600	4.1
Recreation travel (mechanized)	41,066,400	23.1
Automobile	(35,861,800) (20.3)	
Scooter and motorcycle	(2,571,400) (1.4)	
Ice and snowcraft	(2,400,900) (1.3)	
Other	(232,300) (.1)	
Boating	5,618,600	3.2
Power boats	(3,416,100) (2.0)	
Self-propelled boats	(2,202,500) (1.2)	
Games and team sports	709,200	.4
Waterskiing and other water sports	828,200	.5
Swimming and scuba diving	3,614,200	2.0
Winter sports	7,158,900	4.0
Skiing	(5,973,300) (3.4)	
Other	(1,185,600) (.6)	
Fishing	14,841,800	8.4
Hunting	13,129,500	7.4
Hiking and mountain climbing	5,999,500	3.4
Horseback riding	2,382,800	1.3
Resort use	3,630,800	2.0
Organizational camp use	4,415,800	2.4
Recreation residence use	7,636,500	4.3
Gathering forest products	1,239,800	.7
Nature study	797,800	.4
Viewing scenery, sports environment	7,084,200	3.9
Visitor information (exhibits, talks)	2,340,600	1.4
Total	178,109,500	100

A detailed explanation of financial needs follows:

(1) Administration of concessions and recreation special use permits $1,542,000

About 35 percent, or 29 million visitor-days use, will be accommodated by concessionaires (resorts, marinas, ski areas) and other recreation special-use permittees (organization camps, recreation residences). Private capital is used to develop facilities and to provide services while returning receipts to the Federal Treasury. In fiscal year 1972, receipts totaled almost $3.6 million. It is estimated that receipts in fiscal year 1974 will be $4.1 million.

Funding for this item will be used:

(a) For plans, environmental reviews and statements, designs, prospectus preparation, and administration of new sites for concessionaire development and operation.

(b) To administer and review proposed expansion or improvement of facilities under existing special-use permits.

(c) To administer 1,780 concessions and over 20,000 recreation special-use permits.

Administration is necessary to assure compliance with permit stipulations which require environmental safeguards, satisfactory service, and that the sites continue to serve the purpose for which they were established. Requirements of the National Environmental Policy Act also make planning coordination and observance of construction activities essential.

(2) Operation and maintenance $31,885,000

This item includes funding necessary to:

(a) Operate the recreation program in developed sites and general forest areas, including special areas such as National Recreation Areas, Wilderness, archeological and other special areas, wild and scenic rivers, and the National System of Trails. Operation includes such items as regulation of use (including off-road vehicle use) where necessary, cleanup and disposal of refuse in sites and general forest areas, providing for reasonable safety of visitors, fee collection and enforcement, and law enforcement. It also includes operation of a landscape management program to enhance and protect the visual qualities of the National Forests.

(b) Maintain facilities located in developed recreation sites and those in general forest areas.

The net decrease of $1,053,000 will provide for recreation use while meeting requirements established in recent Executive Orders and new legislation.

The funding level will continue to provide for basic needs of cleanup and disposal of refuse, providing sanitation and sewage treatment facilities, visitor safety, law enforcement, and signing in general forest areas and developed sites.

Dispersed recreation use such as hiking, riding, fishing, hunting, sightseeing and snowplay take place on the 187 million acres of general forest areas. In 1974, this type use will amount to about 121 million visitor-days, or almost 60 percent of all recreation use occurring on National Forest lands. Providing for cleanup, reasonable safety of users, minimal sanitation facilities, and law and regulation enforcement is a major job that will be accomplished.

To protect environmental and resource values of general forest areas, the funds will also be used to implement requirements of E.O. 11644 regarding regulation of off-road vehicles. National Forest lands will be reviewed with public involvement to determine areas to be open or closed to such use. Intensive management to enforce the restrictions will also be necessary.

The funding will allow operation at current standards of more than 8,367 developed recreation sites. It will also provide for continued operation of 237 sites within six National Recreation Areas. The developed sites have a capacity of more than 720,000 persons-at-one-time. Visitor safety, law enforcement, and refuse cleanup and disposal will be provided.

The funding will allow for increased costs of refuse cleanup and disposal associated with sanitary landfill operations as required by E.O. 11507 (disposal of solid waste) and E.O. 11514 (Protection and Enhancement of Environmental Quality).

Essential recurring maintenance and correction of unsafe conditions for all Forest Service recreation facilities in general forest areas and at developed sites will also be accomplished.

Project (2)

The total funding will provide for the cleanup and administration necessary to accommodate 600,000 visitor-days of use expected on over 2,000 miles of the recently established Appalachian, Pacific Crest, and Gabrielino National Scenic Trails.

It will also provide for cleanup and sanitation within the 478 miles of Wild and Scenic Rivers System within the National Forests. It will provide for necessary operation to accommodate the 300,000 visitor-days of use these areas will receive. Cleanup costs are high due to difficult accessibility, and programs will be continued to encourage visitor self cleanup.

This funding will also allow a basic program to comply with E.O. 11593 in identifying and managing for public use key archeological and historical places, buildings, districts, and objects. The funding will allow initiating intensive management for public use and enjoyment of the sites while protecting them from vandals.

The funding requested will allow the development of procedural instructions and training programs for all National Forest land managers to insure that commodity uses, including timber harvest, which the National Forests must support are so planned and administered as to be compatible with the environmental and ecological integrity of all the landscapes involved. It will also allow a program for environmental protection and enhancement of National Forest lands. The availability of the scientific knowledge necessary to fully implement the intent of the National Environmental Policy Act of 1969 is dependent on a continuing cadre of specially trained landscape architects to participate in inter-disciplinary multiple use planning. The funding requested will allow for this continuing cadre of landscape architects for an intensified program in developing overall multiple use, environmental resource, and landscape plans assuring that timber harvest and other commodity uses are harmonious with the natural landscape.

(3) Planning and inventories $1,249,000

The proposed decrease of $20,000 will allow for maintaining the 1959 to 1961 National Forest Recreation Survey and unit management plans, and the preparation of plans for management of areas specially classified by Acts of Congress. Planning for off-road vehicular use will also be accomplished.

(4) Wilderness administration $2,887,000

Maintaining the same level of funding will allow for a minimum acceptable program of cleanup and sanitation on the 14.2 million acres of National Forest Wilderness and Primitive Areas.

Studies leading towards reclassification of Primitive Areas as directed by the Wilderness Act of 1964 will also remain on schedule to assure completion within the allotted time directed by the Act.

It is planned to begin a program of studying roadless areas identified for possible future classification as wilderness.

(5) Visitor Information Service $3,780,000

The $1,063,000 increase will be used:

(a) To prepare, open, and manage the first year of operation at Blanchard Springs Caverns on the Ozark National Forest in Arkansas, $869,000.

(b) To raise the operation and maintenance standards at various Visitor Information Service facilities throughout the National Forest System, $194,000.

Project (2)

Naturalist programs at visitor centers, information stations, amphitheaters, campfire programs, along trails and with auto tours will be continued at existing levels. Such programs contribute significantly to public understanding and appreciation of natural resources and their role in providing a quality human environment. These programs are the foundation of on-the-ground, people-to-people environmental and ecological education activities of the Forest Service.

Project (3)

WILDLIFE HABITAT MANAGEMENT

1972	$6,314,000 1/
1973	7,724,000 2/
1974	7,802,000
Increase	+78,000

A net increase of $78,000 is proposed for the coordination of timber activities on National Forests with the biological needs and requirements of fish and wildlife species inhabiting the areas of work activity. On the basis of planned program level, there will be an increase of $836,000 since $758,000 of the 1973 appropriation is proposed to be used for fighting forest fires and insect and disease control.

The planned level of financing for fiscal year 1974, as compared with 1972 and 1973, is as follows:

	1972	1973	1974
	(in thousands)		
Recurrent work	$4,018	$4,215	$4,293
Habitat restoration and development	2,086	2,734	2,734
Rare and endangered species 1/	- -	775	775
Personnel savings applied to fighting forest fires	210	- -	- -
Total	6,314	7,724	7,802

1/ Estimated cost of rare and endangered species program in 1972 ($556,000) was included in recurrent work, habitat restoration and development, and not categorized by items.

(1) Recurrent work is the heart of the wildlife program which involves relatively fixed annual costs in relation to other resource uses and programs.

Coordination. Program activities such as timber harvesting, timber regeneration, timber stand improvement, recreation, road and trail construction, and reservoir construction can have adverse impacts upon wildlife and fish habitat unless development and land use activities are thoroughly coordinated with the environmental needs of the animal forms. To best accomplish this integration of resource use planning and provide adequate consideration for the fish and wildlife species, the expertise of trained biologists is required. Wildlife biologists are assigned to all regional offices and to a number of the National Forests to also work on multidiscipline planning teams and give technical guidance to this activity. The intensity of coordination determines the degree to which wildlife values are protected or enhanced. The control of animal damage to other resources also requires intensive coordination.

Cooperation. Cooperating with State conservation departments, the agencies responsible for protecting wildlife and regulating the harvest of game populations, is an important part of the Forest Service wildlife program. Habitat management on the National Forests is essential to the success of State fish and game programs because habitat and wildlife populations cannot be managed independently of each other. The States contribute a substantial share of the cost of habitat and fishing water improvements. In 1972, the States financed 45 percent of the habitat work on the National Forests. This amounts to an expenditure of about $1.2 million.

Surveys and plans. Evaluating wildlife, fish, and rare or endangered species habitat, preparing or revising wildlife management plans, and assisting with multiple use planning, are continuing activities which are basic to an effective wildlife program.

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1/ Includes $210,000 personnel savings applied to fighting forest fires.
2/ Includes $715,000 proposed for transfer to fighting forest fires and $43,000 travel reduction savings proposed for transfer to insect and disease control.

Maintenance. Maintaining habitat improvements already in place is a recurring job that generally takes precedence over new development work. The States share in this work under terms of cooperative agreements.

(2) Habitat restoration and development include a wide variety of activities designed to increase wildlife and fish production for the use and enjoyment of the public.

Food and cover--developing either food or protective cover to enhance the quality of the wildlife environment. This is a broadbased program applicable on all Forest Service administered lands.

Water developments--includes several types of projects aimed at providing drinking water for wildlife. This work is particularly important in the arid regions of the West.

Wetland developments. About 90 percent of this work consists of marshland improvement for waterfowl in the north central States and the development of greentree reservoirs along the Mississippi drainage. This work is extremely important in the total national effort to maintain waterfowl production.

Fish stream improvement--includes removal of migration barriers establishing in-stream improvement devices, mechanical gravel cleaning, streambank stabilization, streambank fencing, and construction of streamflow maintenance. Program emphasis will be directed toward the western forests and Alaska.

Fish lake improvement--includes development of new fishing lakes and the improvement of existing lakes. New lake development is a cooperative program with the State conservation departments.

(3) Rare and endangered species include several activities directed toward improvement, protection and management of the habitat for 58 wildlife and fish species found on lands administered by the Forest Service.

Habitat maintained through coordination--coordination of other resource activities with programs for the protection and management of rare and endangered species. Surveys, studies, and plans form the basis for implementing the prescribed environmental needs and requirements. Activities are coordinated and integrated into the programs of other Federal and State agencies having direct responsibility for management of the populations.

Plans and surveys--evaluation of rare and endangered species habitat, preparing or revising wildlife management plans to best meet the multiple resource uses while continuing to provide maximum environmental benefits for these important species of wildlife.

Administrative studies--to effectively identify the critical limiting factors affecting the species through evaluative studies which will provide the guidelines necessary to future management of the habitat.

Direct habitat improvement--includes the development of food, protective cover, nesting areas, habitat enlargement and other enhancement measures to improve and maintain quality environment values.

Work accomplishments during 1972

A summary of direct habitat restoration and development accomplishments follows:

Food and cover development	233,505 acres
Water development	807 units
Wetland development	6,247 acres
Fish stream improvement:	
In-stream structures	1,013 units
Barrier removal	751 units
Spawnbed improvements	4,164 rods
Channel fencing	5,108 rods
Rough fish removal	106 miles
Fish lake development:	
Spawnbeds and shelters	20 units
Aquatic plant control	2,036 acres
Rough fish removal	40,085 acres
New fishing lakes	2,595 acres

Also, several thousand acres of wildlife habitat were improved through coordination efforts.

Examples of Recent Accomplishments

In 1972, a cooperative program with the Alaska Department of Fish and Game consisted of a team of biologists visiting ten logging camps to conduct training sessions. This training for loggers included the "how" of protecting fish rearing tributary streams. An outgrowth of this development is a brochure for sale administrators and loggers showing how to protect fish habitat during logging operations.

Through conversion of tall sagebrush and crested wheatgrass to small brush and forbs on the Curlew National Grassland in Idaho, 1,380 acres of bird habitat were improved. Twelve thousand tree and brush seedlings were planted into fence strips to provide cover.

A 60 percent decrease in the endangered Kirtland's warbler population has resulted in increased effort to save this species from extinction on the Huron-Manistee National Forests in Michigan. In cooperation with the Department of Natural Resources, Bureau of Sport Fisheries and Wildlife, and various Audubon groups, the forest has been working on an accelerated cowbird control project and plans to increase protection and management of nesting habitat.

Public use and enjoyment of the wildlife resources continue to grow. This use includes both hunting and fishing and appreciative uses. In calendar year 1972, the estimated public wildlife use of Forest Service administered lands amounted to:

Hunter visitor-days	13,129,000
Fisherman visitor-days	14,842,000

(The visitor-day is a unit of measure amounting to 12 hours)

In addition, there was an estimated 17.0 million days of appreciative use which includes bird and animal watching, wildlife photography, and forest visits to observe all forms of wildlife, including rare and endangered species. Wildlife activities not only provide for an outdoor recreation experience and the suitable environment for all wildlife species, but it is also important from an economic standpoint. This is especially true in rural areas and communities. Estimated user expenditures for wildlife-oriented activities on the National Forests for fiscal year 1972 are as follows:

Project (3)

Activity	Days Use*	User Expenditures**
	(in millions)	
Appreciative (bird watching, photography) ...	17.0	$85
Big-game hunting	24.0	347
Small-game hunting	9.0	68
Waterfowl hunting	1.7	17
Freshwater fishing	51.0	321
Saltwater fishing	.3	4
Commercial salmon fishing	- -	31

* Days use--calculated from visitor-days use reports, using the following conversions:

(1) Each hunter averages 5 hours of hunting time per day.
(2) Each freshwater fisherman averages 4 hours of fishing per day.
(3) Each saltwater salmon fisherman averages 6 hours of fishing per day.
(4) Each bird watcher/photographer is estimated to spend 4 hours per day.

** User expenditures--based on average expenditures for sport fishing and hunting as determined in the National Survey of Fishing and Hunting (1970). For commercial fishing, the output value is based on the value of the salmon catch of fish spawned in waters within National Forests but caught in off-shore saltwater.

Project (4)

RANGELAND MANAGEMENT

1972	$15,643,000	1/
1973	15,261,000	2/
1974	14,987,000	
Decrease	-274,000	

A decrease of $274,000 is proposed. This is a reduction of $105,000 from the planned program level for 1973 since $169,000 of the 1973 appropriation is proposed for use for fighting forest fires and insect and disease control.

This program is concerned with the management of the National Forest System range environment for livestock grazing under policies that will provide for maintenance of a quality environment and a viable rural economy.

National Forest System ranges are annually providing forage and habitat, during part of the year, for some 1.5 million cattle, 1.7 million sheep, and their offspring. The 17,000 ranch units which own these livestock are mostly family-type operations upon which many rural communities vitally depend for their economic life. Through allocation of the grazing resource, the Forest Service contributes to such socio-economic objectives of the Department of Agriculture as:

(1) Development of rural communities.
(2) Strengthening the family farm.
(3) Achieving equal opportunity for disadvantaged minorities in rural areas.

The program is also committed to improvement and maintenance of a quality environment and to the multiple use principle of resource management.

The program's mission is accomplished through highly developed ecosystem management techniques used in various combinations. These include:

(1) Grazing treatments specifically designed to act favorably on desirable species and communities of vegetation.

(2) Vegetative cover manipulation by artificial means.

(3) Various other cultural treatments of land to promote regeneration and growth of desirable plants.

Some specific examples of program activities are:

Collection and interpretation of resource data.
Preparation and maintenance of management plans.
Allocation of grazing use.
Supervision of range use.
Construction and maintenance of range facilities.
Direct seeding of depleted ranges.
Vegetative cover manipulation to improve range quality.
Mechanical treatment of land to induce vegetative development.

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1/ Includes $210,000 personnel savings applied to fighting forest fires.

2/ Includes $75,000 proposed for transfer to fighting forest fires and $94,000 travel reduction savings proposed for transfer to insect and disease control.

Following are some examples of recent and planned accomplishments:

Activity	1972	1973	1974
Allotment plans maintained	5,650	5,850	6,050
Allotment plans installed	250	200	200
Allotment plans prepared	300	250	250
Permit administration			
Paid permits	17,872	17,100	17,000
Free permits	80,000	80,000	80,000
Livestock use supervision			
Cattle (including offspring)	2,691,540	2,691,000	2,682,000
Sheep (including offspring)	3,481,478	3,400,000	3,300,000
Revegetation (acres)			
Cover manipulation	91,458	91,000	80,000
Range seeding	29,819	30,000	20,000
Other cultural practices	30,723	29,000	28,700
Fence constructed (miles)	1,203	1,173	985
Water developments (no.)	1,440	1,300	1,200
Revenues (thousands)	$5,512	$6,620	$6,900

New responsibilities have been added to the program as a result of Congressional recognition of wild free-roaming horses and burros as a public resource which must be managed and protected. The National Environmental Policy Act also has added new tasks to the range resource management program. Environmental effects of livestock grazing and range resource development projects must be evaluated. These assessments may require the preparation of environmental statements to comply with the provisions of the Act.

Project (5)

SOIL AND WATER MANAGEMENT

1972	$9,596,000 1/
1973	9,734,000 2/
1974	10,123,000
Increase	+389,000

An increase of $389,000 is proposed to provide unmet needs for scientific soils, geology and hydrology services for support of timber management, transportation planning, recreation, fire rehabilitation, range management, and pollution abatement program on National Forest System lands. These scientific inputs and surveillance of the effects of management activities on the air, soil and water resources are essential to meaningful environmental input examinations, and statements made in response to the National Environmental Policy Act (PL 91-190) and requirements in the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500). On the basis of planned program level for 1973, there will be an increase of $449,000 since $60,000 of the 1973 appropriation is proposed for use on insect and disease control.

Benefits to the Nation will accrue through:

(1) Increased resource production supported by scientific soil, geology, and hydrology inputs.

(2) Higher level of environmental quality through additional surveillance of management activities.

The total program for fiscal year 1974, compared with 1972 and 1973, follows:

	1972	1973	1974
	(in thousands)		
Soil, water, and air management support	$6,567	$7,112	$7,501
Watershed restoration and improvement	2,232	1,922	1,922
Wild and scenic rivers studies	637	700	700
Savings applied to fighting forest fires	160	- -	- -
Total	9,596	9,734	10,123

(1) Soil, water and air management support ($7,501,000, an increase of $389,000)

The increase will be used for:

(a) Essential management services, such as direct application of technical water, geologic, air or soils knowledge to specific on-the-ground resource and management situations; advice, counsel, and design of activities on programs in accord with specific air or water management objectives or on soil uses and problems.

(b) Soil, water, geologic, air, and noise inventories, and investigations and the related interpretation analysis, maps and reports. Inventories conducted by scientists provide selected basic information interpreted for both short and long-term planning efforts in such areas as timber management, transportation systems, and the Wild and Scenic Rivers program. As management and development activities move increasingly into the remote, more difficult, and more fragile areas, the need for at least minimal levels of basic information about the watersheds becomes more critical.

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1/ Includes $160,000 personnel savings applied to fighting forest fires.

2/ Includes $60,000 travel reduction savings proposed for transfer to insect and disease control.

(c) Surveillance that assures National Forest uses and programs are compatible with the protection of man's environment, identify areas with existing or emerging air, soil, and water quality problems so that corrective action can be formulated and implemented, and meet constantly increasing demands (PL 92-500) for documenting the effects of activities on the quality of air, soil and water, in relation to existing State and Federal standards.

The 390.4 million acre-feet of high quality water produced from National Forests is an example of the importance of water in the multiple use law. In 1970, the dependent gross product for all water uses from National Forests averaged $992 per acre-foot of water produced, or a total of $141 billion. The economic implications and intangible benefits for protecting the clean water resource will result in substantial and varied benefits to all our citizens.

In the West, particularly, more and more demands are being made upon available water supplies. The Congress and the Courts have determined that the United States has a right to reasonable use of water on National Forests reserved from the public domain except those waters appropriated before the National Forests were created. The objective is to obtain sufficient quantities of water in accordance with legal authority for the administration and development of the National Forest System. This project on a watershed basis includes:

(a) An inventory of present and foreseeable needs.
(b) A determination of water availability.
(c) The potential for increasing yields in water-short areas.
(d) Action to secure the water needed for National Forest purposes.

The western States have indicated their interest in having the Forest Service complete this program as rapidly as possible. During fiscal year 1972 the field inventory of Forest Service water uses was about 85 percent completed. A major part of this project is expected to be completed by 1975.

Additional work is developing because of concerted adjudication proceedings in some western States. Increasing judicial and administrative action is anticipated, both on lands reserved from the public domain and on acquired lands, over the next several years.

Examples of Recent Accomplishments

Land use planning--the process for making decisions about long-term allocations of natural resources and the land base from which they are obtained--has received greatly increased emphasis in 1972. The Tahoe Basin (California-Nevada), the Idaho Primitive area, and the White Clouds area of the Challis National Forest in Idaho, are some of the many areas that are or have been studied by interdisciplinary planning teams. Soil scientists, hydrologists, and geologists, among others, contribute vitally to these comprehensive planning efforts. Information essential for making knowledgeable land management decisions includes that concerning capabilities of the lands--their sensitivity to disturbance, their suitabilities for management choice, their hazards for use, their productivity potentials. The tempo of comprehensive management planning on National Forest System lands is expected to rapidly increase as the basic planning unit changes from selected areas to entire forests.

Soil resource inventories were conducted on 10.5 million acres; detailed soil surveys were conducted on about 0.5 million acres in cooperation with the Soil Conservation Service and the State Agricultural Experiment Stations.

Resource protection requirements and design services were provided by geology, hydrology and soil scientists on more than 1,800 projects.

Project (5)

On the Klamath National Forest in California, a geologic investigation identified an underground sanitation system as a contributory factor to a local landslide. A redesign of the system for disposal of liquid waste is underway.

Soil and water condition and trend observations along with monitoring effects of timber management, mineral developments, Boundary Waters Canoe Areas, and suspected pollution problem sites where people physically use the water resource are underway at 1,000 locations.

After the January 1972 massive landslide in the Bull Run Watershed--municipal supply watershed for Portland, Oregon--geology, hydrology and soils scientists and engineers provided management services to repair the slide area and safeguard water quality.

Field testing is being done of a remote control and recording nuclear snow gage capable of telemetering the water content and internal structural conditions of the snow pack. This instrument is needed to reduce the cost of snow course measurements, and advising forest users on snow pack, ripeness, water holding capacity and avalanche hazard buildup.

On the Monongahela National Forest in West Virginia, soil and water scientists examined more than 10,000 acres to identify potential erosion and sedimentation problem areas or situations in connection with the proposed harvest of timber on several prospective sale areas and their supporting planned road system routes. Prescriptions to minimize possible damages to the soil and water resources were developed.

(2) Watershed restoration and improvement ($1,922,000)

This element is for the restoration and maintenance of surface disturbed areas to enhance the quality of the environment and restore productive capacity of renewable resources. High priority projects include:

(a) The South Fork Salmon River Project (Idaho) where sedimentation has severely damaged anadromous and resident fisheries of regional and possibly national importance.

(b) The Palzo tract project (Illinois) where chemicals and sediment from old surface coal mining operations have seriously degraded water quality and caused the United States to be cited in court by State water quality authorities.

(c) South Fork Holston River and New River Watershed (Virginia) where sedimentation from old manganese mining operations affect stock water, wildlife and resident fisheries.

Restoring the hydrologic functioning of rural lands damaged beyond the point of natural recovery is essential to protecting the beauty and quality of the rural environment. This is a continuing program to:

(a) Meet soil stability and water quality requirements.

(b) Encourage the orderly development of watershed resources.

(c) Repair degraded watersheds.

(d) Provide continuing maintenance to projects completed to keep them effective.

The funds will be used to provide opportunities for utilizing the skills, and to furnish jobs and timely income for local people in rural areas of low income and critical underemployment. Illustrative of some of the specific activities are:

(a) Emergency treatment and maintenance for the highest priority areas in the 184,000 acres of National Forest System lands burned annually by wildfires.

(b) Being responsive to treatment and maintenance needs on thousands of miles of abandoned roads and trails that are the greatest contributors of sediment, uncontrolled runoff, and local problems of flooding and inability of the water supply to serve agriculture, domestic, or recreational needs.

(c) Maintenance and reinforcement on the highest priority areas of eroding and gullied lands treated during the last 5 years.

(d) Removal of debris in stream channels above reservoirs and in anadromous fish streams.

Improvement of the water resource by scientific management helps individuals and communities in rural areas improve their quality of life, and is an integral part of multiple use management.

In response to public demands, the water resource improvement activity for fiscal year 1974 will consist primarily of:

(a) Application of special treatments to capitalize on opportunities to improve water yield through regular ongoing activities such as timber harvesting, range revegetation, timber stand improvement, and fire control in water-short areas.

(b) Maintenance of existing water resource improvement projects to insure continuing effectiveness of work done to date.

(c) Continuation of programs under cooperative agreement with Anaconda Company in Montana and with the Salt River Valley Users Association in Arizona.

Examples of Recent Accomplishments

Rehabilitation of damaged areas is progressing in all parts of the country, but much work still needs to be done.

Rehabilitation work is coordinated with other resource and service divisions to accomplish an integrated program of management under multiple use.

In fiscal year 1972, Forest Service crews treated and stabilized:

Acres of sheet eroded and deteriorated areas	38,000
Miles of gullies	60
Miles of streambanks	40
Miles of shorelines	5
Miles of roads and trails	1,400
Acres of lands disturbed by surface mining and prospecting	1,700

Treatments to aid in restoring favorable watershed conditions on lands damaged by wildfire continued. Emergency measures (initial treatment on new burns and maintenance on older burns) were applied to 20 fires on 71,000 acres that required onsite protection and posed threats to life, property, public health, and watershed functioning.

(3) Wild and scenic rivers studies ($700,000)

These funds will be used to carry out continuing studies on seven of the nine study rivers for which the Secretary of Agriculture has responsibility under the Wild and Scenic Rivers Act (PL 90-542). This Act requires that studies be made and reports prepared by the Secretaries of the Interior and Agriculture for 27 rivers as potential additions to the National Wild and Scenic Rivers System. All studies are cooperative endeavors with States, Federal agencies, and other interested parties participating.

Project (5)

The Forest Service is the lead agency for Agriculture's river study work. The nine rivers for which Agriculture has study leadership responsibility are: Chattooga in North Carolina, South Carolina, and Georgia; Flathead in Montana; Illinois in Oregon; Moyie in Idaho; Pere Marquette in Michigan; Priest, St. Joe and Salmon (Main Stem) in Idaho; and the Skagit in Washington.

The funding for fiscal year 1974 will essentially complete study reports on the Skagit, St. Joe and Salmon Rivers and permit work to continue on the remaining Agriculture-led river studies. It also provides recognition for employment of local people in obtaining data on resource uses and in measuring and evaluating productive capability of soil and water resources.

Examples of Recent Accomplishments

In fiscal year 1972 the field work was essentially completed on the Pere Marquette, Flathead, and Skagit Rivers while substantial work was accomplished on the Illinois, Salmon, and St. Joe. Also, a National Forest contribution was made to the Interior-led Gasconade, Little Beaver, Little Miami, and Missouri Rivers studies.

Project (6)

MINERAL CLAIMS, LEASES AND SPECIAL USES

1972	$5,558,000 1/
1973	5,657,000 2/
1974	6,667,000
Increase	+1,010,000

An increase of $1,010,000 is proposed as follows:

(1) An increase of $414,000 to provide early on-the-ground contacts and supervision of mining operations to prevent or reduce environmental damage.

(2) An increase of $596,000 for action on new applications, amendments, transfers, and inquiries from prospective or present special uses permittees.

On the basis of planned program level, there will be an increase of $1,045,000 since $35,000 of the 1973 appropriation is proposed to be used for insect and disease control.

Mineral claims, leases and permits ($3,251,000, an increase of $414,000)

Mineral operations conducted under the 1872 mining laws are generally subject to minimal State or Federal legislative restraints. Safeguarding other resource values from serious and lasting damage is therefore dependent upon timely--often daily--contact with miners. Particularly during prospecting, miners build poorly designed and improperly located access roads. Bulldozer trenches are excavated only to comply with annual assessment work requirements. Timely supervision can avoid much damage to other resources.

Heretofore, cooperation has been on a voluntary basis. Promulgation of regulations for the occupancy and use of National Forest lands in connection with mining claims will require the filing of operating plans for land use which will be approved contingent upon safeguarding other resources and restoring disturbed areas. While the number of claims managed is not expected to increase, the intensity of management will have to be increased. This will be accomplished by on-the-ground supervision on a continuing basis to insure compliance with the regulations and the intent of the National Environmental Policy Act of 1969.

At the same time mineral production is essential to the national economy and security. Mineral production generally contributes significantly to the rural economy by virtue of the locale of mineral-producing properties. In addition to the payrolls of operating mines, the performance of annual assessment work in the statutory minimum amount of $100 per claim contributes several million dollars to rural area economy each year. Timely action on applications filed pursuant to the new regulations must be taken so as not to adversely affect the rural economy or unnecessarily delay the development of critical mineral needs.

Examination of mining claims is a time-consuming job for qualified mining engineers and geologists. To protect the public interest and encourage bona fide development, it is necessary to examine and report on claims:

(1) For which patent applications have been filed.

(2) Of doubtful validity that are being misused or that conflict with Forest Service programs.

(3) Located in wilderness where applications for prospecting or mineral development permits have been filed.

The mineral leasing job requires:

(1) Review of applications for prospecting permits and leases to determine if mineral activities are compatible with other uses.

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1/ Includes $140,000 personnel savings applied to fighting forest fires.

2/ Includes $35,000 travel reduction savings proposed for transfer to insect and disease control.

(2) The preparation of stipulations and operating plans to protect the environment.

(3) The preparation of mineral title reports on all acquired lands.

(4) On-the-ground administration to ascertain that terms of leases, permits, stipulations and operating plans are understood and followed.

Fiscal year 1974 anticipated workload as compared with fiscal years 1972 and 1973 follows:

	1972	1973 Estimated	1974 Estimated
Surface resource protection and management of mining claims (claims)	22,000	25,180	25,700
Mining law compliance and validity determination (claims)	4,000	4,500	3,300
Mineral leasing and surface resource protection (No. of leases requiring action)	9,632	11,240	10,250
Surface management of mineral reservations and rights outstanding (No. of cases requiring action)	890	928	900
Mineral material disposal (No. of permits or leases requiring action)	3,400	3,890	3,000
Mineral withdrawals and mineral character determinations (acres)	167,500	462,300	210,000

Examples of Recent Accomplishments

Mining claims. New reserves of uranium, copper, silver, gold, lead, zinc and molybdenum are in great demand by mining companies. Management of surface resources on mining claims was accomplished on 22,000 claims during fiscal year 1972. Approximately 4,000 mining claims were examined for compliance with the mining laws during the year. There were 78 mineral patent applications, involving 316 claims, pending at the close of calendar year 1971. Actions on 138 claims were completed during this period; 15 claims (7 applications) aggregating 221 acres were patented during the calendar year.

Under the Church-Johnson Mining Claims Occupancy Act action was completed on 24 cases.

A total of 449 Occupancy Act applications had been received as of June 30, 1971, the last date an application could be made under the law. As of that date, 370 cases had been completed with fee title offered in 68, a lease offered in 121, and a Forest Service special-use permit granted in 8. Because applicants were not qualified under the law, 140 cases have been rejected. Applications were withdrawn in 33 cases.

Mineral leases and permits. Demand for low-sulphur coal that will reduce air pollution in urban areas is very high. Exploration for oil and gas and phosphates continues at a high level. Some 15,700 leases and permits were active during fiscal year 1972, thus requiring Forest Service administration to protect the environment and coordinate uses. Nearly 3,400 sales and free use permits were granted involving disposal of common varieties of mineral materials. More than 900 mineral operations were active on acquired lands as a result of reserved or outstanding mineral rights. These require action to avoid or reduce environmental degradation.

Total revenue from leases and permits on acquired lands amounted to $6,375,277 during fiscal year 1972. In addition, an estimated $25 million was received from leases and permits on public domain lands. Mine or well-head value of minerals from National Forest System lands during fiscal year 1972 is estimated to exceed $100 million.

Special uses - non-recreation ($3,416,000, an increase of $596,000)

Occupancy and use permits, easements and memoranda of understanding authorized 48,300 special land uses on 5.4 million acres of the National Forests in 1972. There is a constant turnover of these authorized uses of about 5 percent each year. The number of new permits issued has increased about 3 percent each year. It is estimated in fiscal year 1974 that the number will increase to around 51,500, covering a total of 5.8 million acres.

Users include public and private enterprise representing individuals, corporations and city, county, State and Federal government agencies. The special land uses are grouped in eight broad categories consisting of about 60 kinds of use excluding recreation. They are:

(1) Agriculture.
(2) Community improvement.
(3) Industrial.
(4) Public information.
(5) Research, study, and training.
(6) Transportation.
(7) Utilities and communications.
(8) Water.

Areas of particular interest are antiquities, electronic installations, fences, pastures, powerlines, reservoirs, roads, telephone lines, and water transmission facilities.

Special land uses assist economic development of rural areas by making suitable land available to farmers, ranchers, and local communities. The Federal Government is the major landowner in many localities. Denial of the use of National Forest System land would create hardships on the local communities, deter further business development, and materially affect on-going Federal programs in rural areas.

More than 25,000 new applications, applications for amendment, applications for transfer, and inquiries are received annually from individuals, companies, corporations, and city, county, and State governments, as well as Federal agencies, to fill their needs. Of this total number, approximately 6,500 are new applications.

Based on past experience, less than a third of the new applications can be approved as being compatible with resource and environmental factors and the needs of the general public. Each new application requires an impact survey, multiple use report or comparison with multiple use plan. New applications of major impact also require preparation of an environmental statement prior to approval. Investigations identify conflicts with management plans and existing uses. Recommendations attempt to assure conformance with multiple use and individual resource plans and programs and actions to protect the quality of the environment. A permitted use must be activated with improvements designed and installed or constructed in compliance with all existing laws, regulations, and local codes under a carefully drawn special-use document embodying all recommended protection measures. Of particular importance are the National Environmental Policy Act of 1969 (PL 91-190) and the Water Quality Improvement Act of 1970 (PL 91-224).

After permits are issued, periodic compliance inspections are made to determine whether the authorized conditions, responsibilities, and duties are met according to acceptable standards.

These standards are those which:

(1) Maintain acceptable levels of water and air quality.
(2) Protect the natural resources from excessive soil erosion.
(3) Prevent unnecessary damage to natural beauty and esthetics of the environment.

(4) Protect renewable resources such as timber, forage, and wildlife from careless or wanton damage.
(5) Do not unnecessarily increase fire hazard.
(6) Protect the public and other users from physical hazards.
(7) Maintain fees or rentals equal to the value of the use authorized comparable with fair market value.

Of the total funds available, about $75,000 would be used to develop and maintain information on National Forest archaeological sites and to protect such sites and artifacts from vandalism or other damage by unauthorized persons, including, if necessary, excavation of endangered sites on an emergency basis.

Under special authorities almost two-thirds of all permitted uses are allowed without charge. The remaining one-third pay fees for the privilege of occupying National Forest land. Fiscal year 1972 receipts from special land uses were $1,088,941, an increase of $121,018 over the previous year. In addition, to the actual receipts collected by the Forest Service, at least $2 million of assistance, through free permits, should be recognized. The total direct monetary value of receipts and benefits is over $3 million. However, many of these free permits no longer qualify, and they will be converted to charge permits. There will be a proportionate increase in receipts to the Treasury.

Project (7)

LAND CLASSIFICATION, ADJUSTMENTS, AND SURVEYS

1972	$7,554,000 1/
1973	8,038,000 2/
1974	9,085,000
Increase	+1,047,000

An increase of $1,047,000 is proposed as follows:

(1) $292,000 for land classification to be used in land use planning with particular emphasis on determining optimum landownership patterns within and adjacent to National Forests.

(2) $98,000 to finance increased costs of examining and appraising an estimated program of 250 proposed land exchanges.

(3) $553,000 for land line location and land status records to be used for marking of landlines and monuments in support of timber management and other land and resource management activities and preparation and maintenance of status records.

(4) $104,000 for mapping needs on the Sawtooth National Recreation Area in Idaho and areas in Alaska pursuant to the Alaska Native Claims Settlement Act.

On the basis of planned program level, there will be an increase of $1,097,000 since $50,000 of the 1973 appropriation is proposed for use for insect and disease control. Subactivities of this program are identified below:

(1) Land classification ($744,000, an increase of $292,000)

The increase will allow participation in the increasing numbers of joint planning ventures with regional, State and local planning bodies assuring that favorable landownership patterns are recognized and pursued.

The function of land classification is to structure and recommend programs concerning the extent, location and composition of the National Forest System that will most effectively further national objectives. Purposes and activities are to:

(a) Improve the land base to provide for current and prospective public needs for outdoor recreation space.

(b) Improve the landownership pattern to facilitate development and use of recreation, timber, range forage, water, and wildlife resources which can contribute to growth of rural economies.

(c) Encourage land adjustment for protection and improvement of watersheds.

(d) Promote stability and encourage economic growth of communities in and near areas in the National Forest System.

(e) Improve efficiency in the administration of natural resource programs.

(f) Improve land use patterns to promote the preservation and enhancement of the environment.

(g) Survey the degree of utilization of public lands pursuant to Executive Order 11508.

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1/ Includes $80,000 personnel savings applied to fighting forest fires.

2/ Includes $50,000 travel reduction savings proposed for transfer to insect and disease control.

Project (7)

Financing at the level indicated will enable Forest Service to meet pressing needs for:

(a) Identification and detailed analyses of areas within and adjacent to the National Forests and Grasslands to determine the land exchange and land consolidation which should be made to best accomplish national objectives, including the Sawtooth National Recreation Area. Of particular urgency are Forest Service intensive unit planning projects and joint agency planning efforts.

(b) Determination of the merits of opportunities to transfer Federal lands to or from the National Forest System, including consideration of lands claimed by Indians, and jurisdictional transfers at numerous Federal water control projects important for outdoor recreation.

(c) Analysis and classification of lands with potential for national recreation areas, monuments, wildlife preserves, or other special status.

(d) Continuing action on Alaska native selections of land, the study of potential new National Forests, and other activities required as a result of the passage of the Alaska Native Claims Settlement Act.

(e) Consideration of applications made by the State of Alaska for State land selections.

(f) Continuing follow-up action on the disposition of public lands surveyed pursuant to Executive Order 11508.

Continual review of the location and extent of the National Forest System components is desirable to determine the direction land use and ownership patterns should take in relation to new developments and needs. The 154 National Forests and 19 National Grasslands located in 44 States and Puerto Rico include nearly 40 million acres of non-Federal land. Programs for consolidations of landownership within existing boundaries of these units need to be based upon sound consideration of their short- and long-range effects.

Examples of Recent Accomplishments

(1) Preliminary study of possible new National Forests in Alaska which provided the Secretary of the Interior with necessary data for withdrawals under the Alaska Native Claims Settlement Act.

(2) The addition of approximately 138,000 acres of Federally-owned land to the Santa Fe, Gila, Carson and Cibola National Forests in New Mexico.

(3) The creation of the 90,000-acre Cedar Creek Purchase Unit in Missouri, including approximately 13,000 acres of former Title III Bankhead-Jones Farm Tenant Act lands.

(4) After long and careful study, the return by the President, of 21,000 acres in Washington to the Yakima Indians and, by legislation, the return of 61,000 acres to the Warm Springs Indians in Oregon.

(5) Agreement with the National Park Service to transfer 23,000 acres of National Forest land in the Yellowstone-Teton Corridor, Wyoming, to the National Park Service so as to coincide with the Centennial of the beginning of the National Park System.

(6) Interchanges with the Corps of Engineers at Libby Dam, Montana; Cave Run, Kentucky; and Dworshak Reservoir, Idaho.

(7) Preparation of an environmental statement on alternatives for future action on the Lake Ocklawaha - Rodman Reservoir Area (Cross Florida Barge Canal area, Florida).

(2) Land exchange ($3,478,000, an increase of $98,000)

Properly conceived land exchanges result in alleviating the need to construct certain road segments, the location and marking of property lines, the issuance of certain special-use permits, and other management costs. The consolidation of ownership through land exchanges results in a $10 cost avoidance for every dollar spent in accomplishing the program. Selected examples of estimated cost avoidance which will result during the next 10 years, from the fiscal year 1974 exchange program, are:

Reductions	Units	Amount (in thousands)
(a) Property lines and corners	1,030 miles	$1,236
(b) Road construction and maintenance	75 miles	3,750
(c) Use permits and occupancy trespass	300 cases	1,200
(d) Road right-of-way needs	190 cases	114
Total		6,300

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 timber supplies. The rural economy is also benefited. Significant benefits can be realized 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.

Carefully designed land exchanges can make material contributions in bettering rural America and the communities located within or near the boundaries of the National Forest System. Farmers and ranchers operating marginal operations can frequently acquire the adjoining National Forest System lands suitable for grazing, thus permitting development of an economic unit. Communities are frequently aided through exchanges that provide lands for expansion and development.

The fiscal year 1974 land exchange program will involve the examination and appraisal of 200,000 acres involving an estimated 250 proposed exchanges. The land the Government gives and receives in exchanges must be examined and appraised. Following examination and appraisal, negotiations are expected to be completed and 200 cases approved during the fiscal year involving a total of 180,000 acres.

Examples of Recent Accomplishments

In fiscal year 1972, 160 land exchanges were approved. In these exchanges, the United States will acquire 70,264 acres valued at $24,800,508 and will grant 49,477 acres valued at $22,479,830. A total of 145 land exchanges were fully completed with title to 99,814 acres passing to the United States and 66,225 acres passing to the other landowners. The net increase in National Forest acreage was 33,589 acres.

(3) Land status records and cadastral engineering (land line location) ($3,637,000, an increase of $553,000)

(a) Land status records. This is a systematic search of records and the presentation in plat, tabular record, and supplementary form of all ownership interests, and Congressional and administrative actions which limit or otherwise affect administration of the National Forest System or the use of adjoining lands by the owners thereof. It is the record of what land interests the Forest Service must administer. Significant progress is necessary to meet the expanding need for correct currently available records of Forest Service landownership, use, and encumbrances.

Project (7)

The National Forest System was created and altered to meet changing needs by many Acts of Congress and administrative actions in accordance therewith. Some 160 million acres were reserved from the public domain.

Over 27 million acres were acquired by several agencies of Government. Over the years many exchange, acquisition, and disposal actions have occurred. The great number of records of the status of such lands as to ownership, encumbrances, and restrictions on use were never satisfactorily assembled, checked, and placed in a system readily used and currently maintained as changes occurred. As a result, the Forest Service has been handicapped in meeting the impact of the vast increase in resource use in recent years.

A system has been developed to assure that accurate status information is assembled and records kept current at a central point and supplied to all field offices of the Forest Service. In converting to this system, all public records are reviewed and entered. Maintenance of records is done in the nine regional offices and supplied currently to some one thousand field offices. The project is about 85 percent completed. The conversion job is scheduled for completion by the end of 1976.

The systematic search and review of records in the conversion project continues to reveal, and identify more clearly, many parcels and general areas which have previously been misunderstood, identified inaccurately, or overlooked in administration due to inadequate records and poor identifying ties between records and ground location.

Users of these system records (Forest Service and other Government agencies, adjoiners, and other public users) are enthusiastic about these records. They give confidence in administration and reduce areas of potential ill-will with adjoiners and users of public and private resources.

Work Proposed for 1974

	1972	1973 planned	1974 estimated
Townships completed	1,200	1,000	1,000

(Total program: 15,561 mapping units--accomplished through 1971 - 11,994)

(b) Cadastral engineering (land line location). Accurate plainly marked property lines are essential to effective management of lands and land based resources. Significant progress in this activity must be made so that National Forest lands can be managed to meet Forest Service multiple use-sustained yield policy and contribute to the stability and growth of the rural economy.

There are about 272,500 miles of property lines between National Forest System lands and adjoining land owned by others. Presently, only about one-tenth of these property lines are adequately located and marked.

About 1,160,500 property corners are required to locate and perpetuate these property lines, with an additional 210,900 corners not on the property lines but needed to control the property corners. Many of these corners were established 50 to 200 years ago. A large share of them have disappeared because of neglect, carelessness, and destructiveness. Many have not yet been established.

Corner search under this program has revealed that about 30 percent of previously established corners are missing and must be restored through relatively expensive cadastral surveys. The search also reveals that many corners are in such poor condition that their loss is imminent unless quick action is taken.

Project (7)

The following has been accomplished since the program was initiated in 1958:

Fiscal Year 1958 - 1972

Corners:

1.	Searched		278,858
2.	Found acceptable evidence of corner		195,647
	(a) Do not need remonumentation		49,253
	(b) Need remonumentation		146,394
	(1) Remonumented by Forest Service	82,355	
	(2) Remonumented by Bureau of Land Management/Forest Service cooperation	44,770	
3.	No acceptable evidence of corners found, cadastral surveys needed to establish corners		83,211
	(a) Corners established by Forest Service cadastral surveys	33,349	
	(b) Corners established by Bureau of Land Management cadastral surveys	15,022	
4.	Miles of cadastral surveys run to reestablish missing corners and establish new corners required:		
	(a) By Forest Service	12,620	
	(b) By Bureau of Land Management	7,642	

Property Lines:

Miles marked to standard	16,886
Miles marked to interim standard	10,098
Miles inspected and maintained	3,759

The Forest Service has been fairly successful in obtaining help and support in this work from some of the adjoining landowners. Additional funding for this program would enable the Forest Service to take better advantage of such cooperation through timely attention to mutually bothersome property line problems.

Most of the activity to date has been to search out and preserve "thread hanging" corners to prevent their complete loss. For every such corner found in time and preserved, a future expenditure of about $700 for a cadastral survey is saved. The average cost to search out and permanently preserve a corner by remonumentation is $70.

Trespass that results in costly litigation and time-consuming "untangling" procedures can be mostly eliminated by timely and adequate marking of property lines.

Since 1966, an annual transfer of the appropriation for this program has been made to the Bureau of Land Management, Department of the Interior. The money was used for urgent cadastral surveys to reestablish property corners that were determined to be lost through the Forest Service corner search activity. In fiscal years 1973 and 1974 $270,000 is planned for transfer each year to BLM.

The work to be done under the cadastral program is shown in the following table. This work is carried on in every State in which the Forest Service administers land.

Project (7)

Work Proposed for 1974 as Compared with 1972 and 1973

	FY 1972 (Accomplished)	FY 1973 (Planned)	FY 1974 (Planned)
Corners (Nos.)			
Search	24,436	29,500	29,500
Remonument	12,332	13,500	13,500
Establish	6,556	3,500	3,500
Maintenance	3,908	2,500	2,500
Boundaries (miles)			
Locate and mark:			
To full standard	2,003	1,500	1,500
To partial standard	657	1,000	1,000
Maintenance	321	1,000	1,000

Examples of Accomplishments

The accomplishment since 1958 in comparison to the total inventory of property corners and lines is as follows:

Corners searched	24 percent of total
Property lines marked	8 percent of total

Work has been programed in areas of most urgent need, thus obtaining maximum immediate benefits.

One-third of the corners revealed as missing by the corner search phase to date has been reestablished by cadastral surveys. This work is also done where most urgently needed, thus obtaining maximum immediate benefits.

(4) Geometronics ($1,226,000, an increase of $104,000)

The increase will be used to help defray the costs of mapping requirements for the Sawtooth National Recreation Area in Idaho and areas involved pursuant to the Alaska Native Claims Settlement Act (PL 92-203).

Multiple use planning requires a particular knowledge of the terrain, the extent and location of the natural resources 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.

Technological advancements have provided new means of improving and extending management of National Forest resources and related facilities. The adaptation and development of such techniques as the analytical approach to control extension for the essential control of remote sensing is being developed and implemented. This promises significant reductions in field-going operations.

Investigations are underway to provide more comprehensive and efficient methods for recording, interpreting, storing, retrieving and displaying interrelated terrain and resource data. Digitizing various forms of data for computer handling is an essential element in the process. Displays are in various forms--tabular data, sean area plots, slope and aspect maps, orthophoto maps and engineering data.

These developmental operations are supplemental to and coexistent with the acquisition of conventional line mapping in the quadrangle format for the national mapping program. The data are needed on some 640,000 square miles of area within the National Forests for a wide range of engineering planning, timber, range, wildlife control, recreation facilities, and watershed management activities. Approximately 60 percent of this area is adequately covered in national accuracy line mapping. 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.

The quadrangle data are converted to various bases for the display of resource inventory data. Thus the interrelationship of all National Forest resources can be observed and analyzed in the process of multiple use planning. The resource inventory data are transferred to the bases by photogrammetric means.

Utilizing the terrain data and resource data procured through photogrammetric procedures, it is proposed to prepare several management bases on an adequate scale and format for approximately 10 National Forests.

		1972	1973	1974
Terrain Data (topographic)	thousands of acres ...	791	791	791
	square miles	1,080	1,080	1,080
Resource inventory data (planimetric)	thousands of acres ...	1,920	1,920	1,920
	square miles	3,000	3,000	3,000
General management	forests	8	12	10

The funds for fiscal year 1974 will be used to produce the above conventional line map information and develop new geometronic process and display techniques.

Project (8)

FOREST FIRE PROTECTION

1972	$37,024,000	1/
1973	32,001,000	2/
1974	32,127,000	
Increase	+126,000	

An increase of $126,000 is proposed as follows:

(1) To provide necessary additional fire protection for the Sawtooth National Recreation Area ($91,000).

(2) To cover increased fixed equipment replacement costs ($35,000).

On the basis of planned program level there will be an increase of $331,000 since $205,000 of the 1973 appropriation is proposed to be used for fighting forest fires and insect and disease control.

The Sawtooth NRA was established by PL 92-400, August 22, 1972. This special area requires more intensified protection due to increased public use and to maintain the special resource values.

The increase of $35,000 will finance part of increased equipment replacement costs and release funds for essential fire prevention and initial attack requirements.

The objectives of the National Forest Fire Protection Program are to:

(1) Hold fire losses to a level consistent with immediate long-range land management objectives.

(2) Use fire to increase productivity of National Forest lands.

(3) Reduce to tolerable limits the fire threat to life and resources in rural areas in case of enemy attack.

(4) Accomplish the above objectives economically and with a high degree of personal safety.

This program is to lower the flammability of forest and rangelands resulting in greater protection of lives, property and resources. The quality of the environment is improved through scientific smoke management and application of sound fire management practices including the prescribed use of fire. Uncontrolled fires become less tolerable each year as the interface between rural and urban areas increases.

Land and resources protected by the Forest Service are subject to more use by recreationists, travelers and others for special purposes, collectively increasing the risk from man-caused fires. Paradoxically, response of the land to good management practice often creates combustible fuels where few existed before. The challenge is to meet the burgeoning problem of increased hazard and risk. Where possible, effort has been made to make improvements in fire prevention, preparedness, suppression, and modification of fuels to increase effectiveness and efficiencies.

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1/ Includes $50,000 personnel savings applied to fighting forest fires.

2/ Includes $195,000 travel reduction savings proposed for transfer to insect and disease control and $10,000 proposed for transfer to fighting forest fires. Does not include fiscal year 1972 unobligated balance of $4,881,556 to be obligated in 1973 for fuels management.

Project (8)

The proposed budget will be used to finance protection measures approximately as follows:

Protection Measure	FY 1972	FY 1973	FY 1974
	(in thousands)		
Fire prevention	$6,810	$6,674	$7,056
Fire detection	4,172	4,173	3,976
Fire attack forces	15,608	15,189	15,213
Air operations	3,949	4,317	4,257
Fuel modification	368	534	678
Equipment development and testing	489	526	424
Studies, surveys, plans and training	578	588	523
Transferred to fighting forest fires	50	- -	- -
Total	32,024	32,001	32,127

Note: Above figures do not include 1972 supplemental appropriation for fuels management in the amount of $5 million.

Examples of Recent Accomplishments

Mobilization. During 1972 the mobilization effort was in initial attack forces. The success of the effort is borne out by the fire record. Although there was a 15 percent increase in fires over the previous year, only 4 out of 100 escaped initial attack as compared to nearly 7 out of 100 the previous year. For the first time ever, military aircraft airlifted fire trucks from California to Arizona to strengthen protection for 300 homes in the vicinity of the 28,000 acre, 5-day old Battle Fire.

Having adequate first attack forces available at sensitive locations during critical and hazardous burning conditions resulted in reduced acres burned during a near record year for number of fires. These first attack forces include ground tankers, air tankers, tractors, and experienced and trained firefighters. An example of the effectiveness of these fire attack forces comes from 10 sample fires in the Southwest. For these 10 potentially large fires it is estimated 30,500 acres were spared from burning resulting in an estimated saving of $6.9 million in fire suppression costs.

Fire prevention and law enforcement. Man-caused fires were analyzed on the basis of occurrence, trends, and values lost by National Forests to select twelve forests with the comparatively worst man-caused fire problems. The analysis assists in achieving optimum cost/benefit relationships for available prevention funding. The National Forests in Mississippi and Shasta-Trinity NF, California, made such improvement that they are no longer in the twelve worst forests. Action on fire trespass cases during fiscal year 1972 resulted in collections of $614,599.

Fire training and safety. As a part of a national fire management training program, 104 fire managers successfully completed training in advanced fire generalship designed for managers of large forest fire suppression operations. There were 60 managers trained in the use of aircraft in fire and resource management activities.

Firefighter protection from burns was improved with the introduction of a new fire retardant fabric that was tested by Forest Service testing facilities. During the Battle Fire on the Prescott National Forest, Arizona, which burned for seven days and destroyed 44.5 square miles of forest and range resource, there was one lost-time injury out of an estimated 14,100 man-days of hazardous work. During the Bear Fire, Los Padres NF, California, 6 men lost their lives in a helicopter accident. One other fatality in an air accident occurred in the Southwest Region.

Fuel treatment. Work in this program consists of constructing new fuel breaks, maintaining existing fuel breaks, making vegetative type conversions in highly hazardous fuel areas, cleanup of forest debris along roadsides, and treatment of undesirable forest fuels to maintain the environment and achieve ecological benefits.

Through mechanical treatment or prescribed burning, approximately 220,000 acres of excessive natural fuels were reduced in fiscal year 1972 to improve the forest environment and gain desirable ecological conditions.

Special fuel treatment is underway as a result of the fiscal year 1972 supplemental funding of $5 million. Areas of work were selected that provided the best benefit/cost relationship and degree of protection consistent with previous work. Benefit/cost ratios of 5:1 are not unusual.

The Yerba Buena Ridge fuel break, Angeles National Forest, California, provided quick and safe access to the Aken fire front, making it possible to save 3,500 acres from burning. The estimated savings was $1.9 million.

Air operations. Progress continues in selection of aircraft for use as air tankers. P2V Neptune patrol bombers are being released by the Department of Defense for purchase by private industry for use as air tankers. Coordination of efforts with Bureau of Land Management is resulting in standardization of items commonly used by the two agencies--such as smokejumper equipment, aircraft inspection and operating procedures.

Fifty pilots from private industry, State and Federal agencies completed training in the use of air tankers in fire suppression, the first such training of this scope and nature.

The first Modular Airborne Fire Fighting System, a detached fire retardant delivery system developed with the Air Force, is about complete and will be operational for the 1973 fire season.

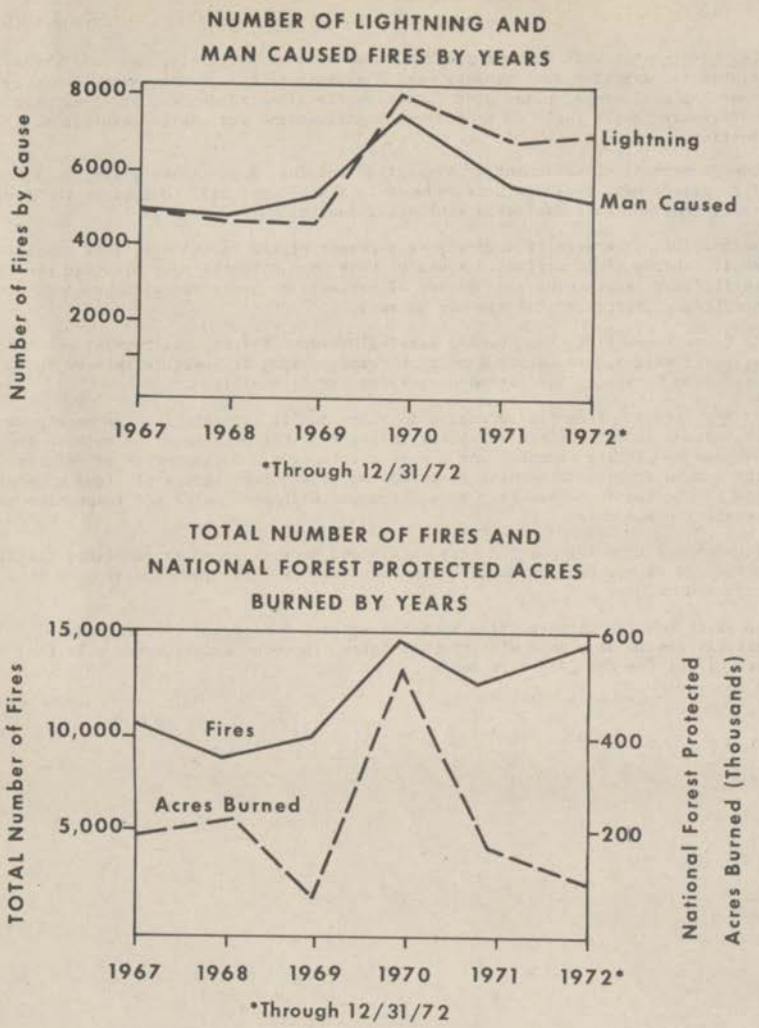
NUMBER OF LIGHTNING AND
MAN CAUSED FIRES BY YEARS
Number of Fires by Cause
8000
6000
4000
2000
Lightning
Man Caused
1967
1968
1969
1970
1971
1972*
*Through 12/31/72
TOTAL NUMBER OF FIRES AND
NATIONAL FOREST PROTECTED ACRES
BURNED BY YEARS
TOTAL Number of Fires
15,000
10,000
5,000
Fires
Acres Burned
600
400
200
National Forest Protected
Acres Burned (Thousands)
1967
1968
1969
1970
1971
1972*
*Through 12/31/72

Figure 8

Project (9)

MAINTENANCE OF IMPROVEMENTS FOR FIRE AND GENERAL PURPOSES
(INCLUDING COMMUNICATIONS)

1972	$7,684,000 1/
1973	7,795,000 2/
1974	8,576,000
Increase	+781,000

An increase of $781,000 is proposed to be used for maintenance of water and sanitation systems constructed under the pollution abatement program, and other improvements which support all Forest Service activities.

The program provides for the maintenance to acceptable standards of buildings, utilities, pollution abatement facilities, airfields, communications systems, and related facilities throughout the National Forests and National Grasslands. The replacement value of these improvements exceeds $300 million. It is essential that the physical plant upon which Forest Service land management activities depend, be adequately maintained. These funds will be used to maintain the following:

Type of facility	
Fire lookouts, towers, and observatories	1,500
Dwellings, cabins, barracks, and trailers	5,400
Field offices	800
Storage and service buildings	7,000
Water and sewer systems	5,000
Radio units	22,100
Landing fields and heliports	500
Miles of telephone lines	7,500
Miles of administrative fences	1,200

Maintenance funds are distributed to field units based upon number of improvements by classes currently justified by program use and an analysis of unit maintenance cost.

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1/ Includes $30,000 personnel savings applied to fighting forest fires.

2/ Includes $48,000 travel reduction savings proposed for transfer to insect and disease control.

Project (10)

PAYMENTS TO EMPLOYEES' COMPENSATION FUND

1972	$1,622,187
1973	2,131,000
1974	2,300,000
Increase	+169,000

An increase of $169,000 is proposed 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 1973 payment was $2,131,010.

Project (11)

FOREST ADVANCED LOGGING AND CONSERVATION

1972	- -
1973	$5,000,000
1974	- -
Decrease	-5,000,000

A decrease of $5 million is proposed.

In fiscal year 1973 an amount of $5 million was appropriated for a forest advanced logging and conservation program. However, these funds are not planned to be used in 1973 and funds are not being requested in fiscal year 1974.

It is proposed that the $5 million appropriated in 1973 be transferred to Forest land management for fighting forest fires.

92-148 1973

Project (12)

WATER RESOURCE DEVELOPMENT RELATED ACTIVITIES

1972	$3,989,000 1/
1973	4,022,000 2/
1974	4,022,000

No change is proposed. On the basis of planned program level, there will be an increase of $26,000 since $26,000 of the 1973 appropriation is proposed for use for insect and disease control.

The funds available will help avoid misuse of resources in the most sensitive situations, in connection with water development projects of other agencies.

The construction agencies, frequently through separate Congressional authorization, initiate the projects and schedule the performance. The Forest Service cooperates in the planning, development, and management of the water and related resource development associated with National Forest System lands.

Each water development project poses resource problems and opportunities peculiar to the individual site under consideration, to adjacent and tributary lands, and to the associated rural area environment. This requires a comprehensive environmental impact survey by the Forest Service to determine the effect of each water resource development proposal on all the resources, facilities, and the rural areas affected by the project. These surveys determine the best pattern for multiple use management of project associated land, prescribe the resource management adjustments needed to assure a maximum National Forest contribution to the water project, and identify Department-wide opportunities for utilizing project potential for the enhancement of rural America.

In addition to impact surveys, the work performed under this program includes:

(1) Liaison with the construction agency to assure the benefits of a combined and harmonious interagency effort.

(2) Participation in wild and scenic river studies on State and private lands.

(3) Treatment of lands, tributary to or within the project area to provide improved water yields and reduced sedimentation which will better serve operating requirements of reservoirs, maintain or increase the useful life of the project, and provide for public safety and enjoyment.

Work and financing planned for fiscal year 1974 is compared with fiscal year 1973:

	Fiscal Year 1973		Fiscal Year 1974	
	No. of Units	Cost	No. of Units	Cost
(1) Impact surveys and construction liaison	375	$2,748,000	238	$2,386,000
(2) Wild and scenic rivers studies	18	200,000	10	150,000
(3) Soil stabilization and cover improvement	65	1,074,000	77	1,486,000
Totals	458	4,022,000	325	4,022,000

(1) Impact surveys and construction liaison ($2,386,000, a decrease of $362,000)

Impact surveys delineate the effect, define necessary mitigating measures, and identify enhancement opportunities relative to proposed water resource developments associated with National Forests and National Grasslands. Reports resulting from such surveys document measures which are essential to the attainment of National Forest multiple use objectives and identify how National

1/ Includes $100,000 personnel savings applied to fighting forest fires.

2/ Includes $26,000 travel reduction savings proposed for transfer to insect and disease control.

Forest management can contribute to project purposes to optimize their economic and social contribution to rural America. To be effective, the surveys and reports must be concurrent with the construction agency's preliminary planning to permit their findings to be incorporated in the licensing or authorizing document.

Liaison with the construction agency during the construction period is necessary 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.

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 and the project works fail to make their maximum contribution. 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. The impact survey effort and construction liaison work reflects an involvement at 238 projects.

Fiscal year 1972 accomplishments included preparation of environmental impact survey reports for: Upper Pena Blanca, Cochiti Reservoir, Kendall Dam, Alpine Narrows, Warm River, Hipes Reservoir, Booneville Reservoir, Pike Creek, and Pinewoods Lake. In addition, construction liaison was carried out on such major projects as the California Water Plan and the Central Utah Project.

(2) Wild and scenic rivers studies ($150,000, a decrease of $50,000)

The proposed level of funding will cover Departmental responsibilities for Wild and Scenic Rivers Studies on State and private lands.

The Forest Service has lead responsibility for the Department of Agriculture relating to studies under the Wild and Scenic Rivers Act of 1968. In addition to rivers assigned to the Department, the Forest Service coordinates USDA input to the eighteen Interior-led studies. Work will proceed on the remaining ten of these in fiscal year 1974. Eight have already been completed. Funds will be used to carry out the Federal responsibility and to augment the State's efforts in their own studies under the Act. These activities are needed to fulfill the Nation's demand for a quality environment.

(3) Soil stabilization and cover improvement ($1,486,000, an increase of $412,000)

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 and other elements of the impact survey determine that such work is needed and that benefits to the project purpose are clearly established.

Treatment programs include the following:

(a) Modifying the vegetation to decrease erosion, to reduce flood peaks, and to increase the annual quantity and improve the timing of water yielded from the tributary lands.

(b) Clearing reservoir areas, where not done as part of construction, and keeping the reservoir free of debris to make the area safe for public use and to maintain scenic beauty.

(c) Land treatment measures such as contour terracing, gully plugs, headwaters debris and flow retarding structures, and streambank and shoreline stabilization measures.

Project (12)

Essential land treatment and related measures are planned at 77 projects, including 14 PL-566 small watershed projects approved after March 21, 1966. Reservoir sweeping, debris and stump removal, and vector and aquatic weed control will be accomplished on about 30,000 acres at 32 projects in order to provide for public safety and user enjoyment of the reservoir area. At the remaining projects a combination of treatment measures, including some of the above, will be performed to improve water quality and quantity.

Fiscal year 1972 accomplishments included the application of land treatment measures at Trail Creek, Vernon, Georgetown, Carpinteria, and Cottonwood PL-566 projects. About 400 acres of stumps were removed at projects for protection of the reservoir users and for esthetic reasons. Reservoir sweeping was accomplished at over 15 projects and measures to control erosion and stabilize streambanks which improves water quality were applied at 25 projects.

Project (12)

GEOGRAPHIC BREAKDOWN OF APPROPRIATIONS

Water Resource Development Related Activities

	1/ 1973 estimate	1974 estimate
Alabama	$29,900	$29,900
Alaska	48,200	48,200
Arizona	138,800	138,800
Arkansas	30,200	30,200
California	649,000	649,000
Colorado	283,600	283,600
District of Columbia	212,000	212,000
Florida	4,700	4,700
Georgia	15,000	15,000
Idaho	322,500	322,500
Illinois	121,200	121,200
Indiana	59,000	59,000
Kentucky	62,200	62,200
Louisiana	1,600	1,600
Maine	7,300	7,300
Maryland	3,100	3,100
Michigan	24,000	24,000
Minnesota	17,300	17,300
Mississippi	37,500	37,500
Missouri	98,500	98,500
Montana	242,300	242,300
Nebraska	2,400	2,400
Nevada	21,500	21,500
New Hampshire	13,600	13,600
New Mexico	104,300	104,300
North Carolina	29,700	29,700
North Dakota	6,600	6,600
Ohio	52,800	52,800
Oklahoma	2,700	2,700
Oregon	385,900	385,900
Pennsylvania	8,600	8,600
South Carolina	18,200	18,200
South Dakota	17,700	17,700
Tennessee	36,700	36,700
Texas	45,500	45,500
Utah	356,000	356,000
Vermont	8,600	8,600
Virginia	48,500	48,500
Washington	271,600	271,600
West Virginia	47,300	47,300
Wisconsin	28,300	28,300
Wyoming	107,600	107,600
Total	4,022,000	4,022,000

1/ Includes $26,000 travel reduction savings proposed for transfer to insect and disease control.

Project (13)

FIGHTING FOREST FIRES

1972	$50,555,000 1/
1973	4,275,000
1974	4,275,000

No increase is proposed.

This program provides an initial amount for suppressing forest fires on or threatening National Forests and Grasslands which cannot be handled by the regular forest fire protection program. This initial appropriation is supplemented each year to the extent necessary to cover all emergency forest firefighting costs.

Included are expenditures for men and equipment to control large fires. In addition, when critical conditions present an unusual threat, men are engaged in special efforts to prevent fires and temporary forces are used at strategic locations to be available to attack fast-spreading fires.

The volume and scope of emergency forest firefighting varies annually according to severity of burning conditions and the extent of the forest fire protection program. This program and the forest fire protection program are directly related. The cost of fire protection on the National Forests and Grasslands is the sum of the two programs.

Calendar Year 1972 Fire Season

Extreme burning conditions continued in the Southwestern States during the spring and summer. Some areas show as little as one-fourth of the normal precipitation for the seven-month period, March through September. The Northwestern States generally experienced moderate burning conditions.

A 30 percent increase in the number of fires in the Western States, accompanied by a 17 percent decrease in the number of acres burned, as compared to 1971, attests to the effectiveness of first attack actions during the year.

Through December 31, 1972, 14,140 fires burned 116,526 acres of National Forest protected area. Of these fires, 5,733 were man-caused. The number of fires is the highest in 11 years, excluding 1970. Three major fires in Arizona and California burned 49,800 acres, or 42 percent of the acres burned. During one five-day period in August, 250 fires occurred in Southwest Idaho, taxing fire suppression capabilities. Only one of these fires became a large fire.

Geographic Breakdown of Obligations--Fiscal Year 1972

Alabama	$30,712	Maine	279	Oregon	8,067,791
Alaska	28,192	Michigan	124,801	Pennsylvania	4,666
Arizona	9,855,622	Minnesota	203,504	South Carolina	42,113
Arkansas	415,436	Mississippi	125,034	South Dakota	196,794
California	15,277,465	Missouri	266,971	Tennessee	96,727
Colorado	1,003,464	Montana	2,378,317	Texas	33,491
District of Columbia	4,687	Nebraska	33,129	Utah	694,236
Florida	176,739	Nevada	584,635	Vermont	742
Georgia	30,662	New Hampshire	2,804	Virginia	185,145
Idaho	4,338,952	New Mexico	3,815,049	Washington	3,209,744
Illinois	29,097	North Carolina	190,559	West Virginia	14,770
Indiana	7,836	Ohio	13,644	Wisconsin	17,200
Kentucky	75,006	Oklahoma	29,725	Wyoming	710,833
Louisiana	91,521			Total	52,408,114

The amounts for 1973 and 1974 have not been distributed by States. Locations of emergency firefighting funds cannot be forecast with any degree of accuracy.

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1/ Excludes $4,720,000 personnel savings in other Forest land management accounts which were applied to fighting forest fires.

Project (14)

INSECT AND DISEASE CONTROL

1972	$10,718,000 1/
1973	10,585,000 2/
1974	10,585,000

No increase is proposed. In 1973, $1.4 million in funds provided for other items is proposed for use in insect and disease control to meet unusual outbreaks which occurred in 1973.

The Forest Pest Control program involves protection of the forest from depredation by insects and diseases on lands of all ownerships. Activities include:

(1) The prevention, detection, evaluation, and suppression of pests on all Federal lands.
(2) Coordination of the program on lands of all ownerships.
(3) Federal financial assistance to States for a similar program on State and private lands.

The program for fiscal year 1974 will include a strong effort to hold losses caused by bark beetles to tolerable levels. It is not possible to predict this far in advance the exact locale or scope of control operations, but present beetle activity indicates a need for:

(1) Mountain pine beetle control projects in Montana, South Dakota, Wyoming, and Washington.
(2) Douglas-fir beetle, fir engravers, and western pine beetle control projects in California, Oregon, and Washington.
(3) Spruce beetle control projects in Alaska, Arizona, Colorado, New Mexico, Oregon, and Washington.
(4) Southern pine beetle control projects in Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia.

Defoliating insects--such as the gypsy moth, spruce budworm, Jack pine budworm, tussock moths, and sawflies--will be controlled where resource values are seriously threatened by them and cost-benefit ratios are favorable. Current reports indicate that suppression projects may be required to control:

(1) Gypsy moth in Massachusetts, New Jersey, New York, Pennsylvania, and Rhode Island.
(2) Spruce budworm in Maine, Minnesota, and Montana.
(3) Jack pine budworm in Michigan and Wisconsin.
(4) Tussock moth in Oregon and Washington.
(5) Sawflies in Michigan, Minnesota, and Wisconsin.
(6) Cankerworms and leaf tiers in New Jersey, New York, and Pennsylvania.
(7) Pine butterfly in Montana.

The National Environmental Policy Act, particularly the requirement for preparation and review of environmental statements, has increased the cost of doing business. This, coupled with cancellation of the registration of pesticides normally used to control the most troublesome forest defoliators has seriously reduced current capabilities to cope with major outbreaks and prevent devastating losses on a broad front. Public concern about the aerial application of any pesticide, however innocuous, has compounded the protection job.

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1/ Includes $150,000 personnel savings applied to fighting forest fires.
2/ Does not include $1.4 million travel reduction savings in other Forest land management funds to be used for insect and disease control work.

Efforts must be diverted to screening and testing alternate chemicals and other means of managing pest populations. All these requirements, limitations, and diversions are resulting in current protection much below that which is necessary to maintain healthy forests and a desirable environment.

Current efforts will be continued on control of the dwarf mistletoes in the Western regions in 1974. These parasitic plants are responsible for reductions of tree growth amounting to estimated losses of $40 million annually in lumber production from western conifers. Integrating control into planned silvicultural work provides a high rate of return (10-15 percent) by eliminating losses caused by dwarf mistletoe.

White pine blister rust control will be continued in the East, the Lake States, and in selected stands in California. The program in the East is primarily a cooperative one, financed by the States with Federal financial assistance. Careful evaluation of rust conditions and hazard has reduced the area requiring control materially in recent years.

Pest outbreaks fluctuate greatly. The cost to check and contain outbreaks cannot be accurately predicted. Using past experience as a guide, along with the knowledge of developing situations, Federal fund needs for fiscal year 1974, as compared with 1972 and 1973, are as follows:

Item	1972	1973	1974
	(in thousands)		
Administration, detection, and evaluation	$5,298	$5,516	$5,810
Methods improvement	731	720	720
Bark beetle control	1,566	1,563	1,389
Defoliator control	1,219	1,678	1,319
Other insect control	130	129	129
Blister rust control	819	644	615
Oak wilt control	71	59	57
Dwarf mistletoe control	707	250	520
Other disease control	27	26	26
Savings applied to fighting forest fires	150	- -	- -
Total	10,718	10,585	1/ 10,585

Impact data for most forest insects and diseases are sketchy or lacking. Good data are essential to properly analyze and evaluate outbreaks and make suppression recommendations. Studies to develop standards and implement collection of impact data for forest pests of high economic importance continue high on the priority job list for 1974.

Pest control scientists help to protect the environment by carefully weighing and determining the adverse effects of unchecked pest outbreaks and those which might result from prescribed control treatments with the benefits to be derived. As part of their overall responsibilities, pest control scientists will keep all environmental impacts, both beneficial and adverse, in proper perspective and recommend those courses of action that will provide the greatest benefits.

1/ In 1973 an additional $1.4 million in funds provided for other items is proposed to be used for insect and disease control as follows: Southern pine beetle, $700 thousand; gypsy moth, $600 thousand; and spruce budworm, $100 thousand.

Examples of Recent Accomplishments

Cooperative gypsy moth suppression. The insecticide carbaryl (Sevin) was used for suppression of gypsy moth populations on carefully selected areas by States of Pennsylvania (20,406 acres), New Jersey (49,962 acres), and New York (41,279 acres) in cooperation with the Forest Service. Treatments were successful in protection of current year's tree foliage. Significance of any long-term benefits must await further evaluation.

Gypsy moth research and development. The insect and disease program was involved as a full partner in the Department's research and development effort to develop an effective and environmentally acceptable integrated pest management program for the gypsy moth--in cooperation with Northeastern States, universities, citizens and other groups.

Change in cost-sharing with States. A broad program change, based on a study of workload, resulted in an increase of about twofold in cost-sharing with States for the cooperative pest action program on non-Federal lands. Also, a policy change was made to allow up to 50 percent (formerly one-third) cost-sharing for actual suppression work undertaken. These changes will provide States with an increased opportunity to carry out the total job on State and private lands in an effective manner.

Evaluation of seedling for disease resistance. Research findings for determination of resistance of selected loblolly and slash pine seedlings to fusiform rust disease were evaluated for use on a mass production scale. At the present time it appears that standardized screening of seed lots on a large scale and with a high degree of confidence can be done successfully. This will provide a rapid means of getting genetic resistant seed identified and used for regeneration by landowners and managers throughout the South.

Spruce budworm attacked in Maine. Some three million acres of spruce-fir type in Maine were infested by spruce budworm. Maine, in a cooperative suppression project with the Forest Service, used Zectran to treat 500,000 acres where high damage was imminent if the infestation were allowed to go unchecked. The overall reduction in budworm population in the treated area was about 85 percent.

Bark beetles. Suppression of various bark beetle outbreaks involved treatment of numerous individual spot infestations in the West and South. The massive southern pine beetle epidemic now underway is being vigorously attacked on many fronts (Figure 14). Hopefully these efforts will result in population declines next year. Although direct chemical treatment was necessary in some places, greater advantage, than in any previous year, was taken to utilize sanitation-salvage logging as a means of removing infested trees from the woods before beetle emergence.

Project (14)

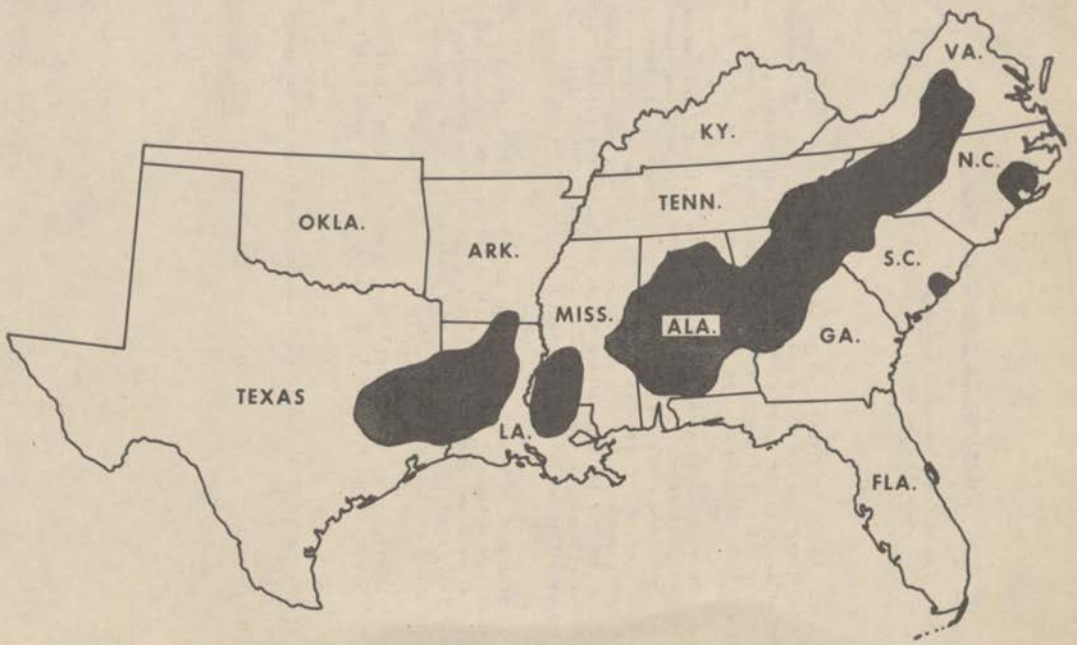
GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Insect and Disease Control

	1973 estimate	1974 estimate
Alabama	$381,000	$150,000
Alaska	108,000	108,000
Arizona	160,000	160,000
Arkansas	114,000	104,000
California	1,000,000	1,000,000
Colorado	350,000	350,000
Connecticut	20,000	20,000
Delaware	6,000	6,000
District of Columbia	180,000	180,000
Florida	43,000	43,000
Georgia	325,000	130,000
Hawaii	20,000	20,000
Idaho	740,000	740,000
Illinois	8,000	8,000
Indiana	8,000	8,000
Iowa	7,000	7,000
Kansas	6,000	6,000
Kentucky	55,000	55,000
Louisiana	500,000	450,000
Maine	749,000	600,000
Maryland	160,000	160,000
Massachusetts	20,000	20,000
Michigan	160,000	160,000
Minnesota	115,000	115,000
Mississippi	180,000	130,000
Missouri	100,000	100,000
Montana	753,000	753,000
Nebraska	8,000	8,000
Nevada	30,000	30,000
New Hampshire	110,000	110,000
New Jersey	313,000	190,000
New Mexico	250,000	250,000
New York	840,000	630,000
North Carolina	325,000	295,000
Ohio	60,000	60,000
Oklahoma	7,000	7,000
Oregon	640,000	640,000
Pennsylvania	353,000	225,000
Rhode Island	170,000	31,000
South Carolina	149,000	124,000
South Dakota	300,000	300,000
Tennessee	157,000	157,000
Texas	270,000	220,000
Utah	65,000	65,000
Vermont	90,000	90,000
Virginia	530,000	520,000
Washington	420,000	420,000
West Virginia	150,000	150,000
Wisconsin	190,000	190,000
Wyoming	290,000	290,000
Total program level	11,985,000	10,585,000
Transfer from other Forest land management accounts	-1,400,000	- -
Total appropriation	10,585,000	10,585,000

SOUTHERN PINE BEETLE INFESTATION

NOVEMBER, 1972



60,000,000 gross acres of forested land are located in the southeastern States. Infestations are located in ten of these States mostly private holdings but also includes 17 National Forests and 33 Ranger Districts.

Project (15)

COOPERATIVE LAW ENFORCEMENT PROGRAM

1972	$2,500,000
1973	2,527,000 1/
1974	2,527,000

No increase is proposed.

Public Law 92-82 (August 10, 1971) authorized the Secretary of Agriculture to cooperate with any State or political subdivision thereof in the enforcement of State or local laws on lands of the National Forest System. Such cooperation includes reimbursement to a State or its subdivision for expenditures incurred in connection with activities on National Forest System lands.

State and local laws and ordinances are applicable on National Forest System lands with few exceptions. The Forest Service must look to State and local law enforcement officials to enforce these laws and ordinances on the National Forests. State and local law enforcement agencies will continue to perform, on a nonreimbursable basis, their normal law enforcement duties without cost to the Federal Government. This program provides for the negotiation of law enforcement agreements between the local law enforcement agencies and the Forest Service to handle abnormal impacts caused by public use of the National Forest.

Funds for this program were made available May 27, 1972, and in fiscal year 1972, only $84 thousand was obligated. The unobligated balance remains available for use in subsequent years and will be used to carry out a balanced program in fiscal years 1973 and 1974, when an allowance is made for non-recurring start-up costs incurred in fiscal year 1973.

A report system is being developed to reflect the number of State violations and cases made by State and local law enforcement agencies on National Forest lands.

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1/ Includes $6,000 travel reduction savings proposed for transfer to insect and disease control.

Project (15)

GEOGRAPHIC BREAKDOWN OF APPROPRIATIONS

Cooperative Law Enforcement

	1/ FY 1973 estimate	FY 1974 estimate
	(in thousands)	
Alabama	$14	$15
Alaska	41	40
Arizona	95	95
Arkansas	40	40
California	520	525
Colorado	170	80
District of Columbia	24	45
Florida	35	35
Georgia	20	20
Idaho	130	135
Illinois	21	25
Indiana	6	10
Kentucky	30	30
Louisiana	15	15
Maine	1	1
Michigan	45	50
Minnesota	27	35
Mississippi	20	20
Missouri	31	35
Montana	175	190
Nebraska	5	- -
Nevada	50	50
New Hampshire	25	25
New Mexico	125	140
North Carolina	35	35
Ohio	9	10
Oklahoma	3	5
Oregon	281	275
Pennsylvania	21	25
South Carolina	15	15
South Dakota	30	10
Tennessee	25	25
Texas	15	15
Utah	107	125
Vermont	5	5
Virginia	35	40
Washington	190	192
West Virginia	23	30
Wisconsin	23	29
Wyoming	45	35
Total	2,527	2,527

1/ Includes $6,000 travel reduction savings proposed for transfer to insect and disease control.

SALES ADMINISTRATION AND MANAGEMENT

Mrs. HANSEN. You are requesting an increase of $1,395,000 for sales administration and management. What does this entail?

Mr. HOUSLEY. This increase would be necessary, Madam Chairman, in order to meet both the rising costs of doing business and to meet the requirement placed on us by environmental considerations.

Mrs. HANSEN. At the same time, you have a decrease of $8,566,000 in reforestation stand improvement. In other words, you are going to spend less on this and at the same time put more into sales administration.

Mr. HOUSLEY. Yes, ma'am. The emphasis is on producing the volume cut and sold.

WILDLIFE HABITAT AND RANGE RESEARCH

Mrs. HANSEN. Also on page 17, in spite of the committee's reminders to you over the years and by add-ons which we have made, you show a decrease of $1,115,000 in wildlife habitat and range research.

Mr. ARNOLD. The total amount to be used in fiscal year 1974 remains about the same as in fiscal year 1973, Mrs. Hansen. The reduction is the amount of the funds added on last year.

Mrs. HANSEN. Why do you suppose we added these funds? There was the hue and cry from people all across the country asking for increased research in this area. Two examples come to mind. First, in New Mexico, there is one of the lowest income areas in the United States. Every year you tell us about how poor the range is. The Navajos are using that range; 50 percent of them are unemployed and on welfare and they desperately need some range improvements to enhance their economic condition.

I saw your research activities down there myself. It was amazing the improvement that could be made by the kinds of studies you are doing.

The second thing, on wildlife habitat. I was in northern Wisconsin and the complaint was that if you didn't do protective and planning work on the wildlife habitat, the wildlife went down in the vicinity of your cities and created problems.

So these things were added on to provide better information in order to improve the quality of our lands. Do you think it was wise to take these items that provide better knowledge for such things as wildlife habitat out of the budget and not recognize that they have priority?

Mr. ARNOLD. They certainly do have the priorities, Mrs. Hansen. They relate particularly to the problem of production versus environment. We know that wildlife and production of timber can be compatible.

Mrs. HANSEN. But you have to give us some answers. That is why we put it in. We weren't just writing in numbers.

REFORESTATION AND STAND IMPROVEMENT

There is a decrease of $8,566,000 for reforestation and stand improvement. Have you completed all your programs for stand improvement that you need?

Mr. HOUSLEY. No, ma'am; we have not.

Mrs. HANSEN. So you cut it?

Mr. HOUSLEY. That is correct. The amount is less than the 1972 request.

Mrs. HANSEN. It has been said by many people that if you undermanage your U.S. forests, the hue and cry will get so loud that there will be a tendency to dispose of the forests "to private industry who can manage it." Is this what you are headed for?

Mr. HOUSLEY. We would certainly hope that that would not be the result.

Mr. VEYSEY. Madam Chairman, could I ask a question that relates at this point?

Mrs. HANSEN. Yes, you can.

FOREST MANAGEMENT PRACTICES IN OTHER COUNTRIES

Mr. VEYSEY. Mr. McGuire, could you give me the status of our forest management practices in this country as compared with, say, Canada, Mexico, or any other nation that you have been working with? I understand the problem. You could spend almost an infinite amount of money. What have other nations come to in terms of their intensity of management?

Mr. MCGUIRE. The most intensive management of forest lands is found in Europe. In Europe, population densities are greater, and the central government control over forest practices was much greater than it ever was in this country.

When you look at the rest of the world, I suspect you will find more intensive management in the United States than in Canada, but they are roughly comparable. Canada has more remote areas and perhaps less economic opportunities than the United States.

In tropical America, forestry is just beginning. In most places, it's quite rudimentary, although some countries in Latin America are doing a very commendable job of tree planting. For example, they have introduced species such as the eucalyptus in parts of Latin America. These plantations already are producing wood for paper and pulp.

In the rest of the world, forestry is still in the beginning stage. I think this is a very brief overview of the situation.

Mr. VEYSEY. On this point of the reforestation and stand improvement, would that same comparison exist as with Canada, with Mexico, with the European nations? I understand in Europe they manage very intensively their forests. They pick up every stick and branch that falls.

Mr. MCGUIRE. Yes, I think reforestation and stand improvement are two outstanding characteristics of intensive forestry. The more intensive the practice is, the more reforestation is done, the more promptly it's done after cutting, the more that you find examples of thinning and removal of cull trees, fertilization, et cetera.

Mr. VEYSEY. Am I to understand that the net result of an $8 million decrease in this item is a move to a less intensive level of management of our forests?

Mr. MCGUIRE. Of our National Forests, yes. It would be less intensive management of the National Forest System in fiscal 1974 with this level of budgeting.

Mr. VEYSEY. What will that do? Will that result in a lot less trees being planted or less reseeding or what?

Mr. MCGUIRE. Yes, the overall effect will be a reduction in growth in future years.

Mr. VEYSEY. Can you relate that to any numbers? We were talking about numbers of trees that you are going to grow in nurseries and plant out this year. What would this $8 million do to us there?

Mrs. HANSEN. In your chart, "Estimate of reforestation and timber stand improvement." You had reforestation, 131,480 acres; timber stand improvement, 227,870. This year, reforestation is 153,300. But the timber stand improvement is only 108,600. Is this not correct?

Mr. MCGUIRE. That is correct. The reduction will be taken mainly in timber stand improvement. We are going to try to maintain the approximate level of reforestation.

Mr. VEYSEY. About the same number of trees will be planted?

Mr. MCGUIRE. Yes, approximately.

Mr. VEYSEY. Where does the reduction come in?

TIMBER STAND IMPROVEMENT

Mr. MCGUIRE. We are going to take the reduction mainly in the area to be thinned and improved.

Mrs. HANSEN. In other words, timber stand improvement?

Mr. MCGUIRE. Yes, timber stand improvement. These are measures taken in young stands, of saplings, and thin them out to remove trees that may be infested with insects or to remove trees that are worthless and take them out of the stand so they don't occupy the growing space and replace them with better trees. These are all measures that the forest industry takes in the juvenile stand to increase the growth. If the measures are not taken, additional growth will not be obtained.

Mr. VEYSEY. Can you give me any quantitative difference that that makes in terms of acres or in numbers of defective trees you want to remove, or whatever it is? Can you pin that down?

Mr. HOUSLEY. It would reduce our timber stand improvement accomplishment in fiscal 1974 to a total of 108,600 acres.

Mr. MCGUIRE. Which is about a 50-percent reduction, I believe.

Mr. WYATT. Would my colleague yield?

Mr. VEYSEY. Certainly.

Mr. WYATT. Chief, how are you going to plant approximately the same number of trees in fiscal 1974 as fiscal 1973, if you are decreasing the reforestation money by almost $3 million?

Mr. MCGUIRE. The figures in the explanatory notes may be a little misleading in the sense that the estimates for 1974 include some acreage where we are going to rely on natural seeding. We are going to prepare the seedbed, but then rely on natural seedfall to get regeneration of the stand. We hope that that will progress to some extent. Actually, we are going to reduce our planted acreage by about 5,000 acres.

Mr. WYATT. Really, the amount that you are going to spend on reforestation in 1973 is approximately $3 million less than this committee provided for you in fiscal 1973, because $3 million has been put in the deep freeze. So when you cut that 1973 figure by another $3 million, we are talking about two $3 million reductions over what this committee provided last year, which is a reduction, if I have

figured my percentages right, of almost 25 percent in reforestation money in fiscal 1974 over what the Congress provided for fiscal 1973. Is that approximately correct?

Mr. McGuire. The decrease is approximately what was added by Congress in the last appropriation act.

Mr. Wyatt. I thought, Chief, that we brought it from $18 million up to $21 million in fiscal 1973 for just the reforestation alone. Perhaps I am in error on that figure.

Mrs. Hansen. No, you are not.

Mr. McGuire. I think the appropriation overall was raised.

Mrs. Hansen. We added $3 million for reforestation. That's now impounded.

Mr. Wyatt. Would you check that and give us the actual figure? I think that the reduction over the 1973 level is in addition to the amount that is in the deep freeze. So you don't have a $3 million reduction, you have nearly a $6 million reduction over what we provided.

Mrs. Hansen. The $3 million reduces the base. So this is not only reflected this year, but it will be reflected next year and in following years.

Mr. Wyatt. I think it's nothing short of scandalous that when we are at an all-time period of wood fiber shortage and prices are at an all-time high, that you have a cut in reforestation which I think is going to be reflected in the neighborhood of 25 percent of what has been provided last year.

NATURAL SEEDING PROCEDURE

Mr. Veysey. You indicated a shift in the technique from preparation of the ground to a natural seeding procedure.

Mr. McGuire. Yes, sir.

Mr. Veysey. I suppose that is less expensive?

Mr. McGuire. Yes, sir.

Mr. Veysey. Maybe nature knows best.

Mr. McGuire. It's less expensive. It's less certain. Nature doesn't always provide a natural seedfall every year.

Mr. Veysey. Are you going to introduce seeding?

Mr. McGuire. In some places, we also seed now. What I am saying here is we will rely to a greater extent on natural regeneration. If it does not occur, then later on we will have to go back to seed and plant.

Mrs. Hansen. For the gentleman's information, there are some years that are known as good cone years and some years that are poor cone years. Part of the problem in reforestation in the past has been the fact they didn't have available all the seed that they wanted for their reseeding. I would hope that you are not cutting your ability to acquire seed and have it available.

RECREATION-PUBLIC USE

You have cut funds for operation and maintenance for recreation for public use. In your justifications you say that you are going to have 198.2 million visitor-days of use, which is an increase. At the same time, you are cutting $1,053,000 on the operation and maintenance of this land. Yet at the same time, you are increasing visitor information services by $1,063,000. This seems a strange thing. If you

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are going to operate at a lower maintenance level, it seems to me that you would not be accommodating your visitors to the extent that you need to.

What does the visitor information item comprise?

BLANCHARD SPRINGS CAVERNS

Mr. DEINEMA. This coming year we are opening the Blanchard Springs Caverns in the Ozark National Forest. Opening this facility is going to cost approximately $900,000. That is the major amount of this shift of funds for visitor information service.

Mrs. HANSEN. That is the staffing and management of it?

Mr. DEINEMA. Yes, ma'am.

Mrs. HANSEN. But you are cutting your operation and maintenance to pay for it.

Mr. DEINEMA. Yes, ma'am.

Mr. HOUSLEY. That will be partially compensated by the funds that we have requested under the special item "Land and water conservation fund receipts."

Mr. MCGUIRE. You may be talking about land acquisition. We do have a new proposal in the budget before you that would utilize funds received from user fees.

ADMISSION AND USER FEES

Mrs. HANSEN. What is your average entrance fee?

Mr. HOUSLEY. The user fee is $1 at most sites, but there are some $2 sites.

CONCESSIONAIRE CONTRACTS

Mrs. HANSEN. You say about 35 percent or 29 million visitor-days use will be accommodated by concessionaires. These are resort, marina, and ski areas. We have some problems with the consessionaires in the National Park Service. Would you insert in the record a summary of what the concessionaire contracts are, what your stipulations are, and what your returns are from them?

Mr. HOUSLEY. We would be glad to do that.

(The information follows:)

Permits for concessions developments on National Forest lands are issued under the term Permit Act of March 4, 1915, as amended July 28, 1956.

A standard permit form is used for all concession operations. Each permit states specifically what facilities or services are authorized. Included on this form are stipulations covering the term of the permit, approval of development plans and construction or reconstruction of improvements and payment for timber cut or destroyed. Also covered are such things as maintenance of improvements, compliance with laws and regulations, prevention and suppression of forest fires, protecting from damage the land and property of the United States, and payment for damage to roads and trails. The stipulations further indicate that title to improvements vests in the permittee and upon termination they shall be removed from the site. An individual permit is not transferable. However, provision is made for the issuance of a new permit to a new owner, if a sale of the improvements is made, under conditions warranted at the time. The stipulations provide that the permit may be revoked for breach. They provide for termination in the public interest during the term subject to payment by the United States of an equitable amount for the improvements.

In addition to the standard stipulations printed on the form, additional stipulations further describe and specify requirements to cover such things as fees, accounting procedures and records, site planning, construction schedules, protection of the resources and aesthetics from fire, erosion, chemicals and mechanical damage, public access and nondiscrimination, compliance with all applicable construction, health and safety standards and additional positive measures for protection of health, safety and sanitation. Stipulations also give the Forest Service the right to control the service being provided and review charges made to the public and change these charges if warranted.

The Graduated Rate Fee System used by the Forest Service for permitted concessions development recognizes the permittee's investment in fixed assets and his ability to receive a reasonable return on this investment through the volume of sales generated by the investment. Since the opportunities to profit by concessioners' use of National Forest land are authorized entirely on the basis of the public need for such facilities or services, it is recognized that the fee schedules need not generate a charge that is all the traffic will bear. The Graduated Rate Fee System also recognizes that the recreation business is a highly fluctuating one. Under the System the permittee pays at a low rate against his sales in poor years. As sales increase because of good seasons and profits likewise increase, he pays at a progressively higher rate. However, even the highest rates charged do not preclude a reasonable return on his investment. The System automatically adjusts to either increased investments or increased sales.

Receipts deposited to the U.S. Treasury from National Forest concessions were approximately $3,600,000 in fiscal year 1972.

PUBLIC LAW 92–421, SUPPLEMENTARY NATIONAL FOREST REFORESTATION FUND

Mrs. HANSEN. Public Law 92–421, approved September 18, 1972, established a supplemental National Forest reforestation fund. This authorized annual appropriations of $65 million. You are requesting $16,429,000 for reforestation. Here you have a directive in a bill which was signed by the President. He didn't veto it. Why don't you work to implement it?

Mr. MCGUIRE. That bill, you may recall, started out to provide funds from tariff receipts. Section 32 moneys they were called. However, as it finally was enacted, the source of the funding was removed and the bill confirmed the authority we already had to plant trees. So it did not really change the authority.

VISITATIONS TO NATIONAL FORESTS

Mrs. HANSEN. Will you place in the record your annual visitations for the years 1971 and 1972, and your estimated visitations for 1973 and 1974?

Mr. MCGUIRE. Yes, ma'am.

(The information follows:)

Recreation use of national forests

Calendar year:	*Visitor days* [1]
1971	178, 109, 500
1972	183, 958, 300
1973 (estimate)	190, 300, 000
1974 (estimate)	198, 200, 000

[1] Recreation use of national forest land and water which aggregates 12 person-hours. May entail 1 person for 12 hours, 12 persons for 1 hour, or any equivalent combination of individual or group use, either continuous or intermittent.

IMPACT OF RECREATION FUNDS ON ECONOMY IN RURAL AREAS

Mrs. HANSEN. I want to ask a question that is rather intimately related with the economy. Since your forests are in rural areas, your recreation public use has a substantial impact on the local economy of these rather depressed rural areas. Isn't this true?

Mr. MCGUIRE. That is true.

Mrs. HANSEN. So, you are not content with simply cutting the poverty program, you also decrease the amounts of money in the recreation use budget. Therefore, you substantially add to the poverty problem. People won't go to a place that is not maintained, or where the visitors wander all over forest areas, build fires, and give you quite a sizable fire danger. This costs more in the end to take care of than it would to provide the right recreational use in the first place. Isn't that correct?

Mr. HOUSLEY. Yes, Ma'am.

Mrs. HANSEN. My feeling is that there is going to be no diminishing in the demand for recreation. There's an ever escalating use of the National Forests for public recreation, fishing, hunting, hiking, camping, backpacking, and so on. Isn't that correct?

Mr. HOUSLEY. Yes, ma'am, that is correct.

Mrs. HANSEN. Then you have one additional new factor which is going to require some increased operation costs. That is your snowmobiles in these national forests. Isn't that correct?

Mr. HOUSLEY. Yes, we are experiencing increased snowmbile use.

Mrs. HANSEN. You should invite the Office of Management and Budget to visit a national forest that is not operated properly, invite them to camp for a week.

OFF-ROAD VEHICLE USE

What is your current policy in regard to off-road vehicle use?

Mr. HOUSLEY. We this week published in the Federal Register proposed new regulations providing for control of off-road vehicles. These are broad regulations which provide that the forest supervisors individually will determine their application with public input——

Mrs. HANSEN. What kind of public input will you have?

Mr. HOUSLEY. They would do this in a variety of ways, through informal public meetings, solicitation of views from interested organizations, by all the various means of achieving public participation. The supervisors will designate the areas to be open to off-road vehicles, and those which would be closed to off-road vehicles, and those which might have some restrictions placed on the kind of vehicle, and the season or manner of their use. This process has already begun under existing regulations for the past several years and will continue for the next several years before it is quite complete.

WILDLIFE HABITAT MANAGEMENT

Mrs. HANSEN. You are requesting a $78,000 increase for wildlife habitat management. In your justifications you state in 1972 the States financed 45 percent of the habitat work on the National Forests which amounts to an expenditure of $1.2 million. This is through their State departments of game and fish; is that correct?

Mr. HOUSLEY. Yes, ma'am.

Mrs. HANSEN. Is that amount increasing or going down?

Mr. HOUSLEY. I do not have a figure handy, but it is my impression it is steadily increasing.

Mrs. HANSEN. You also have an increase for your rare or endangered species habitat. Is this increase intended to take care of some of the problems?

Mr. HOUSLEY. Yes, ma'am. We give emphasis to protection and maintenance of habitat for endangered species, such as the osprey. the Kirtland warbler, and bald eagle, and other species.

Mrs. HANSEN. How many endangered species do you have in your National Forests?

Mr. MCGUIRE. 58, ma'am.

GRAZING FEES

Mrs. HANSEN. You indicate a decrease of $274,000 for rangeland management. What are the Forest Service policies on grazing fees?

Is your agency under the same policy as BLM and the Bureau of Indian Affairs on grazing?

Mr. HOUSLEY. We are very closely attuned to the BLM in the fee system being used.

Mrs. HANSEN. Are your prices for the same types of land going to be the same?

Mr. HOUSLEY. They are similar.

RANGELAND MANAGEMENT

Mrs. HANSEN. Why do you propose to reduce this amount?

Mr. HOUSLEY. The reduction will be taken largely in terms of the capital investments in range revegetation activities.

Mrs. HANSEN. Do they not need this range revegetation?

Mr. HOUSLEY. Yes, ma'am.

Mrs. HANSEN. Then why cut it?

Mr. HOUSLEY. The priorities are placed on the current needs of management.

Mrs. HANSEN. What kind of priorities are these? You say that national forest system ranges are annually providing forage and habitat during part of the year for some 1.5 million cattle, 1.7 million sheep, and their offspring. The 17,000 ranch units which own these livestocks are mostly family type operations upon which many rural communities vitally depend for their economic life.

Why say all that and then cut it? I pointed out a minute ago some of these places are the poorest areas in America.

Mr. HOUSLEY. That is correct.

Mrs. HANSEN. This is a time when beef is at a very high price. It is now patriotic to eat fish, I am told. You almost have to be a millionaire to even look at beef these days. You know as well as I do that if you could increase the quality of their rangeland, you will increase the number of cattle and sheep that graze there; is this not correct?

Mr. HOUSLEY. Yes, ma'am.

Mrs. HANSEN. So you are deliberately denying the opportunity of people to have a better living by bringing the prices of beef down. I have been on those rangelands in all of your Western States. Some of them are in a disgraceful state.

Mr. McGuire, why do you not invite the Office of Management and Budget to go down there and try to graze some sheep and cattle on some of your New Mexico land, side by side with the Navajos?

Priorities? What could have a higher priority than making sure that you increase the income of people where 50 percent of them are on welfare? Is that not correct?

Mr. MCGUIRE. Yes, ma'am.

Mrs. HANSEN. Where are the priorities in this country?

You have an increase of $389,000 for soil and water management. Please give us a summary of the current status of the wild and scenic rivers studies.

WILD AND SCENIC RIVERS STUDIES

Mr. HOUSLEY. There are nine wild and scenic river candidates where the studies are being conducted by the Department of Agriculture. On the Chattooga River in Georgia, North Carolina, South Carolina, the study is complete. The report is being readied for submission to the President. Field studies are completed on the Pere Marquette in Michigan, the Flathead River in Montana, and the Skagit in Washington.

The study on the Illinois River in Oregon is in the second year of a scheduled 3-year study. The Priest River in Idaho study will get underway beginning in fiscal 1974. The same is true of the Moyie in Idaho—on the St. Joe River in Idaho, the field study is essentially complete. The field study work is also complete on the Salmon River in Idaho.

Mrs. HANSEN. Please provide for the committee the main basis of your studies, what you are doing.

Mr. HOUSLEY. We would be glad to provide that.

(The information follows:)

The wild and scenic river studies in response to Public Law 90-542 are a comprehensive multiobjective effort aimed at determining the best and wisest use for the river and its immediate area. An attempt is made to identify the objectives and needs of the people as well as the capability of the resources to meet the objectives and satisfy needs. Insofar as possible this is accomplished through public meetings and public participation in the study and through inventory of the physical resources.

From the evaluation of data and public input, management alternatives ranging from the status quo through varying degrees of development are formulated. After appropriate review and further public participation, an alternative is chosen as the management proposal for the river. The proposal is in the form of a report with supporting material which is forwarded to the President and the Congress for consideration. The report contains recommendations as to what portions of the river studied should be included in the national wild and scenic rivers system, the classification (whether wild, scenic, or recreational or combinations), the boundaries, and the administering agency. The report also contains costs in terms of land acquisition, management, development, and also in terms of values foregone or curtailed in the event the river is added to the national system. Pending the congressional decision on whether or not the river should be added to the system, the national forest lands involved in the area are managed to protect the values which caused the river to be considered a candidate for a wild and scenic river.

Mrs. HANSEN. You have an increase of $414,000 for mineral claims, leases, and permits. What is your estimate of the value of annual mineral production from national forest land?

Mr. HOUSLEY. Could we supply that figure for the record?

Mrs. HANSEN. Why, I thought you would have it right at your fingertips.

Mr. HOUSLEY. I should have.

Mrs. HANSEN. Provide it for the record.

(The information follows:)

The value of annual mineral production from national forests land is estimated to be $100 million at the mine or well.

MINING REGULATIONS

Mrs. HANSEN. If we cannot improve our grazing lands, why the increase for mineral claims?

Mr. HOUSLEY. We anticipate new mineral regulations will be issued in the near future and the implementation of these regulations would present an additional cost item.

Mrs. HANSEN. What are the kinds of costs that will go into these regulations?

Mr. HOUSLEY. These regulations are aimed at better control of the mining activity.

Mrs. HANSEN. Such as?

Mr. HOUSLEY. To reduce the impact on surface values: roadbuilding, the manner of exploration, access, removal of vegetation in connection with mineral exploration.

Mrs. HANSEN. Does it provide for reclamation?

Mr. HOUSLEY. Yes, ma'am.

Mrs. HANSEN. Let me ask you, if you have mineral exploration going on and your permitee is destroying the land and finds nothing, then what happens to what he has damaged? Who pays for it?

Mr. HOUSLEY. Under the present conditions the prospector would not have any liability for that.

Mrs. HANSEN. Do you propose to give him that liability?

Mr. HOUSLEY. We would work out an operating plan which would provide for his restoration of the site when he completed his activities.

Mrs. HANSEN. Are you going to provide then for a bond technique, because some of these people do not have adequate financing.

Mr. HOUSLEY. This procedure is used in connection with leasing activities.

Mrs. HANSEN. Do you want to insert in the record your overall guidelines in this new system?

Mr. HOUSLEY. We would be glad to.

(The information follows:)

Since interagency reviews have not been completed on new mining regulations, we are unable to furnish the information requested. When the regulations are finalized they will be published in the Federal Register.

RECLAMATION PROBLEMS

Mrs. HANSEN. Part of our reclamation problems do occur on U.S. forest lands, as you are well aware. There is a wide variety of minerals, rock, gravel, involved, is there not?

Mr. HOUSLEY. Common varieties are not locatable.

Mrs. HANSEN. Supposing a man had a permit to go down and get some riverbed gravel, what does he do?

Mr. HOUSLEY. We control that through the permit procedure at present.

Mrs. HANSEN. Is your procedure satisfactory to safeguard against erosion, sludge, and so on, as a result of removing the gravel?

Mr. HOUSLEY. With respect to the common varieties, I think it is.

SPECIAL USES—NONRECREATION FEE STRUCTURE

Mrs. HANSEN. You are requesting an increase of $596,000 for special uses, non-recreation. Would you please give us the information on your current fee structure for the one-third who pay fees and what changes in the fee structure, if any, are planned?

Mr. HOUSLEY. We anticipate no major changes in the fee structure.

Several types of approaches to fees are used. Some of the concession-type activities are operated on the basis of a percentage of receipts as related to investment in the concession, the graduated rate fee system.

In other cases, the fee is based on the percentage of the land value used by the permittee.

Mrs. HANSEN. You have eight categories for special land uses—agriculture; community improvement; industrial; public information; research, study, and training; transportation; utilities and communications; and water.

Would you give us some examples, for the record, in the categories and right now an example of, say, industrial?

(The information follows:)

Examples of permitted uses in the eight categories are:

Agriculture: Apiary, cultivation, nursery, pasture, and farm buildings.

Community: Cemetery, church, sanitary landfill, school, community center, and service buildings.

Industry: Camps, processing plant, mill and factory, sawmill, pulpmill, and motion picture and television location.

Public information: Markers and monument.

Research, study, and training: Archeological areas, observatory, education center, and military bivouac and maneuver area.

Transportation: Airport, wharf, canal, railroad, stock driveway, tramway, and roads and trails.

Utilities and communications: Oil and gas transmission lines, powerlines, powerplants, antenna system, electronic site including radio and television, telephone line, and microwave site.

Water: Conduit, flumes, pipelines, dam and reservoir, well, spring, and windmill.

Mr. HOUSLEY. An industrial special use permit may be a warehouse or a storage yard for a contractor building a road, something of that sort.

Mrs. HANSEN. Public information?

Mr. HOUSLEY. It might be a chamber of commerce type sign, located outside some of the small communities within the national forests.

Mrs. HANSEN. Research, study, and training?

Mr. ARNOLD. Those are usually cooperative agreements with universities who need special use of a particular tract of land.

Mrs. HANSEN. For some of their research programs, plots of land and so on?

Mr. ARNOLD. Yes, Madam Chairman.

Mrs. HANSEN. Utilities and communications?

Mr. HOUSLEY. The major special-use permit types in the communications line are telephone, telegraph, and microwave installations; of course, major power transmission lines are also included.

UNDERGROUND LINES

Mrs. HANSEN. Are you doing anything in the Forest Service to try to get your lines underground?

Mr. HOUSLEY. Yes, Madam Chairman, to the full extent that the technology and the state-of-the-art will permit.

Mrs. HANSEN. How many miles of underground lines do you have now?

Mr. HOUSLEY. We might be able to supply that for the record.

Mrs. HANSEN. Will you please do that?

Mr. HOUSLEY. We will do the best we can.

(The information follows:)

There are about 350 miles of underground powerlines and 2,550 miles of underground telephone cable permitted on national forest land.

COST AND PROBLEMS OF UNDERGROUND LINES

Mrs. HANSEN. What are the particular problems involved in that? Give us a comparison of the cost.

Mr. HOUSLEY. For installation?

Mrs. HANSEN. Yes.

Mr. HOUSLEY. We would be glad to.

[The information follows:]

There are three basic problems that go along with undergrounding utility lines. The first is the state of the art. Many telephone lines, by their small physical size, may be plowed into the ground. This part of the art is highly developed. Power distribution lines which vary up to 34,500 volts can be buried and many have been buried successfully. Above that voltage there are technical and cost problems that have not been fully overcome and these lines can be categorized as transmission lines. Some lines up to 115,000 volts have been put underground for short distances at great cost.

The second problem then deals with cost. Many small lines may be put underground for costs about the same as for overhead construction. Further, since there is a reduction of maintenance cost and a longer life it is economically feasible to pay an initially higher cost of installation and go underground. However, costs for larger lines increase rapidly. One study carried out for the Forest Service indicated overhead construction for 115,000 volts would be about $25,000 per mile. The same voltage underground could cost as much as $300,000 per mile.

The third problem is the impact on the environment and forest resources. In some cases there could be more damage going underground than overhead. Therefore, we must study each situation and determine which type of construction should be allowed. There is no cut-and-dried policy that can be used. In the vast majority of distribution lines we can expect to go underground, but the higher voltage transmission lines will continue to be above ground for some time.

ALASKA NATIVE CLAIMS SETTLEMENT ACT

Mrs. HANSEN. An increase of $292,000 is requested for land classification. Please describe the program requirements necessitating this increase.

Mr. MCROREY. Madam Chairman, the increase is aimed primarily at participating in the requirements of the Alaska Native Claims Act, in that there are two areas in which we are involved. One is in the Native selections where it is necessary to determine rights-of-way and other interests that should remain in the United States.

Mrs. HANSEN. How much National Forest land will be involved in the Native Claims settlement in Alaska?

Mr. MCROREY. It is an undetermined figure at the present time.

Mrs. HANSEN. Does anybody have any idea at all?

Mr. MCROREY. Yes, there are estimates. It will depend upon the selections by the Native villages.

Mrs. HANSEN. Suppose a village makes up its mind that it wants to have land in a certain location and then they change their mind next year and they want it in another location. What happens then?

Mr. MCROREY. I think you are in an area that I cannot answer. In part, the determination of location of village sites is keyed to the date of the enactment of the law itself.

Mrs. HANSEN. So that actually, once it is fixed and they establish that date, that is it?

Mr. MCROREY. That is it.

Mrs. HANSEN. You hope.

Mr. MCROREY. There can be some modifications.

Mrs. HANSEN. Such as?

Mr. MCROREY. Depending upon the enrolled number of natives in the village, for example.

Mrs. HANSEN. What would be one of the factors?

Mr. MCROREY. One of the factors would be the proximity of the village to other villages and the availability of national forest lands for the selection that can be made by the villagers themselves.

INDIAN-CLAIMED LANDS

Mrs. HANSEN. Now, there is a paragraph in your justifications: "Determination of the merits of opportunities to transfer Federal lands to or from the National Forest system, including consideration of lands claimed by Indians, and jurisdictional transfers at numerous Federal water control projects important for outdoor recreation."

Do you want to give us the details on that?

Mr. MCROREY. Madam Chairman, there are from time to time claims made by Indians that affect the national forest lands.

Mrs. HANSEN. Upon what are they based? Is this stateside or Alaska?

Mr. MCROREY. This is stateside, primarily.

Mrs. HANSEN. Is this similar to the Blue Lake problem in New Mexico?

Mr. MCROREY. That is correct, similar to Blue Lake, to the McQuinn strip in Oregon, and to the Yakima in Washington. In connection with all of these, there is the necessity to gather the facts and present them in report form. This is one of the areas involved.

LAND SURVEYS

Mrs. HANSEN. Are all your corners and all your surveys so accurate at the present time that they are utterly dependable?

Mr. MCROREY. They are not, Madam Chairman.

Mrs. HANSEN. What percentage are? You know the Bureau of Land Management is going to be deterred from getting their management done.

Mr. MCROREY. It is quite low, I would be happy to provide it for the record.

At the present funding it will take around 100 years to complete the job adequately.

Mr. LONG. Report back to us at the end of that time.

Mrs. HANSEN. You will be dealing with another committee, I assure you.

This disturbs me because, as I am sure you realize, it involves the transfer of lands, the settlement of these claims between people, the management of your checkerboard areas, and so on.

Mr. MCROREY. This is correct.

Mrs. HANSEN. Have you ever tried to get a program through to increase your land surveys or have you given that up?

Mr. McRorey. No; we certainly have not given it up, Madam Chairman.

Mrs. Hansen. What percent per year of your backlog do you reduce?

Mr. McRorey. May I supply that for the record too?

Mrs. Hansen. I am afraid it is too embarrassing to talk about it in committee, is it not?

Mr. McRorey. It is quite low.

Mrs. Hansen. Do you wait until you get into trouble and then do it?

Mr. McRorey. We frequently get into trouble and have to do it, but we do not necessarily wait. We program our work to known areas of need.

Mrs. Hansen. I understand.

(The information follows:)

At the present time, approximately 13 percent of the corners and surveys on national forest lands are dependable. Each year about 1 percent of the backlog of the work to be done is completed.

USE OF LASER BEAM FOR SURVEY WORK

Mr. McRorey. I think in the past year we have indicated to the committee, for example, that we were involved in a project, which was the development of a laser beam for survey work to cut down on the amount of time and amount of manpower actually required to do the job.

This, I am happy to tell you, is coming along fine. We expect it to be operational sometime this calendar year.

We also have stepped up a cooperative program in which, particularly with States and counties, we join together in solving the common problem of land lines between adjoining owners.

Mrs. Hansen. Do you pool your money or your manpower?

Mr. McRorey. We do both, we pool money and manpower. This is something that has come along in the last several years. We feel this is going to increase in the future.

LAND EXCHANGE IN NEW MEXICO

Mrs. Hansen. You have a $98,000 increase for land exchanges. I have an article from the Washington Post, February 8, 1973, from the Washington Merry-Go-Round. It relates to a land swap.

Land Swap—The U.S. Forest Service is caught in an ecological bind that may force it to trade 7,600 acres of Federal land for a tenth as much acreage in New Mexico's Gila National Wilderness. The owner of the wilderness land is rancher John Hamilton, Jr., who, according to Forest Service documents, has threatened to turn it into subdivisions unless the swap goes through. This would endanger such rare species as the Mexican duck and would wreck the "solitude and integrity of the Gila Wilderness," say the documents. The Forest Service justifies the trade by saying the 7,600 Government acres are good only for grazing. But persistent reports say there are copper and other minerals in the land, an extra bonus for the hard-trading rancher.

Will you make a comment, Mr. McGuire?

Mr. McGuire. We have looked into this situation and we find that the values are indeed comparable.

We have no basis for changing those values with regard to the minerals. We do not find there are mineral values there, or there is any evidence of mineral values there. We think we are all right in this instance.

Mrs. HANSEN. What about disturbing the solitude?

Mr. MCROREY. The proposed exchange was one that was——

Mrs. HANSEN. Who proposed it?

Mr. MCROREY. It was proposed, in this instance, undoubtedly by our field people, because their adjustment plans provide to the maximum extent possible the acquiring of the private holdings within the wilderness system.

Mrs. HANSEN. Does this relate to checkerboard activity and management, or what?

Mr. MCROREY. It relates to better management from the standpoint of having consolidated ownership.

Mrs. HANSEN. Where is this?

Mr. MCROREY. The lands that would be disposed of are on the fringes of the existing ownership.

Mrs. HANSEN. What are you acquiring?

Mr. MCROREY. Inholdings within the main body of the forest.

Mrs. HANSEN. Will this improve the wilderness type of activity?

Mr. MCROREY. It will, Madam Chairman. It will also bring into public ownership land which, as the article indicates, has a potential for development which would be incompatible with the wilderness experience.

Mrs. HANSEN. So that you felt that it was a mandatory investment of the U.S. Government to get this before the land was developed in the middle of a wilderness area; is this correct?

Mr. MCROREY. This is correct.

LAND LINE LOCATION

Mrs. HANSEN. You have an increase of $553,000 for land line location. What is $553,000 going to do in this program?

Mr. MCROREY. $553,000, Madam Chairman, will enable us, first, to continue our program of completing just as rapidly as possible the land status records for the lands in national forest ownership.

Mrs. HANSEN. Which is not too fast.

Mr. MCROREY. That project is now 85-percent complete.

Mrs. HANSEN. What areas remain?

Mr. MCROREY. This has been done region by region on a programed basis.

Mrs. HANSEN. Do you want to place in the record those that are completed and those areas that remain?

Mr. MCROREY. We will be happy to.

(The information follows:)

STATUS CONVERSION PROJECT ACCOMPLISHMENT, DEC. 31, 1972

Region	Percent completed	Completion target date
1. Northern	53	June 30, 1978
2. Rocky Mountain	93	June 30, 1974
3. Southwestern	85	Dec. 31, 1974
4. Intermountain	55	Dec. 31, 1978
5. California	81	Dec. 31, 1976
6. Pacific Northwest	59	Do.
8. Southern	98	June 30, 1973
9. Eastern	80	Do.
10. Alaska	100	----------

Mrs. HANSEN. If you are like some of the other agencies, the easiest ones have been done first, is this correct?

Mr. MCROREY. This is correct.

GEOMETRONICS

Mrs. HANSEN. That is what I thought. So the rest of them will be more costly.

You have an increase of $104,000 for geometronics, is that correct?

Mr. MCROREY. That is correct. These are mapping projects. The increase is geared to meeting demands placed upon us by the Alaska Native Claims Act, where additional mapping will be necessary.

Mrs. HANSEN. Also, the Sawtooth National Recreation Area?

Mr. MCROREY. Also the Sawtooth National Recreation Area, Madam Chairman. This is a newly created area. We anticipate that the usage will become quite heavy in terms of managing it properly, and new maps and displays are needed.

Mrs. HANSEN. You say:

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.

So that this would avoid duplication?

Mr. MCROREY. Correct.

FOREST FIRE PROTECTION

Mrs. HANSEN. You have an increase of $126,000 for forest fire protection. That is for Sawtooth and what else?

Mr. MCROREY. It also covers increased costs for replacement of fixed equipment.

Mrs. HANSEN. Mr. Wyatt, since we are discussing forest management, do you want to discuss the particular problems in the Angeles National Forest?

Mr. WYATT. The letter from the regional forester of region 5, I think that probably is a sufficient basis for any information I want in the record at this point, Madam Chairman. I think that is pretty comprehensive and I think that covers it. Thank you.

MODULAR AIRBORNE FIRE FIGHTING SYSTEM

Mrs. HANSEN. You say: "The first Modular Airborne Fire Fighting System, a detached fire retardant delivery system developed with the Air Force, is about complete and will be operational for the 1973 fire season." What is this?

Mr. MCROREY. It is designed for installation in aircraft. It is applicable in all emergency situations. The initial use undoubtedly will be in those areas where at the present time and for the foreseeable future, the explosive fire dangers are the greatest. This would be the Southwest. It could also be the Northwest. It could be any area. They are mobile. They can be moved rapidly.

Mrs. HANSEN. Where do you have your greatest call, your greatest use of them?

Mr. McRorey. The greatest use undoubtedly will be in that area where we have the greater fire problem, and this is in southern California.

CALIFORNIA FIRES

Mrs. Hansen. Is California your severest fire area in the country now?

Mr. McRorey. In terms of acreage burned, it is.

Mrs. Hansen. How about the cost of fighting the fires in California, are they higher?

Mr. McRorey. The costs of fighting fires are high everywhere, Madam Chairman.

Mrs. Hansen. Would you insert in the record some comparative costs between firefighting costs in Alaska, California, Oregon, Washington, Idaho, and Colorado, so that we have a pretty good picture of where these costs are?

You have different problems arising in different areas.

(The information follows:)

FIREFIGHTING COSTS

	Fiscal year	
	1971	1972
Alaska	$25,231	$28,192
California	20,091,996	15,277,485
Colorado	344,762	1,003,464
Idaho	5,568,770	4,338,952
Oregon	3,027,811	8,067,791
Washington	31,159,446	3,209,744

FIREFIGHTING EQUIPMENT

Mr. Veysey. I would like to ask about the Modular Airborne Fire Fighting System. Is that the tanks that could be put in the Hercules aircraft?

Mr. McRorey. That is correct.

Mr. Veysey. When you say it is ready, does it mean you have the tanks and the arrangements all set up to go? I do not quite understand the effect of that statement.

Mr. McRorey. The equipment is undergoing some modification at the present time with the contractor, Food Machinery Corp.

Mrs. Hansen. What is the name of the contractor?

Mr. McRorey. Food Machinery Corp.

Mrs. Hansen. How do you let your contracts, through bid?

Mr. McRorey. Yes, ma'am.

Mr. Veysey. Food Machinery is making the tanks, but the aircraft are to be furnished by the Air Force, is that right?

Mr. McRorey. That is right.

Mr. Arnold. These tanks are adaptable to 30 different kinds of military aircraft. They were developed and pilot tested with the C–130.

Mrs. Hansen. And you reimburse the Army or Air Force, or is that their public contribution?

Mr. McRorey. We have operating agreements with the Department of Defense, the Air Force, for the use of their equipment.

Mrs. Hansen. Insert those agreements in the record.

(The information follows:)

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE DEPARTMENT OF DEFENSE
AND
THE DEPARTMENT OF AGRICULTURE

I. PURPOSE

This Memorandum of Understanding establishes general guidelines concerning the furnishing of assistance by Department of Defense components at the request of the Forest Service (under the control of the Department of Agriculture) in forest and grass land fire emergencies occurring within the Continental United States (48 contiguous States).

II. RESPONSIBILITIES

A. The Secretary of the Army has been assigned primary responsibility for coordinating and controlling, through established service command channels, the employment of military forces and resources in providing assistance in connection with natural disasters occurring within the Continental United States. The Secretary enters into this Memorandum of Understanding on behalf of the Departments of the Army, Navy, and Air Force, and Department of Defense (DOD) agencies, referred to hereafter as Department of Defense components, which may be requested to provide disaster assistance to the Forest Service.

B. The responsibility for alleviating natural disaster conditions rests primarily with civilian agencies. The Department of Agriculture, Forest Service, has statutory responsibility for protection of the National Forests from damage by wildfire and for cooperation with the States in the protection of forest and watershed lands from fire. In addition, it has the responsibility to coordinate Federal aid to other Federal agencies and the States in rural fire emergencies.

C. Upon Presidential declaration that a forest or grass land fire constitutes a "major disaster" under Public Law 91-606 (42 USC chapter 15), the Office of Emergency Preparedness (OEP) is responsible for coordinating all Federal disaster assistance. The Director, OEP, has also been assigned responsibility for determining when a fire emergency "threatens such destruction as would constitute a major disaster," thus permitting Federal assistance pursuant to Public Law 91-606 (42 USC chapter 15).

III. POLICY

A. It is the policy of the Department of Defense to provide assistance to the Forest Service in the form of personnel, equipment, or services in cases where a forest or grass land fire emergency is beyond the capabilities of the resources available to the Forest Service. There are three categories of such emergencies in which the Department of Defense will provide such assistance:

1. Declared Major Disasters - Upon declaration by the President that a forest or grass land fire constitutes a "major disaster" under Public Law 91-606 (42 USC chapter 15), authorized military resources will, consistent with defense priorities, be made available as requested by the Director, Office of Emergency Preparedness (OEP) to assist in the fire suppression effort.

2. Threatened Major Disasters - Upon determination by the Director, Office of Emergency Preparedness (OEP), pursuant to Public Law 91-606 (42 USC chapter 15), that a fire on publicly or privately-owned forest or grass lands threatens such destruction as to constitute a major disaster, authorized military resources will, consistent with defense priorities, be made available as requested by the OEP Regional Director to assist in the fire suppression effort.

3. Imminently Serious Conditions - Whenever a forest or grass land fire, whether or not previously declared a "major disaster" or a "threatened major disaster" as provided in subparagraphs 1 and 2 above, is of such imminent seriousness that immediate action is necessary to save human life, prevent human suffering, or mitigate great destruction of or damage to property, commanders of military installations, at the request of the Forest Service, may take such action and provide such assistance as may be required and justified under the circumstances to suppress the fire.

B. In providing assistance pursuant to subparagraph A(1-3), above, military commanders will comply with the applicable provisions of Department of Defense Directive 3025.1, and with any pertinent directives of the DOD component involved.

IV. OPERATIONAL PROCEDURES

A. When requesting assistance in connection with fire emergencies which have been declared "major disasters" (see III A 1, above) or "threatened major disasters" (see III A 2, above), the Forest Service will submit its requests to the Department of Defense through OEP in accordance with OEP regulations and procedures. Such requests should be forwarded either to Headquarters, Department of the Army, Attention: Director of Military Support, or to the commander of the appropriate CONUS Army.

B. When requesting assistance in connection with fire emergencies which create "Imminently Serious Conditions" (see III A 3, above), and with regard to which OEP funding is not contemplated, the Forest Service may submit its requests directly to the Department of Defense. Such requests should be submitted either to the commander of the appropriate CONUS Army, or to the commander of the nearest military installation.

C. All requests by the Forest Service under this memorandum shall include, in addition to the type and amount of assistance required, information on the extent and probable duration of the fire emergency, and a statement to the effect that all available civilian resources have been committed.

D. The Forest Service shall establish and maintain contact with each CONUS Army headquarters to develop local procedures and to maintain information on military capabilities for emergency assistance.

E. The Forest Service will act as liaison between other Federal and State agencies as regards their requirements for military assistance in suppressing forest or grass land fires. All requests for such assistance will normally be submitted through the Forest Service; however, when a fire emergency is so serious that adherence to normal request channels would significantly endanger life or result in great loss of property, other Federal or State agencies may make direct requests for assistance to the commander of the nearest military installation.

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V. FUNDING AND FINANCIAL PROCEDURES

A. When military assistance is furnished pursuant to requests from OEP in fire emergencies which have been declared major disasters or which have been determined by the Director, OEP, to "threaten such destruction as to constitute a major disaster," reimbursement to DOD components for personnel, supplies, and services furnished will be made by OEP pursuant to the provisions to Public Law 91-606 (42 USC chapter 15), and the Code of Federal Regulations, Title 32, part 1709.

B. When military assistance is furnished pursuant to requests from the Forest Service in fire emergencies, and OEP funding under Public Law 91-606 is for any reason not available, such assistance will be deemed to have been furnished pursuant to section 601 of the Economy Act of 1932, as amended (31 USC 686). Upon presentation of a voucher stating charges for assistance furnished to the Forest Service by a military service, the Forest Service will promptly reimburse that military service for all costs involved in furnishing the requested assistance as are in addition to the normal operating expenses of the personnel and equipment involved without requirement of audit (see 31 USC 686(a)). Such costs will include additional personal services of military and civilian employees, travel and per diem expenses for military and civilian personnel, and other expenses to include transportation of supplies, material and equipment with prescribed accessorial charges; costs of supplies, material, and equipment furnished and not returned or damaged beyond economical repair; and costs of repairing or reconditioning unconsumable items returned.

C. Each request submitted by the Forest Service will carry an appropriate identifying number,which will be utilized by the DOD component furnishing the assistance to maintain an accurate record of all expenses incurred in fulfilling that request. Billings attributable to each fire order will be submitted on Standard Form 1080, Voucher for Transfer Between Appropriation and/or Funds.

D. All requests submitted by the Forest Service, to include both telephonic and confirming written Fire Orders (Forest Service request identification flagword), will describe as specifically as possible the services, materials, and equipment being requested and authorized for charge.

E. Charges for personal services, materials and/or equipment furnished will be governed by applicable DOD directives and implementing regulations of DOD components.

F. Nonconsumable materials and equipment. Charges will be made for costs incurred in withdrawing such equipment and materials from, and returning them to, depot stock. Damages to equipment will be charged on the basis of costs of repairing or reconditioning the equipment and placing it in as good a condition as when loaned. The military services concerned will furnish all needed repair material and perform all necessary repair and maintenance work. Charges for equipment destroyed will be on the basis of current replacement costs for an item in a condition similar to that immediately prior to destruction (30 Comptroller General 295 and Comptroller General B146588, 8/29/61).

G. In the event that actual costs of furnishing requested assistance significantly differ from the standard costs or rates of charge specified in appropriate directives described in V E, above, it is mutually agreed that appropriate adjustments of charges will be made on the basis of actual costs. It is further agreed that where the extent of assistance provided requires an increase in the overall operating costs of the military agency involved, reimbursement will also cover these relevant increases in costs. Due consideration shall be given to the unusual costs involved in the expeditious transport of personnel, supplies, and equipment necessitated by emergency conditions (e.g., air-lift, air-drop, ship-to-shore, float-in operations, etc.) and claims for the costs of such emergency operations shall be deemed to be valid and to consitute proper claims for reimbursement.

H. All charges for services or materials as specified above will be accumulated against appropriate reimbursable orders, cross-referenced to each Fire Order issued by the Forest Service. In the interest of convenience and economy, if the total accumulated charges for any single incident covered by one or more Fire Orders does not exceed $100, billing by the respective military departments concerned will be waived.

I. When, in response to requests for military assistance received from OEP or the Forest Service, the Department of the Army asks other DOD components to furnish resources in connection therewith, the Army will process for collection all claims for reimbursement and submit consolidated billings to the appropriate agency.

J. Billings by DOD components for the cost of assistance furnished to agencies other than the Forest Service will be forwarded to the Forest Service, which is responsible for obtaining reimbursement from the agency concerned. Payments, however, will be made directly to the Department of Defense, with a copy of the payment voucher or other suitable document being furnished to the Forest Service to indicate that payment has been made.

VI. EFFECTIVE DATE

This memorandum is effective as of the date it is signed below by the Secretary of Agriculture and the Secretary of the Army and shall remain in effect until specifically rescinded; however, the provisions hereof relative to operational procedures and funding and financial procedures shall be reviewed biennially by designated representatives of the respective signatories to determine whether the agreements contained herein should be continued, modified or terminated.

APPROVED FOR FOREST SERVICE
U. S. DEPARTMENT OF AGRICULTURE

(S) T. K. Cowden
By_____ Date June 22 1971

APPROVED FOR DEPARTMENT OF DEFENSE

(S) Thaddeus R. Beal
By_____ Date June 11 1971

CONTRACT AIRCRAFT

Mr. VEYSEY. Yes, I would be interested in how that works out.

Do I see in this the intent to sort of shift away from the use of contractors flying on fire retardant materials, to the use of Air Force under these arrangements?

Mr. MCROREY. No, sir. The modular tanks that we are discussing here actually are primarily applicable to the larger aircraft. We anticipate that there is currently, and there will continue to be, a need for contract aircraft.

Mr. VEYSEY. But this is a new phase that would replace, I suppose, some of the needs for contractors?

Mr. ARNOLD. The contract aircraft have a certain limited capability that we exceed under fire disaster conditions. This allows the military to come in to help meet the peak overload that occurs almost every year, but it does not replace the existing private industry.

Mr. VEYSEY. The limitations to which you refer exist because the contractors have not been able at this point in time to acquire the larger aircraft that you are talking about, right?

Mr. ARNOLD. That is part of it. Part of it also is, as with most natural disasters, we cannot plan and finance a base to meet the peak disasters, but only for the average.

Mrs. HANSEN. But you do keep them on standby contracts, do you not?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. This is just supplementary effort which comes in if you have a heavy duty use, is this correct?

Mr. ARNOLD. This is correct.

AIR TANKER AND HELICOPTER AVAILABILITY

Mr. MCROREY. Madam Chairman, if I may comment on the request to provide for air tanker availability, this year the budget proposes to again have in the neighborhood of 70 air tankers available. This means they are in flight readiness, on the flight line, and located at designated tanker bases for the period of contract and immediately available for fires as they occur.

At the same time, we also plan to have some 90 helicopters available on the same basis through contract work. These again will be on the flight line ready to go during the period of this contract.

Mrs. HANSEN. Supposing they are not; what happens?

Mr. MCRORY. Then we would have to go for additional planes from different sources.

Mrs. HANSEN. The fire season is just about upon us, is it not?

Mr. MCROREY. In the Southwest, yes.

Mrs. HANSEN. The fire season will begin very shortly in Alaska also?

Mr. MCROREY. That is correct.

Mrs. HANSEN. Supposing you have a fire in Alaska, Arizona, California, New Mexico, and let's say Colorado, all at one time and then you have one break out in Oregon. Are your operations in gear so that they can handle all of these at the same time?

Mr. MCROREY. Our operations are such that they are coordinated, Madam Chairman. Also, we are now stressing what we term "total mobility" in which we are able effectively and very rapidly to move

both personnel and equipment from place to place as the danger occurs. We coordinate this out of a single center.

Mrs. HANSEN. You have a corps of trained people, including trained Alaska natives. This has been a good base, has it not?

Mr. MCROREY. That is correct.

We also have trained firefighters and crews elsewhere. Indian crews in the Southwest have been very excellent and used very effectively over the years. They can be moved rapidly from place to place.

FUNDING COSTS OF HELICOPTER AVAILABILITY

If I might, continuing on with the helicopter availability, as in past years, our present proposal is to fund only a portion of the total cost for helicopter availability out of this budget. Additional costs that arise during the guarantee period will be funded by the FFF fund.

Mr. VEYSEY. How many sets of this modular equipment will you have ready this summer?

Mr. MCROREY. We do not have the figure. We would be happy to furnish it for the record and furnish you a copy.

Mr. VEYSEY. I think it would be well to have for the record a schedule of how rapidly you will receive this equipment.

(The information requested follows:)

The Air Force will receive delivery on the one prototype system by June 1, 1973. Plans and drawings, from which additional units can be manufactured, will be delivered when the system is accepted. The prototype will be tested at Eglin Air Force Base and on several selected fires this summer and fall to determine its suitability and to develop procedures for its use on fire.

Once the system is accepted, delivery of additional units will be contingent on the availability of funds.

MAINTENANCE OF IMPROVEMENTS

Mrs. HANSEN. An increase of $781,000 is requested for maintenance of improvements. You say in the first paragraph, "proposed to be used for maintenance of water and sanitation systems constructed under the pollution abatement program."

Since a great many of your programs landed in the deep freeze this year, I am going to make sure we will not have the same thing happen next year.

Mr. DEINEMA. I see no way that we can make that guarantee, but as we put in these new more sophisticated pollution abatement systems, it costs more.

FOREST ADVANCED LOGGING AND CONSERVATION

Mrs. HANSEN. I understand, but the committee does not put things in the deep freeze; you do.

No funds are requested for forest advanced logging and conservation. You plan to transfer fiscal year 1973 funds to fight forest fires.

This is the FALCON program. We have had for several years discussions about the need to get into the elevations and the areas which cannot be reached in an environmentally safe manner without this kind of new technology. You have been working on this ever since I have been on the committee in some kind of exploratory way.

Now all of a sudden it vanishes. Has it vanished for all time?

Mr. ARNOLD. No, ma'am, we have, as you know, a small continuing engineering research program at Seattle, Wash., at Bozeman, Mont., and in Morgantown, W. Va. The complete program at Seattle is aimed at this. It is a $258,000 program. It is used principally in developing new cable systems.

Also, during the past year we have monitored and did the best we could to look at the opportunities for the Falcon program. We plan to present Falcon in the budget at the earliest opportunity that we can do so.

Mrs. HANSEN. That will be the year 2000 at the present rate. The comment was made by a candidate for the U.S. Senate, who said during the campaign that private industry scoffed at this idea. Would they be scoffing because they, the larger entrepreneurs, could afford to do this and could get patent rights so that they would be the only ones who could use it?

Mr. ARNOLD. No, ma'am.

Mrs. HANSEN. Why did he make the comment?

Mr. ARNOLD. I do not know why he made the comment. The systems we are developing and have on the drawing board at the present time related even to very small areas in Appalachia.

Mrs. HANSEN. I completely understand this. That is the purpose of this project.

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. Because the knowledge would then be widely available.

Mr. ARNOLD. This is correct. However, even a large company could not do it, because it is not one system of advanced logging or aerial logging. It will be a combination of balloons, different sizes of helicopters, or surface effects vehicles.

The differences in terrain, the differences in timber, and the differences in soils, all of these things make for a very complex picture. There is not one answer. There will be a very wide range of answers even in just the Western States of Oregon and Washington and certainly in the South. It looks like we might even go to surface effects, air-cushion vehicles, in the South, in the 40 million acres of swampland down there.

Mr. WYATT. I assume since this $5 million, added for the FALCON program, Chief, in fiscal 1973, has been impounded and, since no funds were included in the budget for fiscal 1974, I assume you have given up on this program; is that correct?

Mr. MCGUIRE. No, sir. We are going to have to start this program eventually. The way I look at it, we have deferred it for another year, but it is still very important.

Mr. WYATT. I was being facetious, as you know. But you have not given up on it, and you consider it an important program, an important conservation program, do you not?

Mr. MCGUIRE. It is essential if we are going to be able to harvest the timber on sensitive sites. If we are not able to do that, we will have to reduce the allowable cut.

Mr. WYATT. Do you have any feel whether or not others in the Government may have given up on the program?

Mr. MCGUIRE. No; I do not know of any special antagonism to the idea.

I think it was felt that it was a new program and, like a lot of new programs, the start should be deferred for the time being.

Mr. WYATT. For a couple of years more?

SOIL STABILIZATION AND COVER IMPROVEMENT

Mrs. HANSEN. You have an increase of $412,000 for soil stabilization and cover improvement.

Give us the details of this and where this work will occur.

Mr. HOUSLEY. This deals with the treatment of lands tributary to water resource development projects aimed at reducing sediment yield, modifying runoff patterns.

AIR-CUSHION VEHICLES

Mrs. HANSEN. While you hunt for more answers, we will go to Mr. Yates, who has a question on the air cushion.

Mr. YATES. You used the phrase "air-cushion vehicles" and that interested me because I am also on the Transportation Subcommittee, which is dealing with air-cushion vehicles. What kind do you propose to use and under what circumstances?

Mr. ARNOLD. This is only in the conceptual stage at this time.

The Canadian Government actually has pilot-tested surface effects vehicles in pilot testing on logging operations at the present time. We have not done anything. This was the second step of the Falcon program before we could so do it.

We have made just an informal analysis. The pure surface effect vehicle is probably not appropriate except in the swamplands. But some combination of surface effects and wheels should have many opportunities in the field of forest harvesting.

Mr. YATES. What about a military vehicle that goes both on water and land?

Mr. ARNOLD. Military vehicles in this area are generally very expensive to operate and they are not designed for the particular nature of harvesting timber, but we are following very closely the Canadian Government's tests and trials in this area. We will be ready to look at it when they do a little more work.

Mr. YATES. How far advanced are they?

Mr. ARNOLD. They have been at it about 2 years. They have a second test vehicle being delivered this spring.

Mr. YATES. Thank you.

INSECT AND DISEASE CONTROL

Mrs. HANSEN. There is no change in funding for your insect and disease control. You have transferred an additional $1.4 million travel savings to this account; is this correct?

Mr. MCGUIRE. That is correct.

Mr. NELSON. We transferred this in fiscal 1973.

Mrs. HANSEN. But there is no increase in 1974 either?

Mr. NELSON. That is correct, there is no increase in funds requested. However, there is a program level decrease of $1.4 in 1974 because of the reprograming in 1973.

Mrs. HANSEN. Are you going to transfer something else over?

Mr. NELSON. Madam Chairman, as indicated before the committee in past years, it is difficult at this point to accurately ascertain what the outbreaks will be during the fiscal year. We have planned this $10.585 million level for the anticipated outbreaks during the year.

PRINCIPAL INSECT AND DISEASE PROBLEMS

Mrs. HANSEN. What have been your principal problems in this area?

Mr. NELSON. In the insects and disease area, our principal problems have been with gypsy moth, southern pine beetle, spruce budworm. We also have a problem on the west coast with tussock moth.

In addition, there are other types of control and other insects and diseases.

Mrs. HANSEN. Are you getting anywhere with your answers?

Mr. NELSON. Yes, I think we are getting someplace.

Each year we are able to use a relatively small increase in number of insecticides that are environmentally viable as well as biological control measures. This is a slow process, as you realize. It requires a great deal of testing. But I think that we are gaining on this particular problem.

Mrs. HANSEN. You mention the cancellation of the registration of the pesticides has seriously reduced the current capability to cope with major outbreaks.

Can you expand on that statement?

ZECTRAN

Mr. NELSON. I think the controls put on the use of a number of pesticides have reduced our effectiveness in being able to get at the insect populations.

DDT, as you know, is an excellent insecticide as far as control measures are concerned, but it has environmentally hazardous aspects.

With the help of this committee, several years ago we were able to purchase Zectran. We have found this to be effective in a number of cases and are pursuing it.

Mrs. HANSEN. Is it as effective as you hoped?

Mr. NELSON. I think I can say that it is as effective as we hoped. There are some areas where we have not reached the specificity that we have desired, but in general this has been a very good program.

Mrs. HANSEN. In what areas?

Mr. NELSON. I would have to get that for the record.

Mrs. HANSEN. Please insert the information in the record.

[The information follows:]

Budworm larval reduction from a pilot test using Zectran in Idaho during 1971 was disappointingly low. Reduction of budworm larvae on the tested areas ranged between 28 and 68 percent. These reductions were considerably lower than the 85 to 95 percent normally experienced through the use of Zectran on spruce budworm operations in the Eastern and Western United States. The reason for poor control in the Idaho test is not clear. Further, refinements of aerial application procedures in mountainous terrain appear necessary.

Mr. ARNOLD. Zectran was largely developed for spruce budworm. I think it has been a little better than we had hoped because we have been able to apply it in pilot test areas in tussock moth and gypsy

moth control. We are finding other uses, even more than the original use for which it was developed.

Mr. YATES. Off the record.

[Discussion off the record:]

POLICY OF STATE COST-SHARING

Mrs. HANSEN. Have you changed your policy with regard to cost-sharing with the States?

Mr. NELSON. Yes, ma'am.

Mrs. HANSEN. In what way?

Mr. NELSON. During the past year we increased the percentage of Federal participation from 33 to 50 percent.

Mrs. HANSEN. What is the reason for this change?

Mr. NELSON. The reason for the change is to attempt to get the States involved in insect and disease control in larger measure than we have in the past. We think in many cases the delivery system is best at the State level and therefore we have increased the participation with the States.

SITE PREPARATION FOR NATURAL RESEEDING

Mr. LONG. You have engaged in site preparation for natural reseeding in past years. Yet fiscal year 1974 is the first year that you include these site preparation acres in your total reforestation acreage.

If these 26,200 acres for site preparation were not included, your figures show that you plan to reforest on 4,380 fewer acres than in fiscal year 1973. Why did you include this type of activity in your figure this year, and not in prior years?

[The information follows:]

Site preparation for natural reseeding was included in the reforestation targets for fiscal year 1974 to display more accurately the total planned program. Previously site preparation for natural reseeding and for artificial regeneration (planting and seeding) have been lumped together, although areas naturally reseeded with and without site preparation have been reported separately from other reforestation on various accomplishment reports for several years. The distinction lies in the fact that work to prepare an area for reforestation by natural reseeding is all the work required—assuming cooperation of the elements and the seed trees—for a completed job. In contrast, site preparation for artificial regeneration is just part of the work to be done on a given area and must be followed up with planting or seeding to complete the reforestation job. Unlike site preparation for natural reseeding it cannot be treated as a reforestation target because it is just a part of the total reforestation job for that area.

Also, increased knowledge and experience in the regeneration of various species and improved site preparation techniques enable us to capitalize on and expand opportunities for natural reseeding. Such gains should be reflected in the area planned for reforestation to give a true picture of the area we expect to be put back into production through the work done in any given year.

GYPSY MOTH

Mr. LONG. Please tell us about the status of your efforts to control the gypsy moth.

[The information follows:]

STATUS OF EFFORTS TO CONTROL GYPSY MOTH

We have been cooperating with the States since 1971 to suppress gypsy moth infestations. During the first two years of the program, the Federal Government cost-shared up to one-third of the cost of the suppression project. Presently, we are cost-sharing up to 50 percent of the project cost.

Cooperative State/Federal gypsy moth treatment is limited to high value areas where forest resource loss is imminent. Widespread application of pesticide is not carried out. No massive effort is underway to "break the back" of the outbreak nor is an effort being made to eradicate the insect from the United States. Cooperative gypsy moth control proposals must be supported by biological, cost-benefit, and environmental evaluations.

Acreage treated for the gypsy moth in 1971 and 1972 and proposed for treatment in 1973 in our cooperative efforts with the States to reduce forest resource damage is as follows:

State	Acres Sprayed 1/ 1971	1972	Acres Proposed for Spray 1973
New Jersey (Agri.)	54,029	47,412	55,000
New Jersey (Env. Prot.)	19,873	2,760	4,500
New York	241,000	41,279	100,000
Pennsylvania	20,400	20,400	60,000
Rhode Island	-0-	-0-	65,000
	335,302	111,851	284,500

1/ Based on information given in the USDA Forest Service Draft Environmental Impact Statement on the Cooperative 1973 Gypsy Moth Suppression and Regulatory Programs filed with the Council on Environmental Quality on January 10, 1973.

LAND MANAGEMENT FUNDS IN OTHER COUNTRIES

Mr. LONG. What percentage of receipts do countries such as Scandinavian nations and Canada put back into management of their national forest lands?

(The information follows:)

USE OF RECEIPTS BY FOREIGN NATIONS IN MANAGEMENT OF THEIR FOREST LANDS

Sweden.—The national forests of Sweden are operated as a commercial enterprise under the control of a state board of directors. Five-year plans are developed within which target profit levels are presented which in modern times range from about $3 to $8 million net return per year. By net return is meant profit over and above all costs required to manage the forest lands. A profit is not earned every year, and if there is not sufficient money to manage the forests properly, money can be borrowed from the state bank to be returned at a later date. No Federal tax is paid, but there is a state tax paid on the profits earned.

Whenever a net profit is realized, over and above all costs, it is returned to the state treasury.

Germany.—All of the States of Germany operate in an arrangement similar to the United States. In other words, appropriations are made annually to the state forest services and all of the receipts from forest lands are returned to the state treasury.

Japan.—In Japan 100 percent of the receipts from their national forest lands can be used for the management of those lands. Details on how the costs of non-income producing activities are covered are not available to us at this time.

Canada.—Jurisdiction for the management of forest lands is primarily with the provinces with the exception of crown lands which are found in Northwest Territory and similar remote areas. In the case of crown lands, there is no provision for the use of receipts in the subsequent management of those lands. The system is the same as in the United States where the receipts go into the general treasury and new appropriations are made for subsequent management. The provinces are administered in this way also.

Mrs. HANSEN. We will adjourn until 1 p.m.

AFTERNOON SESSION

HOMEOWNER CONTROL OF GYPSY MOTH

Mrs. HANSEN. The committee will come to order.

Mr. MCDADE. Before we leave this, may I make inquiry about the gypsy moth?

Mrs. HANSEN. Yes.

Mr. MCDADE. Last year we had some discussions, and years previous, you will recall, about the Department's efforts in coming up with environmentally acceptable and yet effective control measures to deal with the infestations of the gypsy moth. There was a lot of optimism expressed in the Department about doing that. Can you give me a current appraisal of the situation?

Mr. NELSON. I gather, Congressman McDade, that you are talking about individual homeowner control in particular?

Mr. MCDADE. We were interested in trying to develop what an individual homeowner might be able to do, if anything, if he was not in an area that was to be sprayed and was afflicted with the pests. We can take that as a starting point.

Mr. NELSON. Two new chemicals have been registered for ground application for the gypsy moth. These are Dylox and Imidan. Imidan was registered for ground application within the past year, Congressman.

With respect to the individual homeowner, he will still have some difficulty in attempting to control the gypsy moth if he attempts to do

it alone. Again, it is recommended that a communitywide effort be made.

Several control techniques are available to protect the individual trees from damage. The egg masses can be destroyed during the winter and early spring. After the hatch, the caterpillars can be killed by crushing them or painting a band of sticky material of a tanglefoot nature around the trunk.

However, if he has pressure equipment, or if it is available, then several insecticides are available for him to use.

Sevin-4 oil or wettable powder can be used. The Dylox and Imidan can be used. B.T., Bacillus thuringiensis, is also registered as a ground application. Again, we would recommend that the county agents be consulted before using these insecticides.

INFESTATION OF GYPSY MOTH

Mr. McDade. Do you still foresee that the Department will, within a reasonably short period of time, develop a solution of the problem that will permit wide application without any environmental consequences?

Mr. Nelson. Yes, we do. We think that within several years we will certainly have much better control measures available than we do today, environmentally and viable alternatives.

Mr. McDade. There is no doubt in your mind, is there, that within the Department this is an increasing problem and not a decreasing problem?

Mr. Nelson. Yes, sir; that is the case.

Mr. McDade. Can you tell us how serious the infestation is becoming?

Mr. Nelson. On gypsy moth, the infestation now is up to approximately 1.4 million acres. This has increased over the last decade from a figure of about 500,000 acres.

In addition, the gypsy moth has been found in a number of States where it was not previously present. There are indications that there is movement of the gypsy moth to the south. In West Virginia, for example, a number of gypsy moths were trapped last year. The situation with gypsy moth is such that we do expect larger areas to be infested.

ADEQUATE FUNDING OF GYPSY MOTH PROGRAM

Mr. McDade. I think you indicated to us last year as well that your funding situation was such that, with particular reference to my own State, the State of Pennsylvania, you would be able to enter your cooperative programs without any financial problems, that you had sufficient amounts of money to fund all the control efforts initiated by the State. That is true this year, too, for 1974, is it?

Mr. Nelson. Yes, sir. At present we plan to fund the State cooperative programs in gypsy moth.

Mr. McDade. You were not rejecting any programs because of funds, were you?

Mr. Nelson. Again I would harken back to the answer I gave just before the recess, that at this point in time it is difficult to know the exact size of what the program will, of necessity, be in the spring of

1974. At this time, we do not see problems in meeting our cooperative program.

Mr. McDade. In your calendar 1973 spraying, which is getting ready to occur, you have not rejected any programs in the Commonwealth of Pennsylvania because of lack of funding, have you?

Mr. Nelson. No, sir. In fact, the reprograming that the committee allowed this past week of $1,499,000 included a sizable portion for gypsy moth control.

Mr. McDade. I want to commend you for your responses and I continue to urge the Forest Service to do their very best with this very serious problem.

Mr. Nelson. Thank you, Mr. Congressman.

TUSSOCK MOTH

Mr. Wyatt. Chief, could you prepare and insert in the record what the situation has been in regard to the tussock moth—what it has been, what it is now, and what you are doing about it, and what the prospects are for success?

Mr. McGuire. We will do that.

(The information follows:)

Status of Tussock Moth Control Efforts

In last 10 years (1963–1972) some 16 identifiable tussock moth outbreaks have occurred; 3 in Oregon, 3 in Idaho, 5 in northern California and 1 each in States of Washington, Montana, Arizona, New Mexico, and Nevada. Of these 16 outbreaks, action was taken on 5 of them, including planned action for current outbreaks. The others didn't require action because they collapsed at an early stage, were too small or the resource threatened did not justify treatment.

Currently, there are some 433,000 acres with high populations in the Oregon/Washington area. In addition, populations are showing a potential for buildup in Nevada, northern California and northern Idaho.

On the present outbreaks considerable research and development is underway or planned (1) to come up with better survey and evaluation methodology; (2) to provide a better understanding of reasons for buildup, progress, and decline of infestations and (3) to develop better control strategies. We are confident that results of this R. & D. will place us in a much better position to cope with future tussock moth infestations.

We have prepared and filed a draft environmental statement covering the present Oregon/Washington outbreak. The proposed action is to harvest timber where serious tree damage has or will occur and where economic, environmental and other factors warrant; to chemically treat affected high use, high value recreation areas; and to reforest affected areas where necessary. The course of action finally decided upon will be guided by conclusions drawn from public review and comment on the draft statement and by the biological potential of the insect based upon spring of 1973 evaluations. We will do everything within our resources and capabilities to obtain success in whatever action is taken to minimize the impact of the present outbreak in Oregon and Washington.

Mr. Wyatt. This is a problem of grave concern. We lost hundreds and hundreds of acres of timber. We are handicapped by not having had sufficient research which, once again, shows the shortsightedness of underfunding or zero funding for that type of research.

CONDOMINIUMS ON NATIONAL FORESTS

Also, would you insert in the record the present status of the condominium building and leasing to be done on National Forest lands? I make this request because I think I have done it now for each of the

last 5 years and I know that 2 or 3 years ago there was a report completed. I don't see any motion to a conclusion of this question at the present time. It doesn't entirely satisfy me that the Forest Service is reluctant to proceed with the condominium program in the recreational areas simply because these will not be available to everyone.

My reasoning is that since they won't be available to everyone, that we have none. I think some are better than none. I would appreciate anything that you could say as to the present status of that. It will be perfectly satisfactory for you to provide it for the record.

Mr. McGUIRE. We will be glad to furnish a report on that.

(The information follows:)

As noted by Congressman Wyatt, the Forest Service has completed studies regarding condominiums on national forest land. In this effort, we have worked closely with a committee representing the recreation resort and ski industry.

Although we have reached general agreement with the industry representatives, we feel that some further contacts and analysis should be involved. Basically, we continue to endorse the provision of public overnight accommodations on national forest lands and feel confident at this point that the needs of resort developers can be met in the effort to provide for the public.

We expect to have this issue resolved by July 30, 1973.

COOPERATIVE LAW ENFORCEMENT PROGRAM

Mrs. HANSEN. You have no change in funding for the cooperative law enforcement program. But since this is a relatively new program, in fact very new, how well is it working? What has your experience been?

Mr. DEINEMA. To date we have had very favorable responses from the program. We have 191 agreements signed and are in the process of final negotiations on another 127.

Mrs. HANSEN. Are these agreements made mostly with counties?

Mr. DEINEMA. Yes, ma'am. The response from the cooperators has been very favorable. We have had very short-time experience with it to date, however.

Mrs. HANSEN. What is the cost going to be?

Mr. DEINEMA. In the current fiscal year we are requesting $2,527,000.

Mrs. HANSEN. I know that is what you are requesting, but what do you think the cost actually will be?

Mr. DEINEMA. We don't have that much experience with it yet. This is our best estimate at this particular time.

Mrs. HANSEN. How much experience did you have last summer?

Mr. DEINEMA. Last summer we were only able to execute about 80 agreements.

Mrs. HANSEN. Where were they located; in what areas?

Mr. DEINEMA. Mostly in the West, on areas where we have had a heavy recreational impact.

Mrs. HANSEN. Were they Southwest, Northwest, or where?

Mr. DEINEMA. California was one of the heaviest participants. The Northwest came right along behind it.

Mr. EVANS. What is the carryover cooperative law enforcement?

Mr. DEINEMA. We have $4,936,000 available in 1973, the current fiscal year. That includes a carryover of $2,415,000 from 1972.

Mr. EVANS. How much carryover do you anticipate in 1974?

Mr. DEINEMA. None. We expect to have the bulk of these agreements signed and obligated in this fiscal year.

Mrs. HANSEN. What does your average agreement cost?

Mr. DEINEMA. I don't have that. I will have it put in the record.

[The information follows:]

The average cost of a cooperative agreement with State or local law enforcement agency is approximately $12,000.

FOREST RESEARCH

Mrs. HANSEN. We will insert at this point in the record justification pages 73 through 101.

[The pages follow:]

Projects (16) - (26)

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Forest Research

State	Headquarters or Project Location	FY 1973 estimate	FY 1974 estimate	Change
		(in thousands)		
Alabama	Auburn	$399	$402	+$3
	Tuskegee	42	42	- -
		441	444	+3
Alaska	Fairbanks	378	381	+3
	Juneau	536	541	+5
		914	922	+8
Arizona	Flagstaff	807	812	+5
	Tempe	594	598	+4
	Tucson	255	257	+2
		1,656	1,667	+11
Arkansas	Fayetteville	243	245	+2
California	Arcata	255	257	+2
	Berkeley	2,541	2,559	+18
	Fresno	306	309	+3
	Redding	155	156	+1
	Riverside	2,617	2,632	+15
		5,874	5,913	+39
Colorado	Fort Collins	2,077	2,092	+15
Connecticut	Hamden	1,051	1,058	+7
District of Columbia	Washington	449	452	+3
Florida	Lehigh Acres	112	113	+1
	Marianna	180	181	+1
	Olustee	647	651	+4
		939	945	+6
Georgia	Athens (including Atlanta)	1,479	1,489	+10
	Macon	1,007	1,015	+8
		2,486	2,504	+18
Hawaii	Honolulu	408	411	+3
Idaho	Boise	258	260	+2
	Moscow	959	966	+7
		1,217	1,226	+9
Illinois	Carbondale	720	725	+5
Kentucky	Berea	358	360	+2
Louisiana	Pineville	1,918	1,929	+11
	New Orleans	867	872	+5
		2,785	2,801	+16
Maine	Orono	184	185	+1

GEOGRAPHIC BREAKDOWN OF APPROPRIATION Projects (16) - (26)

Forest Research -- continued

State	Headquarters or Project Location	FY 1973 estimate	FY 1974 estimate	Change
			(in thousands)	
Maryland	Beltsville	$198	$200	+2
Massachusetts	Amherst	321	324	+3
Michigan	East Lansing (including Cadillac)	560	564	+4
	Houghton	428	431	+3
	Marquette	255	257	+2
		1,243	1,252	+9
Minnesota	Duluth	286	288	+2
	Grand Rapids	330	332	+2
	St. Paul	1,228	1,237	+9
		1,844	1,857	+13
Mississippi	Gulfport	1,463	1,472	+9
	Oxford	287	289	+2
	State College	203	205	+2
	Stoneville	594	599	+5
		2,547	2,565	+18
Missouri	Columbia	248	249	+1
Montana	Bozeman	507	510	+3
	Missoula	3,229	3,250	+21
		3,736	3,760	+24
Nebraska	Lincoln	201	203	+2
Nevada	Reno	153	154	+1
New Hampshire	Durham	765	770	+5
New Jersey	Pennington	352	354	+2
New Mexico	Albuquerque	221	222	+1
New York	Syracuse	84	85	+1
North Carolina	Asheville	826	831	+5
	Franklin	250	252	+2
	Research Triangle (Raleigh-Durham)	859	864	+5
		1,935	1,947	+12
North Dakota	Bottineau	215	217	+2
Ohio	Delaware (including Columbus)	1,416	1,426	+10
Oregon	Bend	207	208	+1
	Corvallis	2,409	2,424	+15
	LaGrande	458	461	+3
	Portland	1,199	1,207	+8
		4,273	4,300	+27

GEOGRAPHIC BREAKDOWN OF APPROPRIATION Projects (16) - (26)

Forest Research -- continued

State	Headquarters or Project Location	FY 1973 estimate	FY 1974 estimate	Change
			(in thousands)	
Pennsylvania	Upper Darby	$563	$567	+4
	Warren	331	334	+3
		894	901	+7
Puerto Rico	Rio Piedras	343	346	+3
South Carolina	Charleston	273	274	+1
South Dakota	Rapid City	302	305	+3
Tennessee	Sewanee	194	195	+1
Texas	Nacogdoches	302	304	+2
Utah	Logan	444	447	+3
	Ogden	563	567	+4
	Provo	400	403	+3
		1,407	1,417	+10
Vermont	Burlington	506	509	+3
Virginia	Blacksburg	95	95	- -
Washington	Olympia	358	360	+2
	Seattle	865	872	+7
	Wenatchee	309	311	+2
		1,532	1,543	+11
West Virginia	Morgantown	345	347	+2
	Parsons	314	316	+2
	Princeton	1,053	1,060	+7
		1,712	1,723	+11
Wisconsin	LaCrosse	109	110	+1
	Madison	6,828	6,874	+46
	Rhinelander	635	639	+4
		7,572	7,623	+51
Wyoming	Laramie	204	205	+1
Travel reduction savings proposed for transfer to fighting forest fires		385	- -	-385
Proposed for transfer 1/		3,865	- -	-3,865
Total		61,140	57,275	-3,865

1/ Proposed for transfer to fighting forest fires.

Project (16)

TIMBER MANAGEMENT RESEARCH

1972	$11,758,000
1973	12,606,000 1/
1974	11,746,000
Decrease	-860,000

A decrease of $860,000 is proposed.

In fiscal year 1973 $860,000 was appropriated over the budget request for timber management research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $78,000. On the basis of planned program level for 1974 there will be an increase of $78,000.

Timber management research develops scientific knowledge of forest ecosystems with trees as a principal component and develops methods for culture of trees and management of forests for production of timber and for modification and improvement of man's environment. This includes:

(1) Development of cultural methods for timber and timber-related crops.

(2) Techniques of timber measurement.

(3) Techniques of forest management planning.

(4) Techniques for environmental tree culture.

(5) Research in forest genetics.

The core of this research is determining the proper culture for over a hundred different commercial timber species based on a thorough knowledge of their ecology and growth requirements. This research determines how the Nation's needs for timber and other forest benefits can be met on Federal, State, and private lands through measures such as brush control, forest establishment, protection from animals, stand culture, soil and site improvement, and reestablishment of tree species valuable for timber or environmental purposes.

Timber management research also provides forest managers with reliable information on growth and yield of forests and on the influence of cultural practices on yield and quality of the stand.

This program includes research on methods of producing timber-related forest crops such as gum naval stores, maple sap, Christmas trees, and other income-producing natural products from forests.

Forest genetics research includes scientific study of variation and inheritance in trees and development of techniques for producing strains of hybrids having superior growth rate, wood quality, resistance to insects, diseases, and other damaging factors, or special value for use in environmental improvement.

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1/ Includes $860,000 program and $78,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Examples of Recent Accomplishments

Timber losses are reduced substantially by intermediate harvest cutting in Douglas-fir. New management guides have been developed to maximize timber yield in vigorous 70- to 150-year-old Douglas-fir stands in western Oregon and Washington. These guides are based on a study of intermediate harvest cuttings and show that it is possible to recover 81 percent of the potential growth (growth of surviving trees plus expected mortality) up to 38 years after treatment. They also show thinning substantially reduced losses from bark beetles (61 percent), windthrow (30 percent), breakage (33 percent), and suppression (46 percent). These management guides indicate that thinning in this forest type should provide crown space for the taller trees and should leave 60 to 85 percent of the density found in full stocked, unmanaged stands.

Computer based tree measurement system improves efficiency of timber inventory and sales. An improved program for processing measurement data from standing trees is now available for use on the most advanced computers. With data from a highly efficient sampling method, the system permits accurate and automated estimation of the amount of timber in a single sale or in an entire forest from intensive measurements on relatively few trees. The system is being taught to public and private foresters to improve the efficiency of forest inventory and timber sale preparation.

New harvesting guide provides alternatives to clearcutting in old-growth spruce-fir forests. Interim guidelines are now available for developing alternatives to clearcutting old-growth spruce-fir forests in the central Rocky Mountains. These partial cutting practices provide for timber harvesting while maintaining forest cover in recreation areas, travel zones, and scenic view areas. Other patterns of cutting give options for increasing water yield, improving wildlife habitat, or integrating timber production with other key uses.

Multiple-use rating system developed to aid in choice of silvicultural options in western larch. Larch forests in Montana were chosen to model a simple scheme showing the effects of silvicultural practices on other resource uses because western larch is one of the most valuable and esthetically pleasing timber species in the northern Rocky Mountains. The system developed employs a 5-level rating of impacts in helping land managers evaluate the relative effects of silvicultural systems, such as seed tree or shelterwood on wildlife habitat, livestock forage, watershed management, and esthetics. The rating scheme also includes estimates of costs of harvesting the timber and growing a new stand.

Computer simulation permits early decision on management of dwarf mistletoe-infested lodgepole pine stands. Computerized simulation techniques were developed to predict the future course of growth and mortality in stands of lodgepole pine infested with dwarf mistletoe. The simulation utilizes information on the life history of lodgepole pine having different degrees of dwarf mistletoe infestation. This new prediction tool permits early decision among alternative practices of removing infested trees, converting immediately to a new stand, or foregoing any treatment in stands that have good prospects for future growth.

Planting nursery-grown seedlings on well-prepared sites is the best way to regenerate ponderosa pine in the Northern Rocky Mountains. Recent controversy over site preparation practices and planting investments on National Forest land in Montana led to proposals for regenerating ponderosa pine in this area by natural means. However, evidence from a long history of regeneration research indicates that planting seedlings is still the best option for regenerating ponderosa pine in the Northern Rocky Mountains. A recent summary of this research in the Northern Rocky Mountain region shows:

(1) Natural regeneration usually is slow and uncertain.

(2) Competition from understory vegetation is intense.

(3) Site preparation is usually required after cutting for success of natural or artificial regeneration.

(4) Planting nursery seedlings on well-prepared sites can be relied upon to obtain adequate restocking within acceptable time limits.

White ash transplants help to solve oak regeneration problem. Desirable reproduction of pure or nearly pure oak stands throughout the Upper Mississippi Valley may be scarce before and after cutting. Trials in southern Wisconsin indicate that the relatively fast growth, high survival, and adaptability of white ash transplants make them the safest selection for interplanting after oak stands have been harvested. Transplants should be about 2 feet tall, and planting should be accompanied by control of stump sprouting. These findings give the forest manager a reasonable alternative to regenerating oak in areas where this is very difficult.

Acid leached from leaves of cherrybark oak inhibits regeneration. In coastal South Carolina, there frequently is little or no understory beneath cherrybark oaks. Research has found naturally-occurring salicylic acid, leached by rain from the leaves of cherrybark oaks, reduces the survival and growth of both natural vegetation and seedlings planted beneath the oaks. Thus, a source of the difficulty in regenerating bottom land hardwood forests has been determined.

Studies in Poland will aid in better use of Norway spruce in United States forests. Norway spruce is widely planted in the United States. The best strains of this species are found in Poland, where studies of 25 local seed sources revealed considerable variation in seed size, weight, and mineral content, as well as marked differences in seedling growth and mineral requirements. Both elevation and latitude were correlated with mineral content and seedling growth. This information will assist in determining suitable planting locations in the United States for Norway spruce.

Minor element requirements determined for growth of Monterey pine. A project in Spain determined amounts of iron, zinc, and copper in the needles of Monterey pine seedlings and related growth to concentration level. Optimum growth occurred when there were 50 to 150 parts per million (ppm) of iron, 10-200 ppm of zinc and 2-8 ppm of cooper in the needles. Visual deficiency and toxicity symptoms were also described. Monterey pine is the most extensively planted tree in the world, so these findings have wide application in quantifying field nutrient levels for key minor elements.

Planting of high-gum-yielding slash pines is supported under the Naval Stores Conservation Program. State nurseries are now growing 2.5 million high-gum-yielding slash pine seedlings, developed by the Forest Service at Olustee, Florida. When the participants in the Naval Stores Conservation Program plant the high-yielding trees in accordance with provisions prescribed by the Forest Service, they may be reimbursed for 80 percent of the actual cost, but not to exceed $20 per acre. Since this practice became available in November 1971, applicants have qualified for planting 59,000 seedlings on 600 acres.

Southern Coastal Plain soils are not harmed by prescribed burning. Fire is an important tool in managing southern forest vegetation, but its possible long-time effects on forest soils have required extended study. Studies over 20 years of annual or periodic prescribed burning in the South Carolina Coastal Plain show that losses of organic matter and nutrients from the forest floor through the use of fire are offset or exceeded by increases of both in the mineral soil. It is now known that burning neither enriches nor depletes these soils.

Project (16)

Several sources of Siberian larch are suitable for western windbreaks. A 10-year test in North Dakota of 3 Siberian-, Dahurain-, and 2 hybrid larch seed origins suggests that two of the Siberian sources are suitable for windbreak plantings. Larches are particularly useful trees for shelterbelt programs in the northern Great Plains because they have good height potential, rapid growth, moderate crown density, and are resistant to winter desiccation. This new information should make possible improved effectiveness of windbreaks planted in the northern Great Plains.

New book published on Alaska trees and shrubs. A comprehensive handbook--Alaska Trees and Shrubs--describes and illustrates the 33 trees and 94 shrubs native to Alaska. Distribution maps are included for each species as well as keys for their identification. The vegetation of Alaska is described in detail, and the types of forests and tundra are shown on a large map of the State. This information is indispensable to students, scientists, and managers interested in the preservation and wise use of Alaska's natural resources.

Project (17)

WATERSHED MANAGEMENT RESEARCH

1972	$6,166,000
1973	6,616,000 1/
1974	6,266,000
Decrease	-350,000

A decrease of $350,000 is proposed.

In fiscal year 1973 $350,000 was appropriated over the budget request for watershed management research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $42,000. On the basis of planned program level there will be an increase of $42,000.

Watershed management research develops scientific knowledge of the interaction of soil-water-vegetation and atmospheric systems as they affect the quantity and quality of water produced from forested watershed lands--the source of two-thirds of available water in the United States:

Watershed management research seeks to:

(1) Develop methods and techniques for managing forest and forest-related watersheds to protect and improve soil and water quality, improve the yield and timing of water flows, and restore and rehabilitate degraded landscapes.

(2) Develop adequate means of protecting soil and water resources, especially on fragile or unstable soils, while forest and forest-related lands are being managed for other products and services.

(3) Provide basic knowledge of vegetation, soil, water, and atmospheric relationships in wildland and related forest areas.

During fiscal year 1974, research will concentrate on protecting water flows from forest and related lands under various management activities and on rehabilitating disturbed areas. This will include studies on:

(1) Methods of preventing deterioration of water quality.

(2) Opportunities and hazards of sewage effluent and sludge recycling on forest lands.

(3) Protecting and maintaining soil stability.

Research will be expanded on nutrient losses due to soil erosion and on nutrient release from the soil through leaching, decomposition, and weathering. Additional emphasis will be placed on protecting and enhancing habitat for fish in streams draining from forest lands. Research will be increased on preventing erosion and sediment production and rapidly reclaiming surface-mined lands in forest and related rangelands, particularly in the western United States.

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1/ Includes $350,000 program and $42,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Examples of Recent Accomplishments

Improved terraces reduce erosion of surface-mine benches. A two-year study in Kentucky indicates that terraces can effectively control runoff and erosion on surface-mine benches. Terracing treatments, installed for about $10 per acre, reduced storm peak runoff and suspended sediment yield by over one-half. A better vegetative cover was also established on the terraced plots. Future surface-mine reclamation efforts should include some such type of mechanical stabilization.

Water spreading and detention devices tested as possible treatment for controlling erosion. Forest Service scientists in Wisconsin have developed a technique of installing diversion and detention ponds between ridge-top fields and the wooded slopes below to reduce potential flood and erosion damage. Unless the water from the cropland is diverted or detained, this runoff creates undesirable erosion patterns on the forested slopes as well as contributing to flooding in the bottoms.

Nitrogen loss is minimal following forest erosion control fertilization. In an experimental erosion control seeding program in north central Washington, two watersheds were fertilized, one with urea and the other with ammonium sulfate. The third watershed was retained as an unrehabilitated control. Only small amounts of nitrogen were found in stream water from the fertilized watersheds, indicating that careful use of fertilizer in erosion control work does not degrade streams.

Applying secondary municipal sewage effluent may improve forest soil and tree growth. In a Michigan study, approximately 64 inches of secondary municipal sewage effluent were applied at 2.5 inches per week to a jack pine stand on a sand soil. Ground water quality samples taken from wells 5 to 10 feet below the soil surface show no measurable increase in phosphorus and only a small increase in average nitrogen levels early in the study. Radial growth of irrigated trees increased nearly 40 percent during a dry growing season. Approximately half of the phosphorus added to the site was shown in increased available form in the top 2 feet of soil. Retention of nutrients in the soil and increased wood production are two important benefits of recycling sewage wastes on forest land.

Snow fences made a safer highway. Research by Forest Service scientists solved some unique technical problems associated with blowing snow conditions along I-80 in Wyoming. Newly designed fence layouts and heights improved visibility dramatically. Highway Department manpower and equipment needs were reduced because the fences effectively trapped blowing snow.

Project (18)

WILDLIFE HABITAT AND RANGE RESEARCH

1972	$3,473,000
1973	4,588,000 1/
1974	3,473,000
Decrease	-1,115,000

A decrease of $1,115,000 is proposed.

In fiscal year 1973 $1,115,000 was appropriated over the budget request for wildlife habitat research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $24,000. On the basis of planned program level for 1974 there will be an increase of $24,000.

Funding in previous fiscal years was by two separate line items--wildlife habitat research and range management research. These items are now combined because the work has become so interrelated that effective separation is difficult. Furthermore, funding as a combined line item will permit more effective administration of funds to provide for their best use in meeting urgent research needs.

Wildlife habitat and range research is directly concerned with the quality of most of the Nation's terrestrial environment in terms of wildlife and livestock and their use by man. The Nation's forests, ranges, and associated waters provide a home for millions of livestock, big-game animals and countless other wildlife, including song birds, small game, and waterfowl. These animal populations provide recreation, food, fiber, and income for a broad spectrum of the Nation's population. Urban and rural residents generate mounting demands on both public and private land for increased wildlife and livestock resources. In addition, rare, endangered, and unique wildlife species pose special research management problems.

Animal, bird, and fish species vary widely in social and ecological requirements, but the basic ecological processes are common to all species; all are products of the habitat. Man's continued use of the animal resource is dependent upon proper and effective management of the habitat. Land management decisions must be made with full knowledge of the probable impact upon habitat values. Where competitive uses exist and where habitat values are low, ameliorative management systems must be developed.

Wildlife habitat and range research seeks to maintain and increase the diversity and productivity of fish, wildlife, and domestic livestock populations by:

(1) Defining the habitat requirements of the many species.

(2) Assessing the impact of alternative land-use practices upon habitat values and developing ameliorative practices.

(3) Generating strategies to optimize the habitat values of forests and ranges.

Examples of Recent Accomplishments

Cattle grazing in pine forests is compatible with timber management objectives. Research has shown that in the slash pine forests of Louisiana areas planted or seeded to trees, then moderately grazed yearlong by cattle, had pine stands as

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1/ Includes $1,115,000 program and $24,000 travel reduction savings proposed for transfer to Forest land management for fighting Forest fires.

good as those in ungrazed areas. Pine seedling losses were small, even under heavy grazing. These losses were further reduced by withholding cattle three to four months after tree planting. These findings enable land managers to invest in grazing operations to provide continuous income while timber on the same site is growing toward cutting age.

Shrubs offer great potentials for man's benefit in arid and semi-arid lands. Shrubs have not been intensively studied, as have most other groups of plants. As a move to remedy the deficiency of knowledge in this important area, an interagency International Shrub Symposium was held to focus on the biology and use of shrubs. The 500-page Proceedings of the Symposium, published by the Forest Service, covers the continental aspects of shrub distribution, present utilization, and potential for future expanded uses of shrubs. Special attention was given to shrub genetics, one of the most neglected areas in shrub research. The Forest Service has about 1,000 shrub species under investigation as potential plant materials for improving browse and forage production.

Disturbed soil can be stabilized by mulching seeded shrubs. Research in harsh dry areas of the Southwest shows that shrubs can be successfully established on disturbed soils by applying petroleum mulch after seeding. Germination and emergence of desirable browse-producing shrubs was successful even on relatively smooth disturbed soil surfaces. This new technique for soil stabilization is especially applicable in restoring soil and vegetation disturbed in surface mining operations.

Honeysuckle can provide emergency winter food for deer in Ozarks. Deer numbers, limited by the winter food supply, fluctuate greatly according to the level of annual production of evergreen leaves, fruits, and seeds, particularly acorns. Japanese honeysuckle, one of several shrubs tested, has proven the almost ideal plant to provide emergency food. It is relatively easily and inexpensively propagated, and its growth characteristic is compatible with other forest management practices in Ozark hardwood forests. Emergency winter rations in the form of small scattered plots of Japanese honeysuckle could help stabilize the white-tailed deer herds throughout the southern upland forest.

Direct seeding of winterfat depends on soil temperature and moisture content. Winterfat, a naturally occurring common shrub, is an exceptionally desirable food for livestock and wildlife on semi-arid ranges of New Mexico, but direct seeding has often failed. Studies show that soil temperatures of 50 to 80 degrees F are needed for germination and a planting depth of one-sixteenth inch in moist but not wet soil is necessary for seeding success. The biological information necessary for developing successful direct seeding methods for a major range shrub is now available.

Black bear winter survival is affected by natural insulation characteristics of the den. The study of energetics of over-wintering bears has been perfected to allow wildlife biologists a much better look at causes of bear mortality during long hibernation. Over-winter survival depends first on the food supply in summer habitats, then on the extent to which the bear can reduce its metabolic rate and weight loss during the winter. Weight loss is greatly influenced by adequacy of insulating effect and the den site. One of the more inviting den sites for black bear in northern Minnesota is in windrows of rock raked from agricultural land. However, scientists find these sites greatly jeopardize overwinter survival because their poor insulating property requires the animals to expend great quantities of energy.

Project (18)

Guides have been developed for managing subalpine grasslands. Results of 20 years of range research have been summarized as management guides for subalpine livestock ranges in the Big Horn mountains of Wyoming. These important ranges, grassland parks rimmed by coniferous forests, together with associated meadows and shrublands occupy more than one-half million acres within the Big Horn National Forest. Application of these new guides will allow managers to use the resource for optimum cattle and wildlife production while maintaining environmental quality.

Videotapes increase quantity and quality of wild turkey research data. Portable television recording equipment greatly increases the effectiveness of wildlife biologists in their scientific data collection of wild turkey habitat use. Videotaped field observations can be replayed to provide full opportunity for studying the turkeys' habits and reactions in much greater detail and more completely than can be done with written field notes of monitoring. With this new technique, scientists are building information to help in maintaining the wild turkey as an important game species.

Sheep gain greater weight on native bunchgrass than on cheatgrass. Research shows that native bunchgrass ranges in southern Idaho provide greater overall sheep weight gains and grazing capacities than ranges infested by cheatgrass. Cheatgrass ranges were equally as good as the native bunchgrass ranges during wet years. However, during dry years grazing capacities were 60 percent greater on the bunchgrass range which has a considerable longer grazing season requiring less movement of grazing stock.

Project (19)

FOREST RECREATION RESEARCH

1972	$1,064,000
1973	1,353,000 1/
1974	1,103,000
Decrease	-250,000

A decrease of $250,000 is proposed.

In fiscal year 1973 $250,000 was appropriated over the budget request for forest recreation research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $8,000. On the basis of planned program level for 1974 there will be an increase of $8,000.

Forest recreation research through studies of man's interactions with his forest environment contributes to formulation and implementation of environmental resource policies.

Recreation research seeks to:

(1) Develop new and better resource management practices which enhance amenity values.

(2) Understand man's need for and use of forests, open space, and parks as environments for living, working, and recreation.

(3) Analyze and understand the interactions between people and forests, social, and economic factors underlying outdoor leisure activities, esthetic quality of forest landscapes and environmental situations, trends in recreation uses, use and management of wilderness areas, and alternative management strategies for meeting the public demands.

(4) Identify interrelations among recreation, environmental amenities, and other uses of forests and open spaces--and find better ways of coordinating these uses.

Examples of Recent Accomplishments

New methods have been developed for measuring recreational use. Forest managers must know how much use is made of recreational resources, but counting all visitors is seldom feasible, and sampling them can be complex and difficult. Research has developed a series of special methods for collecting valid statistical samples of recreation use and users. Such statistical samples can be the basis for sound estimates of actual use. These recently developed techniques will enable managers to estimate water-based recreation on large bodies of water, trout stream use in the Southeast, and visitor use of wilderness areas more economically.

Commercial campgrounds are a growing industry. Studies confirm that the commercial campground industry is growing rapidly throughout the United States. In the 11 Northeastern States, for example, the number of commercial campgrounds increased from 160 to 1,428 in only 6 years. The camping market is not only growing, but changing. Most of the increases are accounted for by newcomers to the market. At the same time, some experienced campers are quitting because of increased costs, crowding, changes in camping clientele, or shifts in personal interests. Many newcomers, on the other hand, seek social interaction in camping.

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1/ Includes $250,000 program and $8,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

have a high tolerance for crowding, and want conveniences. Few of today's campers are interested in "roughing it"--only about one out of five. The trend, especially in commercial campgrounds is to provide sophisticated comfort and convenience features. Research on commercial campgrounds and their customers is providing information that should help the operators better serve the public.

Landscape analysis is an important part of regional planning. In the Lake Tahoe Basin of California and Nevada, potential development generated by the mass of people attracted to the Basin threatens to impair much of the landscape. A Forest Service scientist analyzed the Basin landscape and potential impacts of development on the scenery. An array of alternative choices with probable impacts was thus provided to the Tahoe Regional Planning Agency to assist in establishing guidelines and priorities.

Analysis of skier characteristics and preferences provides guides for planning and management. Research shows skiing, an important form of outdoor recreation for an estimated 4 million Americans, is done largely by people who are young (two-thirds are 30 or under), single, educated, and have higher-than-average incomes. About 85 percent of all skier-days are spent by people who live close to the mountains. Many new skiers are entering the market; 40 percent to today's skiers have 3 years or less experience. New areas should be as near as possible to population centers and should include adequate facilities for beginners and intermediate-level skiers. This information from research on skiers and their preferences is now available to help resource managers better serve the skiing public while protecting public resources.

Family camping, a popular activity, is expected to grow even more. Recent research shows that family camping now involves over 40 million people a year, and that even more people will join in. Many of today's camping families are newcomers; only 10 percent of them camped before 1950. Furthermore, 42 percent just began camping within the last 5 years. Publicly-owned campgrounds were used by slightly more families than were commercial campgrounds, but this varies among areas of the country. Continued heavy use and management challenges for campgrounds on National Forests and other public lands can be expected.

Studies of wilderness use provides clues for management. A study of use of three Western Wilderness Areas and the Boundary Water Canoe Area identified conflicts between large and small groups, between hikers and horse riders, and especially between canoeists and those who use motorboats. Visits to Wilderness and Primitive Areas have increased at about 10 percent per year over the past 25 years and now total over 5 million visitor days per year. Some parts of the wilderness are crowded--the solitude sought is disappearing. In some cases, the physical environment is threatened by overuse. Research is seeking ways of:

(1) Meeting some people's desires for backcountry recreation outside designated wilderness.

(2) Defining wilderness carrying capacities in both biological and social terms.

(3) Developing management alternatives that will both preserve the wilderness resource and its recreational use.

Project (20)

FIRE AND ATMOSPHERIC SCIENCES RESEARCH

1972	$5,181,000
1973	7,878,000 1/
1974	7,378,000
Decrease	-500,000

A decrease of $500,000 is proposed.

In fiscal year 1973 $500,000 was appropriated over the budget request for fire and atmospheric sciences research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $50,000. On the basis of planned program level for 1974 there will be an increase of $50,000.

The fire research program develops knowledge and technology to reduce forest fire costs and to protect the quality and productivity of American forests. This research is the sole Federal forest fire research effort and is designed to aid all private, State, and Federal agencies in protecting 1.2 billion acres of forest and watershed lands. This research has aided in bringing about a 50 percent reduction in total forest fire losses between 1951 and 1965. Increasing risks and hazards in today's more intensive use of forest lands makes the forest fire control job more difficult. During the five years, 1966 through 1970, the average annual area burned increased to nearly 4.7 million acres and reached 6.7 million acres in 1969. The devastating fires of 1970 in the Northwest and California add further evidence to the increasing severity of forest fire problems.

Forest fire losses are at unacceptable levels. There are opportunities to make substantial savings through full development of new technology for fire prevention and control. The fire research program has high potential to reduce the timber supply impacts from fire loss now averaging 1.5 million acres of commercial forest land burned per year on protected forests, and environmental quality degradation from annual burning of some five million acres on all classes of lands. The current fire research program is focused on:

(1) Fire prevention.

(2) Fire hazard reduction.

(3) Fire control systems.

Examples of Recent Accomplishments

National fire-danger rating system is speeded by automation. A large part of the calculations required to determine fire danger have now been automated. This new development, along with computer storage of all fire weather and fuels data, provides land management agencies with the capability of rapidly assessing the fire danger situation nationwide. This streamlining of the fire danger rating system will also facilitate its adoption throughout the Nation and provide a badly needed tool for fire protection and control.

Pressurized modular fire retardant dispensing system is adaptable to a wide range of aircraft. Implementation of a modular retardant dispensing system, now under final test in cooperation with the Air Force, will greatly increase the flexibility of aircraft now equipped only as tankers which restricts their

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1/ Includes $500,000 program and $50,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

use to firefighting. This system will also allow other aircraft to be used temporarily for firefighting. The system is based on five 500-gallon pressurized tanks palleted to slip into and out of a C-130 airplane. With some changes in tank configuration, the system will also be adaptable to as many as 30 other types of aircraft, including large helicopters.

Unified forest fire command and control center increases effectiveness of southern California's protection system. A new forest fire command and control system that integrates the policies, objectives and operations of Federal, State, county, and city governments into a unified planning and operations base for southern California is being cooperatively developed. The command and control center will:

(1) Automatically develop fire behavior predictions.

(2) Maintain hour-by-hour inventory and allocation of personnel, equipment, and supplies.

(3) Supply up-to-the-minute situation assessment and planning information.

Development of the unified center will provide for more effective action against southern California's potentially catastrophic fires which require rapid mobilization of firefighting resources involving as many as six separate agencies.

Airborne infrared forest fire surveillance system is improved. A dry silver paper recorder has been developed to produce real time high resolution positive imagery while in flight. Previously, there was a significant delay in providing a picture of the fire and surrounding area to fire controllers because film had to be wet-processed at a ground facility. This new rapid processing system will allow assessment of the fire within minutes after infrared mapping over flights.

Significant progress made on design of high altitude airborne retardant dispensing systems for helicopters and fixed-wing aircraft. Nine different fire retardant tank and gating systems have been tested at drop altitudes up to 2,000 feet. Feasibility studies have been made for 18 different modes of getting fire retardants to the target. Personnel and aircraft safety were considered in all test evaluations. These studies show that direct attack is effective only under particular fuel and weather conditions. Under certain other fuel and weather conditions, indirect attack is more effective. The studies also showed that effective direct attack from higher altitudes will require development of an aiming aid. In the case of indirect attack, however, high altitude drops can be made without special equipment. Full development of these systems is critical to safely conducting air operations at night or in dense smoke, and in using large, modern aircraft for firefighting.

Project (21)

FOREST INSECT AND DISEASE RESEARCH

1972	$9,440,000 1/
1973	10,520,000 2/
1974	9,830,000
Decrease	-690,000

A decrease of $690,000 is proposed.

In fiscal year 1973 $690,000 was appropriated over the budget request for insect and disease research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $66,000. On the basis of planned program level for 1974 there will be an increase of $66,000.

Funding in previous fiscal years was by two separate line items--forest insect research and forest disease research. These items are being combined because the work has become so interrelated that effective separation is difficult. Furthermore, funding as a combined line item will permit more effective administration of funds to provide for their best use in meeting urgent research needs.

The mission of forest insect and disease research is to provide the knowledge and technology to:

(1) Define, measure, and evaluate the ecological and socioeconomic impacts of destructive insects and diseases on all forest resource uses and values and on wood in storage and use.

(2) Detect, assess, and predict changes in the occurrence of these pests.

(3) Reduce and/or maintain their numbers and impacts at tolerable levels by means of control techniques and management strategies that are ecologically sound, economically efficient, and environmentally acceptable.

Current research is strongly oriented toward developing comprehensive integrated pest management systems for major forest insects and diseases, such as the gypsy moth, southern pine beetle, western and mountain pine beetles, western spruce budworm, larch casebearer (in western larch), dwarf mistletoes, fusiform rust (in southern pines), annosus root rot, and Dutch elm disease.

Special emphasis is being given to:

(1) Understanding and quantifying the full impacts of certain major pests such as the mountain pine beetle, southern pine beetle, spruce budworm, gypsy moth, dwarf mistletoes, and fusiform rust on the productivity, value, and usefulness of their host tree species.

(2) Finding and developing specific microbial and other biological agents for direct control of the gypsy moth, Douglas-fir tussock moth, forest tent caterpillar, annosus root rot and similar primary pests.

(3) Finding and developing chemicals safer than those now available for suppressing or manipulating pest populations; these materials include insect attractants, repellents-deterrents, and other behavioral chemicals, as well as more selective, nonpersistent toxicants.

(4) Developing specialized equipment and improved techniques for applying pesticidal chemicals to individual trees and to forested areas.

(5) Developing technology to detect, monitor, and evaluate adverse environmental effects, including chemical and oxidative air pollutants, on tree form, color, and growth.

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1/ Includes $26,000 personnel savings applied to emergency work associated with fire and flood damages.
2/ Includes $690,000 program and $66,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Examples of Recent Accomplishments

Plot system in Northeastern States will provide improved bases for decision on gypsy moth control. A series of plots established in the Northeastern States are providing the data needed to better evaluate gypsy moth population trends and impacts. The plots are located both in areas where the insect is well established and where it is a new invader. Control treatments have been applied in some of these areas; in others, no human intervention has occurred. The data obtained will be used to develop further insight into the population ecology of the gypsy moth, to test predictive models, and to assess the short- and longer-term effects of pesticidal treatments.

Promising breakthrough in control of vascular wilt diseases. A method was found to solubilize the fungicide, benomyl, in water. Accompanying this finding, a pressure injection technique was developed to place the benomyl directly into the sap stream of trees. This new technique gives hope that the destructive Dutch elm disease and wilts of oak and maple can be controlled effectively in urban and rural forests.

Causes of gypsy moth mortality important in integrated control. Long-term studies, partially supported by PL-480 funds, have identified specific factors or agents causing mortality of gypsy moth over a wide range of environmental conditions in Yugoslavia. These include bacterial pathogens, viruses, parasites and predators. This information will be used in developing integrated control methods for managing the gypsy moth in the United States.

Resistance to fusiform rust found in loblolly pine. In controlled infection studies, loblolly pine progeny selected for resistance consistently had less rust than ordinary open-pollinated progeny. This important information provides opportunities to reduce damage from one of the most serious killers of southern pine. Results of these studies have been so encouraging that a special research and development program is being established to develop and apply techniques for mass screening of southern pine seedlings for resistance to fusiform rust.

Production and safety testing of viruses for use in insect control underway. The Forest Service has perfected mass propagation methods and participated with Agricultural Research Service scientists in developing acceptable safety protocols for microbial agents. Viruses of the gypsy moth, Douglas-fir tussock moth and European pine sawfly are ready to be mass produced when safety tests, now nearing completion, are finished. With this new information, definitive pilot control tests and registration of the uses of insect control microbial agents should be possible within two years.

Nursery seedlings resistant to white pine blister rust are now ready for planting. Western white pines from blister rust resistant parents have been examined for evidence of infection for up to 15 years. Twenty percent of the progeny were infected compared with 58 percent infection in controls and 71 percent in natural reproduction. Although complete resistance to blister rust was not present, there was sufficient resistance to start planting first-generation nursery stock. Research will continue to identify additional resistance mechanisms which can be incorporated into the program and assure continued resistance to the disease over several rotations.

Bt ground applications effective against gypsy moth. Mist blower applications of Bacillus thuringiensis have been used to control the gypsy moth in Massachusetts, New Jersey, and Pennsylvania. Foliage was protected and the insect population reduced. Two commercial preparations have since been registered by industry for use in suppressing this pest.

Project (21)

Mechanisms of air pollution damage determined for some conifer and hardwood trees. Air pollution continues to cause serious damage in forests across the United States, especially in California. Armed with information developed by research on the mechanisms of pollution, important steps have been taken to identify species or clones within species which are resistant or tolerant to certain air pollutants. It may now be possible to plant or encourage regeneration of tree species of known tolerance in areas chronically troubled with air pollution.

Antiattractant discourages attacks by Douglas-fir beetle. Research has found that an antiattractant, methylcyclohexenone, is produced by female Douglas-fir beetles to regulate the activity of male beetles. This material has been synthesized and tested in the field as a means of preventing mass attacks and consequent outbreaks of this destructive insect. This newly discovered insect-produced chemical shows promise of providing alternatives to the use of toxic chemicals in managing insects which breed in trees damaged by natural causes. More detailed field trials are planned to develop operationally feasible means of using this chemical.

Tree declines are related to environmental stress and insect defoliation. Environmental stress and defoliation of sugar maple cause a change in the chemical constituents of roots. Extracts from defoliated trees were found to increase growth of the root pathogen, Armillaria mellea, suggesting that stresses such as those resulting from drought and defoliation by the gypsy moth may predispose trees to attack by root pathogens. This situation exemplifies the importance of understanding the total impact of all pests associated with a given forest ecosystem.

Seedbugs contribute to seed losses. Field studies have shown that feeding by nymphs of the seedbug, Leptoglossus corculus, is a significant cause of seed loss which was formerly attributed to conelet abortion or "physiological drop" in shortleaf and loblolly pines. Thus, it is apparent that some form of seedbug control will be needed to increase cone and seed production.

Project (22)

FOREST PRODUCTS UTILIZATION RESEARCH

1972	$9,141,000 1/
1973	9,231,000 2/
1974	9,131,000
Decrease	-100,000

A decrease of $100,000 is proposed.

In fiscal year 1973 $100,000 was appropriated over the budget request for forest products utilization research and is proposed to be used for fighting forest fires in 1973 along with travel savings of $61,000. On the basis of planned program level for 1974 there will be an increase of $61,000.

More wood is used annually, primarily as a material for building construction, than the combined total of steel, plastics, and concrete. More than 85 percent of single family housing is of wood frame construction. Newspapers such as the Washington Post require 625 tons of paper for each Sunday issue. The suitability of wood for uses such as these, when compared with nonrenewable and higher-polluting materials, dictates an urgent need for adequate supplies of wood at a competitive price in the future.

By enabling the more effective use of wood, forest products utilization research will permit important savings in the number of trees which must be harvested to meet timber supply requirements and, at the same time, reduce adverse environmental impacts. More efficient utilization will be achieved through research in problem areas such as:

(1) Recycling and reuse of discarded wood fiber.

(2) Advanced engineering design procedures for more efficient use of wood products in building construction.

(3) More precise evaluation of the strength properties of wood for structural uses.

(4) Reduction of waste associated with wood processing.

(5) Methods for manufacturing commercial products from low-grade logs and residues.

(6) Development of high-yield nonpolluting pulping processes.

(7) Development of better methods for protection of wood in use to enhance its durability in situations where it is subject to fire and attack from insects and disease.

Examples of Recent Accomplishments

Improved utilization of southern pines now possible. A study establishing the physical properties of the wood of the four major southern pine species (longleaf, shortleaf, loblolly, and slash) provides the means of achieving more effective use of wood resource with improved performance for the consumer. For the first time, an understanding of the relationship between density, strength and elastic properties in statistically precise terms for the complete species range has been established. Density data over the entire growth range are of particular interest to the pulp and paper industry, since pulp yields vary in direct proportion to density of the wood pulped.

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1/ Includes $48,000 personnel savings applied to emergency work associated with fire and flood damages.

2/ Includes $100,000 program and $61,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Major publications extend knowledge in efficient species utilization. Results of research and experience developed over many years have been compiled into handbooks that provide information invaluable in achieving more efficient use of wood and conservation of the timber resource. A wide range of technical information previously fragmented and widely scattered is now readily available in:

(1) A two-volume book describing the characteristics of the southern pines as a raw material and the most efficient techniques in converting processes (Ag. Handbook No. 420, Utilization of the Southern Pines).

(2) Guides covering important production phases of the veneer industry involving wood characteristics of native veneer species and techniques of cutting and drying veneer (Forest Service Res. Papers FPL 150, Wood and Log Characteristics Affecting Veneer Production, and FPL 167, Veneer Species that Grow in the United States).

(3) A guide to industry practices in air drying lumber, emphasizing practicality, economy, and unit package drying (Ag. Handbook No. 402, Air Drying of Lumber).

Predictability of cutting yields increases red alder efficiency and competitiveness. Alder sawtimber volume has increased tremendously in the past 10 years. Utilization of this little-used species, by West Coast furniture manufacturers, relieves the drain and price competition on many traditionally used Eastern hardwoods. Increased demands for lumber with expanding markets and higher prices for alder generated the need for more exact utilization information. A recent study enables the prediction of expected cutting yields from various grades of red alder lumber. This information is vitally important to furniture parts manufacturers since it provides a management tool in selecting the most economical grade or grade mix to use for specific cutting orders.

Logging residues are a source of valuable black walnut dimension. Black walnut lumber continues to be highly prized for furniture, paneling, gunstocks and other fixtures. The supply of high-quality black walnut trees is critically short, however, and effective methods are needed for processing presently non-commercial low-quality materials to help augment the diminishing supply. A study has shown that much valuable black walnut dimension can be economically produced from short tree sections, tops, large branches, and other forest residues customarily left after logging. A bolter saw is used to produce short flitches, which are then processed into dimension parts Diminishing walnut supplies will be augmented through use of this additional raw material source, and unsightly slash is eliminated.

Guide to design, finishing, and treatment of exposed wood decks developed. Wood decks offer a variety of flexible systems for outdoor living areas and provide spaciousness in home design. Special precautions are necessary to avoid deterioration. A comprehensive guide describes proper materials, design, construction details, treatment and finishes that insure years of satisfactory wood deck performance.

Pine-hardwood combination provides superior building material. Southern pine plywood used as exterior siding provides maximum racking strength to the structure but affords a relatively poor base for paint or other surface coatings. However, southern pine plywood and paintable southern hardwood face-veneers can be combined to produce a strong panel with superior finishing properties. Cottonwood, yellow poplar, and magnolia are typical of many of the southern soft-textured hardwoods that are usable and available in quantity near pine plywood plants. Such a panel could provide a sheathing-siding combination material for application in full-size (4' x 8') sheets that would meet both strength and finish requirements.

Timber can meet demands for highway bridges. Forest Service research has shown timber can be effectively utilized to meet demands for short-span bridges on secondary or rural roads that may be replaced as the result of an intensified Federal bridge inspection program. Glued-laminated bridge stringers can be readily manufactured to meet span and load requirements and laminated wood decks provide a

rigid, low maintenance, water-tight covering to protect them. Experimental structures on Forest Service roads verify design and performance and substantiate that the structures are economical, strong, durable, and esthetically pleasing.

Automatic dry kiln control system now marketed commercially. Following eight months of testing in a commercial-size furniture plant kiln, a labor-saving automated system that dries lumber faster is now being offered and marketed by one of the largest kiln equipment manufacturers in the United States. Manufacturer's estimates indicate that each unit will save the owner about $2,500 annually on average kiln loads. Besides this monetary benefit, the equipment assures more accuracy in schedule settings which provides an improved product with less degrade.

Bark increases fiber yield per cord of wood. Bark is usually considered a contaminant in the production of wood pulp. However, pulping wood chips with the bark left on offers several benefits, such as:

(1) Eliminates the de-barking operation.

(2) Eliminates the loss of white-wood during de-barking.

(3) Permits the use of small tree branches, tops and other woods wastes that are difficult to de-bark.

(4) Yields some fiber from the bark.

Research on softwoods has shown that pulping chips with the bark on yields good quality pulp and about 4 percent more fiber per rough cord of wood. This is equivalent to a 17 percent yield of fiber from bark in comparison to a 50 percent yield from wood. Approximately 0.2 percent more pulping chemical was used and 0.2 percent more chlorine bleach.

Practical method for recycling wax treated corrugated material developed. Wax treated corrugated containers account for six to seven percent of the corrugated material presently used and will increase to 10 percent, or about one million tons annually, in the near future. Virtually all of this good quality, wax-treated material is burned or buried after use rather than recycled since specialized, solvent extraction equipment necessary for wax removal is not available at most secondary mills. The Forest Products Laboratory at Madison, Wisconsin has developed a practical, more generally applicable method for wax removal that uses existing conventional mill equipment. Wood fiber from such reclaimed material shows much promise as a significant source of fiber for use as a corrugating medium either as 100 percent reclaimed fiber or blended with virgin fiber stock to improve properties.

Project (23)

FOREST ENGINEERING RESEARCH

1972	$1,479,000 1/
1973	1,478,000 2/
1974	1,478,000

No increase is proposed. In fiscal year 1973 travel savings of $10,000 are proposed to be used for fighting forest fires. On the basis of planned program level for 1974 there will be an increase of $10,000.

Forest engineering research provides direct support to managers and planners through development of essential new forest management technologies. Problems in timber harvesting, transportation planning, mechanization, and utilization have engineering components that require systematic study. Solutions have far-reaching implications affecting many forest management practices. These include:

(1) Extending the timber supply by facilitating the utilization of trees or parts of trees that might otherwise be inaccessible.

(2) Maintaining price stability of wood products by bringing least-cost technologies to bear.

(3) Providing expanded rural employment under safe working conditions.

(4) Supporting environmental stewardship goals.

Examples of Recent Accomplishments

Patented yarder proves the practicality of skyline logging. A 2-line yarder system has now been developed that has many advantages over the prior 3-line system. A prototype utilizing the new 2-line system has been successfully tested in Oregon and this system is now commercially available. The new system allows unprecedented increases in allowable yarding distance, economy, and adaptability to partial cutting with minimal damage to remaining stands. This skyline logging technology will be extremely useful in controlling land management impacts and providing accessibility to timber not loggable by conventional methods.

Wood chip carrier pipeline prototype is installed. A 2,000-foot wood chip pipeline loop has been constructed, and operational test runs are scheduled. Follow-up studies will determine the amount of carrier water treatment necessary to insure that discharge water can be used beneficially in compliance with water quality standards. Development of an improved transportation system of this nature can assure more intensive utilization of wood fiber and alleviate adverse environmental effects of logging residues.

Promising system for mechanized pine gum harvesting is evaluated. The gum naval stores industry relies heavily on a large woods labor force which is rapidly diminishing. It may eventually be necessary to collect gum by a system that requires little or no labor. Results of a pilot study to identify problems in equipment and operation and to analyze the first fully mechanized pine gum harvesting system in the United States are encouraging. No major obstacles to further development are evident.

1/ Includes $14,000 personnel savings applied to emergency work associated with fire and flood damages.
2/ Includes $10,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Project (24)

FOREST SURVEY

1972	$3,438,000
1973	3,433,000 1/
1974	3,433,000

No increase is proposed. In fiscal year 1973 travel savings of $23,000 are proposed to be used for fighting forest fires. On the basis of planned program level for 1974 there will be an increase of $23,000.

Forest land in the United States (754 million acres) varies greatly in productivity, ownership patterns, availability for industrial use, and opportunities for management intensification. Accelerating changes in forest conditions result from changing land uses, timber growth, cutting, and losses to destructive agents. Demands on forest lands for nontimber uses are also increasing. Consequently, up-to-date inventories of forest land and timber resources are essential to guide programs for production of timber and other forest values.

Forest survey seeks to:

(1) Determine current trends in the timber resource situation.

(2) Determine the outlook for timber growth and supplies available for future harvests.

(3) Identify prospective timber and nontimber resource management problems.

(4) Analyze the effects of alternative programs for meeting prospective forest resources demands.

(5) Identify opportunities for economic development based on forest resources.

Examples of Recent Accomplishments

Nation's timber situation analyzed. A summary report of a new study of the Outlook for Timber in the United States indicates that growth in demands for lumber, pulp and other industrial wood products is resulting in impacts which include rising prices of wood products and increased dependence on imports and competing materials.

Pulpwood production increases in the South and Northeast. Pulpwood production in the South continued upward in 1970, reaching an all-time peak of 42 million cords. Increase in the use of oaks and other hard hardwoods for pulping in the South is a significant departure from past trends. In the Northeast, pulpwood procurement patterns have changed considerably in recent years as old, inefficient mills close or convert to new pulping processes, and high-production mills open. Pulpwood production rose 11 percent over the previous year.

A new computerized system for annual updating of basic forest survey data was developed. Because of the long interval between Statewide resurveys, forest resource information is often neither current nor detailed enough for local need. Utilizing this new system and data on growth and removals, current resources and production statistics for 370 counties in six Southern States were produced. This new updating procedure provides badly needed information for timber management and industrial processing planning before the next scheduled resurvey.

Florida's commercial forest area declined 5 percent. Diversions of forest land to agriculture, urban and other uses reduced Florida's commercial forest land by nearly a million acres between 1959 and 1970. Meanwhile, timber volume increased from 9.1 to 10.9 billion cubic feet mainly because of accumulating growth in pine sawtimber. The trend toward less forest land was also detected in the Delta Region of Arkansas, Southeast Georgia, Northern Michigan, East Tennessee, and Wisconsin.

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1/ Includes $23,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Maine's commercial forest area increased. In Maine, forest area increased 3 percent between 1959 and 1971. A general trend for the East is also illustrated in Maine by a 23 percent gain in growing stock volume mainly in the major pulpwood species.

Forty-seven million acres of commercial forest land were reinventoried during the past year. Field surveys were conducted in Alabama, Alaska, California, Connecticut, Georgia, Missouri, New Hampshire, New Jersey, Oregon, Rhode Island, and Vermont. Reports appraising the forest resource situation were issued for eight States and portions of States. At this rate the resurvey cycle averages 11 years, somewhat greater than the short cycle desired by many users.

Two-stage 3 P sampling offers an alternative for up-dating surveys. A simulated 3 P sample predicted the total cubic volume for five counties in southern Alabama to within 0.7 percent of that shown by the latest forest survey of the area. Remeasurements by this procedure will supplement standard surveys and provide interim data at much shorter intervals than is possible with the standard survey.

Multifunctional inventory technique is studied. A case study using two Arkansas forest survey regions incorporated an appraisal of other forest resources. This approach overcomes deficiencies in appraisals that deal solely with timber production by developing information on other resources, such as recreation, that affect timber production or are affected by timber production.

Project (25)

FOREST PRODUCTS MARKETING RESEARCH

1972	$2,033,000
1973	2,030,000 1/
1974	2,030,000

No increase is proposed. In fiscal year 1973 travel savings of $13,000 are proposed to be used for fighting forest fires. On the basis of planned program level for 1974 there will be an increase of $13,000.

Forest products marketing research seeks to improve the use of the Nation's timber resources through more effective harvesting, processing, distribution, and consumer use of forest products. Studies of factors influencing use of wood and competing materials in construction, manufacturing, shipping, or other end uses indicate potential demands for timber products, and thus serve to guide forestry programs. Research on ways to reduce costs in timber harvesting and processing helps achieve more efficient use and wider markets for available timber resources. Evaluation of opportunities to expand wood-based industries provides guidelines for local development of forest resources and improvement of the rural economy of the Nation.

Examples of Recent Accomplishments

Secondary manufacturing creates volumes of wood residues. Studies show that wood residues generated in 1970 at secondary manufacturing plants in 11 midwestern States totaled about 241 million cubic feet (roughly 3 million tons). Of this total, 55 percent was sold or used for industrial fuel, 11 percent was given away (mostly for animal bedding or waste), and 34 percent was burned or dumped as waste. Relatively small volumes at many individual plants and frequent lack of nearby markets are the main reasons why more of this material is not now marketed for some economic use. This new information provides the base upon which plans can be made for better use of these wood resources.

Bark could have widescale application as mulch material for erosion control. Research shows that shredded tree bark from sawmill wastes makes an excellent mulch for holding disturbed soil against wind and water erosion. Further studies are underway to determine the economics of using a specially equipped mobile bark mulch blower truck for seeding projects on highway roadsides and for strip mine reclamation. Promising results of trials on different types of terrain and for various mulching applications should lead the way to more intensive use of the great volumes of bark now largely wasted.

Use of plywood increasing in apartment construction while lumber use declines. A study of wood products used in apartment construction for which architectural plans and specifications were completed during 1969 showed the average use of lumber per housing unit was 3,886 board feet. Plywood use averaged 1,879 square feet; hardboard 49 square feet; particleboard 52 square feet; and insulation board 45 square feet. Comparisons with a similar study in 1962 show plywood use is increasing and lumber use is declining. This information is valuable in planning for maximum efficiency in wood utilization from forest management to industrial end points.

Further substantial increase in demand for timber and wood products is indicated. Analysis of economic activity in the major timber product markets showed divergent trends in 1971. Residential construction, the Nation's largest market for lumber and plywood, increased about one-third over the 1970 level. Activity in most other major markets such as nonresidential construction, manufacturing, and shipping was below 1970 levels. Trends in prospective economic activity in major markets indicate that the Nation's demand for wood will continue to increase.

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1/ Includes $13,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

Project (25)

Operations research can help the decision-making process in furniture "rounds" manufacture. Operations research techniques were used to evaluate processing strategies of furniture "rounds," high value products produced from better grade hardwood logs. Results of operations research on alternative choices of log sizes, processing constraints, and product requirements can improve profitability of existing plants and help evaluate investments in new plant facilities.

Forecast of mobile home wood use made. Mobile home production has grown dramatically over the past decade and currently accounts for approximately one-third of all single family dwelling units constructed annually in the United States. The mobile home industry has been characterized by shifting geographical areas of concentration. Shipments of mobile homes to the 48 contiguous States for the period 1966-1969 were analyzed to aid in forecasting patterns of wood-building materials used by this industry. From this research, models were developed and projections made of mobile home shipments to States by year for the 1971-1975 period. The wood industry thus is provided with an important planning tool for helping meet product demand from the mobile home builders.

Project (26)

FOREST ECONOMICS RESEARCH

1972	$1,409,000
1973	1,407,000 1/
1974	1,407,000

No increase is proposed. In fiscal year 1973 travel savings of $10,000 are proposed to be used for fighting forest fires. On the basis of planned program level for 1974 there will be an increase of $10,000.

Research in forest economics develops methods to evaluate alternative land management techniques and programs involving the determination of costs and benefits of managing forest lands for timber and other uses, including water, recreation, range, and wildlife. This research includes:

(1) Development and testing of analytical techniques to integrate and balance multiple uses of forest lands, to aid in policy planning and program formulation for public and private forests, and to provide full technological assessment of the impacts of land management programs on environmental quality.

(2) Evaluation of timber management and other policies in respect to alternative cultural treatments, protection, levels of stocking, and harvesting methods to achieve optimum investment in forest activities and to aid in allocating the hundreds of millions of dollars spent for forestry programs throughout the Nation.

(3) Analysis of forestry program alternatives to aid in identifying effective means of stimulating the millions of owners of private lands to adopt more productive forestry practices.

Examples of Recent Accomplishments

Guides to financial returns for forest type conversion to pine plantations in the South developed. These guides show financial returns for various levels of costs and prices and for immediate and delayed conversion with and without timber stand improvement. Use of these guides indicates that profitable opportunities for forest type conversion to pine plantations exist on millions of acres in the South in every ownership class.

Rates-of-value increase estimated for 10 species common to the oak-hickory type. These rates-of-value increase are useful for appraising individual trees, and for evaluating effects of diameter growth, increase in merchantable height, and improvement in tree quality. Rates-of-value increase combined with basal-area requirements provide a basis for determining desirable timber harvests.

Advances made in the use of computers in forest management-financial evaluation and planning. New computer procedures provide for:

(1) Ranking investment alternatives for which the rate of return varies with the amount invested.

(2) Discounting benefit and cost flows over time and interpolating values for intermediate years.

(3) A more realistic classification of timber resources and analysis of a wider spectrum of forest management practices.

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1/ Includes $10,000 travel reduction savings proposed for transfer to Forest land management for fighting forest fires.

The South is gaining markets for forest products. Due to shifting nonforest industries and populations, increasing timber resource availability, and recent innovations in forest-product processes favoring utilization of smaller trees, forest industry in the South appears to be gaining progressively in its competitive position relative to the same industries in other regions.

Practices of forest owners vary widely. Practices followed by nonindustrial private woodlands owners in supplying forest products and services were determined from a sample of 400 Pennsylvania owners. Owners of large forest acreages sell forest products more frequently than owners of small properties, undertake forest management more often, and are more interested in income-producing potential of their forest tracts.

Data on output-per-man-hour indicate a rise in productivity in forest industries. Productivity in the lumber and wood products sector increased annually by 3.2 percent while actual employment dropped 14 percent in the period 1947-67. The paper industry had an annual productivity rate increase of 3.4 percent.

Costs of practicing forestry in the South increased substantially between 1952 to 1967. Increases of 200 to 700 percent exceeded inflation in the general economy and in prices received for forest products. Forestry practices included were:

(1) Controlled burning.
(2) Seedbed preparation by bulldozing or disking.
(3) Planting by hand or machine.
(4) Cutting to release young growth.
(5) Poisoning or girdling undesirable trees.
(6) Timber cruising.
(7) Marking trees for harvest.

REDUCTIONS IN RESEARCH FUNDS

Mrs. HANSEN. You have budgeted a decrease of $3,865,000 for forest research. This reduction is the exact amount of the Congressional addition for fiscal year 1973, which you propose to use for fighting forest fires in 1973. I would like you to explain in dettail the basis for this reduction in light of the fact that your own review "Outlook for Meeting Future Timber Demands" stated "Research is a key element in improving the timber supply picture, both in the woods and at mills."

The second part of the question: Why were only the Congressional additions selected for reduction in fiscal year 1973?

Mr. MCGUIRE. The congressional additions were impounded.

Mrs. HANSEN. Why?

Mr. MCGUIRE. On the general grounds that all additional funds should be not expended in order to hold total expenditures down to a minimal level.

Mrs. HANSEN. But the total budget handled by this subcommittee was below the President's budget.

Mr. MCGUIRE. I don't believe that was taken into account.

Mrs. HANSEN. I am sure it wasn't taken into account, but then that is exactly the picture. When this budget left here we were about $5 million below the total President's budget.

Mr. MCGUIRE. In addition to the $3.9 million, we did have about $385,000 placed in reserve as a result of savings in travel. But the bulk of the impounded funding was in the add-on items.

Mrs. HANSEN. Please place in the record by categories the travel reduction savings.

Mr. MCGUIRE. We could provide the kinds of research that were affected in each case.

[The information follows:]

Fiscal year 1973 travel reduction savings in forestry research

Timber management research	$78,000
Watershed management research	42,000
Wildlife habitat and range research	24,000
Forest recreation research	8,000
Fire and atmospheric sciences research	50,000
Forest insect and disease research	66,000
Forest products utilization research	61,000
Forest engineering research	10,000
Forest survey	23,000
Forest products marketing research	13,000
Forest economics research	10,000
Total	385,000

The travel reduction was absorbed wherever possible by curtailing administrative, supervisory, or coordiating travel or travel for research that could be deferred without damaging the usefulness of a study.

WALNUT RESEARCH

Mrs. HANSEN. This morning we discussed how we were trying to decrease timber losses. Since you say, "Research is the key element in improving the timber supply," and in the case of Mr. Yates' State, wal-

nut research is very important, why was the decision made to impound those?

Mr. ARNOLD. Those were two items that were added by Congress to our original budget request.

Mrs. HANSEN. Did that make them ineligible just because they were added by Congress?

Mr. ARNOLD. No, ma'am.

Mr. YATES. As far as the White House is concerned, the answer is yes.

Mrs. HANSEN. I am trying to get down to commonsense.

LAND EXCHANGE AT MADISON, WIS.

Mrs. HANSEN. I am really deeply concerned about some of these places where you had ongoing research programs. At Madison, for example, didn't we provide funds for transfer of some of that property?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. Wasn't your testimony that there was a time factor in this transfer?

Mr. ARNOLD. Yes. ma'am.

Mrs. HANSEN. What is going to happen to that?

Mr. ARNOLD. The University of Wisconsin has completed its planning and has received construction bids for the addition to the medical school. Of course, we have not been able to complete the transaction of the land.

Mrs. HANSEN. So you have lost that piece of land. Or you are in the process of losing it.

Mr. ARNOLD. We may lose the land exchange opportunity at this point, since the money is not available.

Mrs. HANSEN. So what happens?

Mr. ARNOLD. I don't know what the university will do. It is extremely critical for them. As you recall, the exchange of the 6 acres was for land of equal value, but there was a laboratory valued at about $963,000 on the land which would provide us space for which we already have planning money. It would save us about a half million dollars compared to the cost if we were to construct equivalent laboratory facilities of our own.

Mrs. HANSEN. Supposing you lost the land, what is going to happen then?

Mr. ARNOLD. If we would lose the 6 acres?

Mrs. HANSEN. That is right.

Mr. ARNOLD. Then the Forest Products Laboratory will be handicapped by losing the opportunity to develop the critically needed facilities that have already been planned. One of the planned facilities is a laboratory to test whole structures, such as houses.

Mrs. HANSEN. Which is critically needed at this point of time in the United States.

Mr. ARNOLD. Yes, ma'am. This facility can develop some better uses of wood for housing and reduce the amount of lumber in a given house.

Mr. HANSEN. This was of no importance? I can't understand why you did this.

RESULTS OF RESEARCH

Can you give the committee some recent examples of how research results have been applied to help solve timber supply, recreation, and fire problems?

Mr. ARNOLD. Yes, ma'am. In the field of timber supply, the Forest Products Laboratory developed the "best opening face" method of sawing logs. That is being applied in a number of mills. The companies that make the particular connecting equipment linking the small computer with headsaws are running behind schedule. That is one specific example.

Mrs. HANSEN. Give me some in recreation.

Mr. ARNOLD. You were asking about timber supplies.

Mrs. HANSEN. There are two more parts to my question.

Mr. ARNOLD. Yes, ma'am. In the field of recreation, we have a number of new things this year. One is better ways of getting accurate counts and estimates of the use of facilities and better methods of predicting what they will be in the future.

We also have a new method of analyzing ski resort development which, in fact, is something new to the ski resort indsutry. Of today's skiers, 40 percent have less than 3 years' experience. The large ski resorts that one thinks of, Vail and Aspen, really don't cater to the typical skier today. We need more and smaller ski resorts closer to large cities if we are going to accommodate the young people who are moving into skiing.

We have had a lot of development in the study of wilderness values and uses. We are now in the process of developing a computer model which will allow us to make cost-benefit analyses of various uses of wilderness in terms of numbers of people, types of people, and whether they are larger groups, smaller groups, individuals, or family groups.

In the field of fire, we now have nationwide the national fire danger rating system, which makes possible the total mobility concept that Mr. McRorey mentioned by being able to compare the potential for danger in one area of the country against another area. We can reduce the firefighting forces in one area and move them to the place where the fire situation is very critical.

We discussed the development of tank systems for surplus military aircraft. We are now working with 10 fire agencies in southern California to develop an automated command control system.

We have also completed testing of 10 large varieties of aircraft, including the Canadian CL–215, so that we can make drops of larger quantities of water and chemicals from higher altitudes. The normal altitude, as you will recall, is about 100 feet to 150 feet above the vegetation, which are the trees in the case of forests. It's a very dangerous operation. You cannot do it with a large airplane. So we have the tactics, the strategies, and the tests of 10 vehicles and some 200 to 300 actual drop tests to determine the ways, and develop the methods, of making safer drops by large aircraft.

WATERSHED MANAGEMENT RESEARCH

Mrs. HANSEN. You show a decrease of $350,000 for watershed management research. What is that $350,000 for?

Mr. ARNOLD. That decrease of $350,000 in watershed management research was in three of the items which this committee added to the budget last year.

Mrs. HANSEN. List them.

Mr. ARNOLD. One is in Fairbanks, Alaska, which was the soil-water relationships related to fires and other man-caused disturbances in Alaska.

One was in Durham, N.H., where we are looking at the effects of timber cutting on water quality, a question which, of course, is becoming more critical now.

Mrs. HANSEN. Isn't that a major problem in the entire United States?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. And particularly in the Northeast?

Mr. ARNOLD. Not just in the Northeast. It has come to attention in the Northeast because some studies were reported there on our watersheds. It's just as critical nationwide as in the Northeast.

Mrs. HANSEN. So the thing to do was to impound it?

Mr. ARNOLD. The third study was in Berea, Ky., in which we discussed yesterday the watershed improvement on the strip-mining lands.

SNOW FENCES

Mrs. HANSEN. You have an interesting project listed in your justifications on snow fences. Do you want to discuss that?

Mr. ARNOLD. That is an interesting project and a project which has paid off. Our snow research is aimed not only at avalanche control but of controlling snow movement in and around highways, and in and around buildings in small towns.

Mrs. HANSEN. And it can save lives.

Mr. ARNOLD. This also saved money. Wyoming spent $500,000 putting fencing in a year ago on Highway 80, and they feel that that was money well spent.

WILDLIFE HABITAT AND RANGE RESEARCH

Mrs. HANSEN. You show a $1,115,000 reduction for wildlife habitat and range research. Will you please place in the record a list of the projects involved?

Mr. ARNOLD. I will place that in the record.

[The information follows:]

Wildlife Habitat and Range Research

Location	Purpose	Funding
Olympia, Washington	Determine habitat requirements for deer, elk, nongame, and endangered species under intensive timber culture	$ 150,000
Fresno, California	Determine impacts of recreational use and water impoundments on habitat for fish and land wildlife	50,000
Reno, Nevada	Develop effective methods for improving and managing pinyon-juniper lands	315,000
St. Paul, Minn.	Develop knowledge and procedures for improving wildlife habitat in conjunction with timber management of northern conifers and hardwoods, with special emphasis on the habitat needs of rare and endangered species	300,000
Orono, Maine	Develop intensive management techniques for spruce-fir forests consistent with maintaining and improving wildlife habitat	100,000
Stoneville, Miss.	Develop techniques for intensive culture of bottomland hardwoods consistent with improved wildlife habitat	200,000
	Total	1,115,000

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FOREST RECREATION RESEARCH

Mrs. HANSEN. You have $250,000 reduction for forest recreation research which I assume is in Seattle. Isn't that correct?

Mr. ARNOLD. Yes, ma'am. There was $150,000 of that for study of costs and benefits and the prediction of demand for recreation.

Mrs. HANSEN. This is particularly related to the North Cascades area, the Olympic National Forest, and the other national forests in the Northwest, where you have increasing visitations; isn't that correct?

Mr. ARNOLD. Yes, ma'am. However, it's a little more than that. That is the pilot area.

Mrs. HANSEN. That is the pilot area?

Mr. MCGUIRE. That is the pilot area for research. But the methodology applies nationwide.

RESEARCH ON APPLICATION OF SEWAGE EFFLUENT TO IMPROVE SOIL AND TREE GROWTH

Mr. EVANS. May I ask a question? On page 81, you have an interesting paragraph entitled "Applying secondary municipal sewage effluent may improve forest soil and tree growth."

You talk about an experiment in Michigan. I would suppose that you could know with a certainty that the application of this was going to improve forest stands. Wouldn't that be a logical conclusion, that you wouldn't even have to be an expert to reach?

Mr. ARNOLD. Unfortunately, sewage wastes from many areas include trace elements that are damaging to vegetation. Also, if you get too much on, you can change the composition and percolating capacity of the soils.

Mr. EVANS. Has this experiment caused you to believe that this is a successful practice that should be undertaken?

Mr. ARNOLD. This practice is still in the experimental stage. There has been quite a bit of it done in Pennsylvania by the Pennsylvania State University. A few other universities are doing it. We do not yet know how to apply it to various soils, how to apply it and take care of it in the wintertime, and how to assure ourselves that the trace elements, such as mercury, don't form a permanent pollution to the ground water. The preliminary tests in Michigan indicate that it can be done successfully.

Mr. EVANS. Taking the Michigan experiment, for example, are you also studying about the efficiency or cost effectiveness, or whatever you want to call it, of actually delivering to wide areas? I suppose you are interested in not just a few trees down below but you are talking about trees in vast areas, how you would economically take and apply to vast sections of the forest this municipal sludge.

Mr. ARNOLD. There are three parts to this program. We had an increase in the budget last year which was used to move this work along. The first part is biological interactions. The second part is engineering systems to move the material. The city of Chicago does it by barge and train. The third one is the economic cost benefit. We have all of those in our program planning.

Mr. VEYSEY. Are you speaking now of solid materials such as sludge or of effluent?

Mr. ARNOLD. The Michigan studies concern effluent. We have one study in Southern California on fuel break, which is both. The need is in both effluent and sludge.

Mr. VEYSEY. Do you see any possibility that there is a large application of this practice in the forest lands?

Mr. ARNOLD. Yes, sir, we do see that possibility. Yet, to do the research on the various soil types with different soil chemistry, with different vegetative types to get a generalized model, is going to take some time. But we can relate it to specific situations now.

Mr. VEYSEY. This is research you are talking about?

Mr. ARNOLD. I believe there are some 1,300 or 1,400 communities that now distribute sewage effluent over the land, either agricultural, forest, or waste land, at this time. So it is both a problem and possibly an opportunity.

Mr. VEYSEY. You think the opportunity to use it here would outrank, we will say, using it on agricultural land or golf courses or someplace else?

Mr. ARNOLD. It's being used there, too. It may be both places.

Mrs. HANSEN. Isn't it true it would depend on the location it was in, also?

Mr. ARNOLD. Yes, ma'am.

Mr. VEYSEY. Usually I think of the national forest being above where the material is going to be, requiring a lot of pumping.

Mr. ARNOLD. This is a problem that is a national problem, and particularly now since sewage effluent cannot be put into the ocean or the Great Lakes, so that it almost invariably has to go on the land.

DECREASE IN FIRE AND ATMOSPHERIC SCIENCES RESEARCH

Mrs. HANSEN. Please insert in the record the details on the $500,000 reduction in fire and atmospheric research. This, I assume is in Macon, Ga., isn't it?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. What is the other area?

Mr. ARNOLD. It was in Fairbanks, Alaska.

Mrs. HANSEN. Insert those in the record.

(The information follows:)

FIRE AND ATMOSPHERIC SCIENCES RESEARCH

Location	Purpose	Funding
Fairbanks, Alaska	Determine beneficial and harmful effects of fire, leading to improved fire control strategies.	$100,000
Macon, Ga	Develop nonpolluting smoke management technique to support use of prescribed burning in the management of forests.	400,000
Total		500,000

FOREST INSECT AND DISEASE RESEARCH

Mrs. HANSEN. You show a $690,000 reduction for insect and disease research. What are these items?

Mr. ARNOLD. Those are three items. One was the control of insects in the walnut culture and the second one was the control of diseases in the walnut culture.

The third one, Mrs. Hansen, was $450,000 for studying the effects of air pollution on the Eastern forests in Delaware, Ohio.

Mrs. HANSEN. Place the amounts in the record.

(The information requested follows:)

FOREST INSECT AND DISEASE RESEARCH

Location	Purpose	Funding
Carbondale, Ill.	Control of insects and diseases of Black Walnut and other fine hardwoods.	$240,000
Delaware, Ohio	Determine techniques for minimizing the effects of air pollution on hardwood and eastern conifers in urban areas. Determine the effect trees have in removing air pollutants.	450,000
	Total	690,000

EXTENSIVE USE OF WOOD

Mrs. HANSEN. In your justification you say:

More wood is used annually, primarily as a material for building construction, than the combined total of steel, plastics, and concrete. More than 85 percent of single family housing is of wood frame construction. Newspapers, such as the Washington Post, require 625 tons of paper for each Sunday issue.

How many trees does that involve?

Mr. ARNOLD. I don't have that figure in mind.

Mr. WYATT. How many acres of trees is that? Could you furnish that for the record?

Mr. ARNOLD. We can furnish both of those.

[The information follows:]

Six hundred and twenty-five tons of newsprint would require, for example, approximately 4,000 trees. This would require about 35 acres of forest land.

DISPOSITION OF REFUSE

Mrs. HANSEN. We would be very interested because we really have two problems. Not only is there a problem in the number of trees that are consumed, which I suspect are Canadian, but there is also a problem in the disposition of the 625 tons after it is distributed around Washington, D.C. There is the increasing problem of the disposal of the garbage, the paper, and so on. How would you dispose of it if you didn't burn it? If burning 16 garden leaves in the backyard is prohibited as it is in some places, what about 625 tons of paper?

STATISTICS REGARDING NEW YORK TIMES

Mr. WYATT. How about the Sunday issue of the New York Times?

Mr. ARNOLD. We have that figure, but not with me.

Mrs. HANSEN. Insert the information in the record.

(The information follows:)

Industry sources estimate that the Sunday issue of the New York Times weighs about 5 pounds. With a circulation of 1.2 million, roughly 20,000 trees and 175 acres are required.

RECYCLING OF PAPER

Mrs. HANSEN. Because of these impoundments you don't have very good answers on total recycling. What percentage of the Washington Post is recycled?

Mr. ARNOLD. I don't know.

Mrs. HANSEN. Will you find out and insert the information in the record?

Mr. ARNOLD. We have some information on national compilations but we wouldn't have any information on individual papers.

Mr. VEYSEY. Also what percentage of the Congressional Record is being recycled?

(The information follows:)

We estimate that roughly 25 percent of most newspapers is recycled. We were unable to find any information on the degree of recycling of the Congressional Record.

DUTCH ELM DISEASE

Mr. YATES. Can I ask a question about Dutch elm?

Mrs. HANSEN. Yes.

Mr. YATES. The justifications indicate that you have a solution for Dutch elm. According to this picture in figure 21, apparently you are giving trees a transfusion of some kind.

Mr. ARNOLD. Yes, sir. There is a fungicide.

Just a year ago our scientists at Delaware, Ohio, made two major contributions to that problem. One was to develop a soluble benomyl, which is a fungicide, and the other was to develop a practical way of injecting a fungicide into trees.

We tested this last spring in the greenhouse and found it effective as a preventive of Dutch elm disease.

Last year we were able to make three tests, one in Maine, one in Detroit and one in Ohio. The results looked very promising. We still have to find the optimum concentration. It looks like this is a way of treating individual trees in cities for Dutch elm disease. It is fairly expensive. We are looking at the costs at this point. I fully expect at this time next year to have an answer. We are not now at the point where we can say it is good or ready for application.

Mr. YATES. What about the birch tree? I understand that is being threatened, too?

OAK WILT DISEASE

Mr. ARNOLD. Yes, sir. There is a birch decline. There is an oak wilt. This apparently is going to be effective against oak wilt, also.

Mrs. HANSEN. What causes oak wilt?

Mr. ARNOLD. I am not sure on that one, Mrs. Hansen. We know that it's tied in some with periods of drought where the trees are weakened. But it is a fungus disease which moves into the respiratory tract or translocation system of the oaks.

Mr. YATES. I don't believe you gave me an answer on the birch. You said that you were aware of a disease. Does this mean that you are doing research on the disease for the birch?

Mr. ARNOLD. We are not concentrating on birch at this time.

Mrs. HANSEN. They haven't money enough to finish what they are doing.

Mr. YATES. I know.

Mr. ARNOLD. We have concentrated the bulk of our efforts on Dutch elm disease, but we do have individuals who are knowledgeable on the birch and its diseases.

Mr. YATES. The reason I asked the question is because a friend of mine was told not to buy a birch tree in this area because he said it is particularly susceptible to disease.

Mr. ARNOLD. There is a bronze birch borer that moves in at about 10 years of age. This is particularly on plantings for landscaping.

INFESTATION IN SOUTHWESTERN COLORADO

Mr. EVANS. In southwestern Colorado last October as I drove around this territory I noticed many, many pine trees that were literally infested with web-like cocoons. Do you have any knowledge of what this could be and whether it's serious?

Mr. YATES. It sounds like "red spider."

Mr. ARNOLD. No, sir. I cannot tell you exactly what that is. Our entomologist will know about it. I can provide you with a report.

(The information follows:)

Our entomologists report that the most likely cause of these cocoons is a defoliating insect, *Halisidata sp*, which is occasional common on ponderosa pine. This particular pest is not generally harmful.

RISE IN PRODUCTIVITY IN FOREST INDUSTRIES

Mrs. HANSEN. There is an interesting statistic in your justification:

Productivity in the lumber and wood products sector has increased annually by 3.2 percent while actual employment dropped 14 percent in the period 1947–67. The paper industry had an annual productivity rate increase of 3.4 percent.

Is this due to increasing use of machinery in the forest area?

Mr. ARNOLD. I believe that is the result there. That study was done in Portland, by the way.

STATE AND PRIVATE FORESTRY COOPERATION

Mrs. HANSEN. Please insert justification pages 102 to 114 in the record.

(The pages follow:)

Projects (27) - (30)

GEOGRAPHIC BREAKDOWN OF APPROPRIATIONS

State and Private Forestry Cooperation

	1973 estimate	1974 estimate	Change
Alabama	$717,000	$714,500	-$2,500
Alaska	436,000	443,000	+7,000
Arizona	108,000	108,000	- -
Arkansas	626,000	626,000	- -
California	1,237,000	1,237,000	- -
Colorado	311,000	309,000	-2,000
Connecticut	176,000	174,000	-2,000
Delaware	91,000	91,000	- -
District of Columbia	1,110,000	1,110,000	- -
Florida	856,000	856,000	- -
Georgia	919,000	919,000	- -
Guam	2,500	2,500	- -
Hawaii	85,600	85,600	- -
Idaho	433,000	431,000	-2,000
Illinois	212,000	212,000	- -
Indiana	168,000	164,000	-4,000
Iowa	122,000	122,000	- -
Kansas	289,900	275,400	-14,500
Kentucky	571,000	571,000	- -
Louisiana	683,000	683,000	- -
Maine	631,000	637,000	+6,000
Maryland	344,000	344,000	- -
Massachusetts	272,000	272,000	- -
Michigan	702,000	702,000	- -
Minnesota	494,000	494,000	- -
Mississippi	701,000	701,000	- -
Missouri	725,000	735,000	+10,000
Montana	285,000	285,000	- -
Nebraska	241,000	241,000	- -
Nevada	256,000	252,000	-4,000
New Hampshire	192,000	190,000	-2,000
New Jersey	327,000	327,000	- -
New Mexico	162,000	162,000	- -
New York	671,000	665,000	-6,000
North Carolina	910,000	910,000	- -
North Dakota	94,000	94,000	- -
Ohio	383,000	383,000	- -
Oklahoma	329,000	329,000	- -
Oregon	751,000	761,000	+10,000
Pennsylvania	617,000	617,000	- -
Puerto Rico	122,000	122,000	- -
Rhode Island	101,000	101,000	- -
South Carolina	699,000	699,000	- -
South Dakota	149,000	149,000	- -
Tennessee	656,000	656,000	- -
Texas	521,000	516,000	-5,000
Utah	209,000	209,000	- -
Vermont	215,000	215,000	- -
Virgin Islands	13,000	16,000	+3,000
Virginia	725,000	725,000	- -
Washington	683,000	683,000	- -
West Virginia	405,000	405,000	- -
Wisconsin	845,000	853,000	+8,000
Wyoming	176,000	176,000	- -
Proposed for transfer	9,000,000	- -	-9,000,000
Total	32,760,000	23,760,000	-9,000,000

Project (27)

COOPERATION IN FOREST FIRE CONTROL

1972	$20,000,000
1973	25,000,000 1/
1974	16,000,000
Decrease	-9,000,000

An appropriation decrease of $9 million is proposed to carry the 1974 program at the same level planned for 1973. Protection of non-Federal land from destruction by fire is primarily a State and local responsibility with the Federal role one of providing support and some incentive to the States in their effort. With the advent of revenue sharing, some reductions can be made in this cost-sharing program without causing undue financial impacts on the States.

The Cooperative Forest Fire Control program, authorized by the Clarke-McNary Act of 1924, provides technical and financial assistance to the States in protecting the non-Federal lands. In the first 5-year period that the program was in operation (1924-1928) an average of 284 million acres were provided some measure of protection. During this period, for each million acres protected, there was an average of 262 fires and 58,800 acres burned. This compares with 514 million acres protected, 196 fires, and 3,320 acres burned per million acres protected during the latest5-year period (1967-1971). Protection is currently being given to about 574 million acres of non-Federal forest and non-forest watershed lands. Protection costs have increased from about $1.9 million in 1924 to over $124 million in 1971. Much of the increase in fire control costs is due to the greater use of complex and expensive equipment, including much more extensive use of aircraft. Another significant item which has increased fire control costs is the reduction in the purchasing power of the dollar. Equipment development for specific firefighting application is being accelerated. Modern fire management tools are essential in order to get the maximum production of goods and services from the non-Federal forests for a growing America.

A well-trained and properly equipped fire organization helps to strengthen rural America by providing adequate fire protection. Investments can be made with some assurance they will not be destroyed by wildfires. These increased investments help to strengthen rural income and provide additional job opportunities for rural people. More jobs will aid in reducing rural poverty, and a reduction in the number and size of wildfires will make rural areas better and safer places in which to live.

Funds will be used to assist States to develop more effective and efficient fire organizations. Added emphasis will be placed on reducing the amount of air and water pollution through a reduction in the number of wildfires, especially the large (over 300 acres) disaster-type fires. These are the fires which are the most costly, as well as destructive. Assistance will be directed to helping States get current cost data through updating the periodic fire protection analysis. This will provide better information for the States to use in fire management planning. Law enforcement will be strengthened, and expanded use of fuels management as a fire prevention tool will be made.

A formula that applies uniformly to all States is used in distributing the funds. The formula recognizes the two factors most directly related to fire control:

(1) Extent of the fire protection job.

(2) State and local performance as represented by expenditures.

Each of these factors is given equal weight. The half based on need is termed the "regular allotment" and is determined by a periodic fire protection analysis. A new analysis is to be started in 1973. The half based upon expenditures uses the average of the most current 3-year State and private expenditures and is termed

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1/ Includes $9 million proposed for transfer to Forest land management for fighting forest fires.

the "extra allotment." The total of these two parts becomes the Federal allotment to each State. A sliding scale is used to reduce the total allotment to bring total payments equal to funds available.

The table following this section shows proposed financing in fiscal year 1974, compared with fiscal years 1972 and 1973.

Examples of Recent Accomplishments

Prevention. States continue to expand the use of contactors to reduce man-caused fires in high incidence areas. Alabama plans to contact 10 percent of the people living in rural areas, and Illinois made special contacts with 273 local fire departments. South Carolina has hired a fire prevention specialist to work in 12 high occurrence counties. Washington used hazardous area closures quite effectively, and Michigan employed a new staffman to establish an effective prescribed burning program. Massachusetts passed a law which prohibits open burning, and Oklahoma has codified all of its fire laws. Washington passed legislation which requires spark arresters on motorized equipment that is used off of hard-surfaced roads.

Law enforcement. Significant increases are being made in law enforcement training as a means to reduce the incidence of man-caused fires. South Carolina trained and commissioned 18 more fire control personnel as law enforcement officers. Arkansas, Florida, Nevada, Texas, and West Virginia have all given training courses to personnel in law enforcement or arson investigation procedures. Iowa has strengthened their enforcement in fires caused by railroad operations, and Kentucky employed and trained two new law enforcement officers.

Additional acreage protected. Nearly 54 million more qualifying acres of forest and non-forest watershed lands were placed under fire protection. States which had significant increases were: Alabama, Arkansas, Florida, Mississippi, Missouri, Montana, North Carolina, Oklahoma, Oregon, and South Dakota. Several other States placed a smaller number of acres under fire protection.

Other. One means which has been used to assist States to strengthen their fire management efforts has been use of the Intergovernmental Personnel Act. A Forest Service fire prevention specialist has been detailed to the Alabama State forester's staff and a fire management specialist to the Oklahoma State forester. Also, a New Mexico State employee has been detailed to the Forest Service for intensive fire management training. It is intended to expand the interchange of employees where possible as another means to further fire program objectives of assisting States to develop strong and effective wildfire organizations.

Project (27)

COOPERATIVE FOREST FIRE CONTROL

	State and Private Funds Expended FY 1972	Federal Allotments FY 1972	Federal Allotments FY 1973 (estimate)	Federal Allotments FY 1974 1/ (estimate)
Alabama	$2,090,607	$573,250	$468,000	$468,000
Alaska	342,611	251,864	309,000	309,000
Arizona	66,515	65,214	52,300	52,300
Arkansas	1,819,260	551,210	426,700	426,700
California	28,006,640	1,319,353	1,021,200	1,021,200
Colorado	1,573,930	191,070	208,600	208,600
Connecticut	222,917	145,183	115,100	115,100
Delaware	64,212	47,000	41,400	41,400
Florida	7,242,881	739,386	572,800	572,800
Georgia	6,654,727	780,739	604,200	604,200
Hawaii	158,593	66,643	52,600	52,600
Idaho	844,458	400,767	319,100	319,100
Illinois	610,548	138,202	117,100	117,100
Indiana	270,085	101,712	78,600	78,600
Iowa	99,091	73,284	56,700	56,700
Kansas	894,641	229,249	183,000	183,000
Kentucky	1,287,434	431,825	348,000	348,000
Louisiana	3,360,131	658,248	513,900	513,900
Maine	1,814,277	520,537	403,000	403,000
Maryland	952,237	276,979	222,400	222,400
Massachusetts	620,910	257,187	199,200	199,200
Michigan	3,101,352	656,253	507,800	507,800
Minnesota	468,096	421,201	325,900	325,900
Mississippi	3,142,024	623,896	498,800	498,800
Missouri	2,125,740	517,592	418,800	418,800
Montana	930,001	219,325	177,400	177,400
Nebraska	495,272	189,864	161,500	161,500
Nevada	680,389	216,727	177,300	177,300
New Hampshire	263,188	138,710	110,100	110,100
New Jersey	999,305	284,053	233,600	233,600
New Mexico	213,401	91,800	71,100	71,100
New York	2,198,435	532,493	431,200	431,200
North Carolina	4,056,564	684,826	535,400	535,400
North Dakota	20,224	36,600	31,300	31,300
Ohio	357,558	235,641	187,500	187,500
Oklahoma	762,065	258,998	224,900	224,900
Oregon	4,414,009	691,993	538,400	538,400
Pennsylvania	2,363,545	506,138	402,300	402,300
Rhode Island	233,343	80,301	62,500	62,500
South Carolina	2,970,778	616,216	488,500	488,500
South Dakota	311,751	90,128	76,300	76,300
Tennessee	3,023,084	622,860	488,700	488,700
Texas	1,462,210	451,919	349,600	349,600
Utah	399,416	155,593	125,700	125,700
Vermont	83,849	80,863	62,700	62,700
Virginia	2,163,509	575,644	451,100	451,100
Washington	4,534,622	694,457	538,500	538,500
West Virginia	595,721	256,589	208,000	208,000
Wisconsin	3,095,811	619,943	492,000	492,000
Wyoming	410,720	121,975	108,500	108,500
Administration, inspection, prevention, and special services	- -	1,508,500	1,201,700	1,201,700
Proposed for transfer	- -	- -	9,000,000	- -
Total	104,872,687	20,000,000	25,000,000	16,000,000

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.

Project (28)

COOPERATION IN FOREST TREE PLANTING

1972	$325,000
1973	325,000
1974	325,000

No program increase is proposed.

This program provides financial and technical assistance to cooperating States in the production, acquisition, and distribution of tree seed and planting stock for forest and windbarrier plantings on non-Federal lands. Seed and trees thus furnished at modest cost form the backbone of current public forestation efforts which contribute to increased timber production and the enhancement of environmental values, including public recreation, wildlife habitat, and pollution abatement.

Program funds are used to assist the States in meeting the cost of seed extraction, seedling production, nursery maintenance, and other operations.

The procedure for allotment of funds provides for a project approach with funds to be allocated on the basis of projects which will be designed to stimulate more efficient nursery operations. Projects proposed to date range from the production of "tubed" or specially packaged seedlings to pilot testing of methods for more efficient weed control in nurseries.

The number of trees that States shipped to landowners during each of the past four fiscal years follows:

Year	Federal-State Coop. Program	
1968	544,420,000	Seedlings
1969	523,986,000	"
1970	494,941,000	"
1971	550,797,000	"

Examples of Recent Accomplishments

Production of improved genetic quality seedlings. Improved genetic quality forest tree seed is becoming available for seedling production at a rapidly increasing rate. For example, during the 1971-72 season, seed orchard seedling stock amounted to over 105 million seedlings, which means that about 150,000 acres will be growing more wood than would be the case if regular seed were used.

REGULAR ALLOTMENTS TO STATES

	FY 1973	FY 1974
Arizona	$3,000	$3,000
Colorado	7,000	7,000
Delaware	2,500	2,500
Guam	2,500	2,500
Idaho	12,000	12,000
Kansas	12,000	12,000
Montana	12,000	12,000
Nebraska	8,000	8,000
Nevada	12,000	12,000
New Jersey	2,500	2,500
New Mexico	12,000	12,000
North Dakota	12,000	12,000
Oklahoma	9,000	9,000
Rhode Island	2,000	2,000

	FY 1973	FY 1974
South Dakota	12,000	12,000
Utah	12,000	12,000
Wyoming	4,000	4,000

SPECIAL PROJECT ALLOTMENTS TO STATES

	FY 1973	FY 1974
Alabama (Auburn University Project--weed control)	$26,000	$26,000
Alabama (seedling harvester)	3,000	- -
Colorado (containerized seedlings)	2,500	- -
Connecticut (irrigation)	1,350	- -
Idaho (seeder)	2,750	- -
Illinois (tree shaker)	1,000	- -
Indiana (drainage)	4,000	- -
Kansas (containerized seedlings)	15,000	- -
Maine (cold storage)	3,770	- -
Nebraska (seed source)	2,000	2,000
Nevada (tree nursery)	4,000	- -
New Hampshire (pond)	2,000	- -
New York (seedling storage)	6,784	- -
Pennsylvania (hardwood planting test)	2,000	2,000
Texas (shelterbelt)	5,000	- -
Wisconsin (root rot control)	1,250	- -

Project (29)

COOPERATION IN FOREST MANAGEMENT AND PROCESSING

1972	$5,003,000 1/
1973	5,000,000
1974	5,000,000

No program increase is proposed.

Through State-Federal cooperative programs, technical assistance is provided to private nonindustrial woodland owners, loggers, wood-using industries, communities, and organizations concerned with the protection, management and use of forest resources. On-the-ground assistance is provided by State professional personnel with training and expert backstopping by Federal specialists.

The majority of the productive forest land in the United States, or 296 million acres, is in the hands of small private owners. Most of them lack the technical forestry skills required to manage the lands to provide their share of the Nation's needs for forest products and services. The program provides technical assistance to these landowners through State service foresters to increase the flow of timber and nontimber products and to improve environmental values.

Technical assistance is given to loggers, sawmill, and other plant operators to improve logging, processing and business methods to improve the supply of softwood lumber and plywood through the reduction of wood waste and increased utilization of wood residue. This effort will be implemented through a new program direction known as Softwood Timber Extension Project. STEP is directed toward putting more softwood lumber and plywood on the market and will involve the increased use of private consultants.

State forestry personnel and rural communities provide specialized forestry assistance to Rural Development Committees throughout the Nation. State personnel serve State committees, sub-State units, and rural communities, thereby strengthening the overall effectiveness of local rural development efforts.

Technical assistance is provided in cooperation with the State forestry agencies in 50 States, Puerto Rico, and the Virgin Islands. Significant thrusts of the programs are to develop opportunities for private consulting foresters to establish and expand their forestry assistance operations.

Federal appropriated funds are distributed to the States by formula which is applied to each State's need and performance.

(1) Need is based on the number of small woodland owners in the State and the acres of commercial forest owned expressed as a percentage of the total in the Nation.

(2) Performance is based on State funds expended in excess of Federal funds. The excess is determined for each State and then expressed as a percentage of the total excess for all States.

(3) The average of the need and performance percentages for each State represents the State's share of total funds available for distribution.

(4) The minimum allotment to any participating State is $30,000.

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1/ Includes $10,000 personnel savings applied to emergency work associated with fire and flood damages.

Major work accomplishments are shown in the following table:

Major Benefits	Unit	FY 1972	FY 1973 (Planned)
Woodland owners given direct on-the-ground forestry assistance	Number	128,000	130,000
Forest products operators assisted	Number	16,400	16,000
Incidental forestry assistance	Number	131,000	130,000
Area of woodland involved	Acres	9,374,000	9,500,000
Volume harvested under improved practices	MBF	1,480,000	1,500,000
Area of timber stand improvement	Acres	201,000	200,000
Area planted or seeded	Acres	381,000	400,000

Examples of Recent Accomplishments

(1) The "Camden Fire" burned 892 acres in Spokane County, Washington. This was one of a series of fires that plagued eastern Washington last year.

Of the total area burned, 511 acres were privately-owned by five individuals. Most of this area had been covered by a low density stand of pine and Douglas-fir. Average volume was about 3,000 board feet per acre. Immediately after the fire, the service forester contacted the five landowners involved. He discussed the need for and methods of rehabilitation. They agreed on grass seeding to control erosion, salvage of merchantable material, and finally replanting with trees. In August contracts were made and grass seeding was accomplished.

Some difficulty was experienced in arranging for the salvage of the fire-killed timber. An Idaho buyer was found, and to date, most of the pine has been removed. Utilization is to a 4" top. The price paid was $16 per cord with an approximate volume of 2,700 cords. About 500,000 feet of fir remains with a value of $50 per thousand. Tree planting was the next and probably most important phase. The landowners contracted with the local Future Farmers of America Chapter for planting 71,000 seedlings. This job is now being completed.

The service forester was instrumental in bringing the landowners, log buyer, loggers, FFA, grass seedling contractors, and the Extension Service together. Without his initial contacts and continual work, this 511 acres would probably not have been rehabilitated and would become idle land and a large volume of salvageable timber lost.

(2) Two sawmill clinics were conducted in the villages of Tanana and Ruby, Alaska by State and Forest Service teams. Instruction was given in proper sawing of lumber and processing logs for house construction. The potential benefit to the residents of these communities is great in terms of improved housing for residents of Native villages. The Alaska State Housing Administration in cooperation with the Bureau of Indian Affairs is initiating a program to construct 1,200 homes in Native villages. Locally manufactured lumber will play an important role in this construction effort. The end result will be to increase availability of quality construction lumber and raise the quality of the living structures in these remote areas.

(3) Forest products utilization personnel in Wisconsin conducted a session in log bucking and grading for a large wood-using firm in that State. Direct results noted by a company official include an increase of log recovery volume by 55 percent and an increase of veneer grade recovery by 100 percent. No. 1 log recovery increased by 46 percent while No. 2 recovery moved up 40 percent. Based on information gained at the training session, the company began paying more for graded logs. The cutters earnings have increased considerably since the new rates became effective and better quality logs are being brought to the mill. This kind of activity increases the supply of softwood lumber from the same volume of logs.

(4) A forestry research information and feedback system has been developed and implemented in the Northeast to serve the forester who does not have ready access to a library. His questions and suggestions are received, current applicable information is furnished to him. Questions and suggestions whose answers are not available are consolidated and furnished to various forest research performing agencies for consideration in developing their research programs. This system holds promise of reducing the gap between known research results and field application of these results.

(5) Assistance provided by utilization and marketing foresters employed by the State of Pennsylvania to a wood-based manufacturing firm resulted in a marked decrease in wood waste and the development of a market for wood residue that was heretofore burned creating a high level of air pollution. The assistance saved the firm the cost of disposing of the material which accumulated at the rate of 16 tons per day and facilitated their compliance with anti-pollution regulations. The cost benefit ratio relative to this assist is 1:52, three more local workers were employed and the same amount of wood produces nearly 10 percent more finished products.

Project (29)

The following table shows proposed financing in fiscal year 1974 compared with fiscal years 1972 and 1973:

	FY 1972	FY 1973 estimate	FY 1974 estimate
Alabama	$116,400	$115,200	$115,200
Alaska	30,000	23,000	30,000
Arizona	30,000	30,000	30,000
Arkansas	98,200	95,600	95,600
California	83,300	81,100	81,100
Colorado	54,700	53,200	53,200
Connecticut	34,200	34,100	34,100
Delaware	30,100	30,000	30,000
Florida	201,900	196,500	196,500
Georgia	221,200	215,200	215,200
Hawaii	30,000	28,000	28,000
Idaho	41,600	40,500	40,500
Illinois	64,000	66,500	66,500
Indiana	60,600	61,500	61,500
Iowa	43,200	42,900	42,900
Kansas	34,600	34,900	34,900
Kentucky	149,300	152,300	152,300
Louisiana	95,200	92,600	92,600
Maine	111,800	108,800	108,800
Maryland	75,700	77,100	77,100
Massachusetts	42,900	42,400	42,400
Michigan	134,400	130,800	130,800
Minnesota	94,700	96,100	96,100
Mississippi	122,900	124,100	124,100
Missouri	142,300	146,300	146,300
Montana	55,900	55,000	55,000
Nebraska	36,300	36,300	36,300
Nevada	30,000	34,000	34,000
New Hampshire	56,000	54,500	54,500
New Jersey	43,200	43,100	43,100
New Mexico	42,500	45,200	45,200
New York	157,100	162,300	162,300
North Carolina	243,500	249,800	249,800
North Dakota	30,000	30,300	30,300
Ohio	103,600	104,900	104,900
Oklahoma	40,000	37,300	37,300
Oregon	67,700	65,900	65,900
Pennsylvania	140,700	143,900	143,900
Puerto Rico	30,000	30,300	30,300
Rhode Island	30,000	30,000	30,000
South Carolina	129,500	126,000	126,000
South Dakota	32,600	32,300	32,300
Tennessee	90,900	91,400	91,400
Texas	83,000	83,300	83,300
Utah	30,700	35,000	35,000
Vermont	85,000	85,600	85,600
Virgin Islands	30,000	13,000	16,000
Virginia	189,700	193,700	193,700
Washington	74,000	72,000	72,000
West Virginia	79,600	80,300	80,300
Wisconsin	194,500	189,300	189,300
Wyoming	34,300	33,400	33,400
Total to States	4,303,500	4,276,800	4,286,800
Forest Service administration	699,500	723,200	713,200
Total appropriation	5,003,000	5,000,000	5,000,000

Project (30)

GENERAL FORESTRY ASSISTANCE

1972	$2,431,000 1/
1973	2,435,000
1974	2,435,000

No change is proposed.

General forestry assistance funds are used to accomplish highly specialized forestry assistance not available through other Forest Service cooperative programs. A major portion of the funds is used to provide professional assistance to State forestry agencies, woodland owners, associations, and the wood industry to enhance rural community development and to achieve more efficient management production and processing of the Nation's timber resources.

General forestry assistance funds are used to provide expert forest resource management and use assistance in such activities as:

(1) Land use planning.

(2) Multiple use management.

(3) Dissemination of forest research findings.

(4) Forest products utilization.

(5) Continuous forest inventory.

(6) Forest hydrology.

(7) Advisory management services provided to State forestry agencies, including organizational management training.

(8) Special studies.

Technical assistance is provided directly by the Forest Service or through specific agreements with State foresters, colleges, and/or private contractors.

Examples of special study projects currently being conducted are:

(1) Rural development and comprehensive land use planning. Special efforts are being made to involve State foresters in comprehensive land use planning and rural development. These efforts are directed toward improving the use of forest resource in all aspects of State and local planning and development. Forest planning and development provides a multitude of benefits to rural communities, such as:

(a) Employment for local workers.

(b) Recreation for resident and non-resident visitors.

(c) Adequate supplies of quality water.

(d) Raw materials such as timber and specialty products that will increase income and jobs.

(2) Mountain land use planning. Professional foresters are providing planning assistance to local county officials in Summit, Grand and Eagle Counties, Colorado. This special project will enable the Forest Service, State foresters and the counties to determine the best use of mountain land within the critical limits of soil, fire, flood protection and impact caused by population explosion.

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1/ Includes $21,000 personnel savings applied to emergency work associated with fire and flood damages.

(3) Forest products utilization. State and Forest Service personnel, working closely with private consultants and university staff members are extending the Nation's supply of forest resources by determining new and better uses for logging and milling residues and low quality trees. A project in Michigan is directed at increasing the yield of quality grade lumber from small low grade hardwood trees currently being used for wood pallets. The processing and merchandising of sawdust, bark, and even twigs and needles, has expanded dramatically since foresters began analyzing the benefits of using these materials for soil amendments and as a mulch. State and Forest Service personnel were largely responsible for the formation of a National Bark Producers Association.

(4) Minority forest landowners. Application of operational governmental programs to further the potential of minority landowners to manage their forest land is the major emphasis of a project in South Georgia, Southeast Alabama, and North Florida.

Additional projects currently in operation provide special assistance in forest land inventory and multipurpose management techniques--all designed to improve the Nation's forest land.

Examples of Recent Accomplishments

(1) A forest survey indicated an opportunity for sustained harvesting and processing of cottonwood stands in Nebraska. Armed with this basic resource data and information on economic and employment trends, forest products utilization personnel promoted the establishment of a sawmill in the area to process the raw material that was presently being wasted. A market survey was conducted and the results were widely publicized. Today a modern processing plant is in operation, employing local workers and providing indirect employment to several more loggers and support service workers.

(2) As a result of an analysis, which was followed with technical assistance by a team of State and Forest Service personnel, a faultering wood-based manufacturing plant in Indiana was able to continue operations and maintain employment of 20 full-time jobs. The team's recommendations included ways to improve production and decrease wood waste without eliminating jobs or purchasing additional equipment.

(3) A large corporation in Maine was having problems obtaining sufficient quantities of West Coast softwood lumber for their use in constructing modular homes. Lumber prices were also escalating which reduced the firm's competitive position. Forest products utilization specialists suggested to the firm's management personnel that they consider using local softwood species, mainly spruce, in their operation. After a thorough analysis was made with the assistance of the specialists, the firm began using Eastern spruce for modular home framing. The firm is now using 5 million board feet of this locally produced lumber per year. This new market valued at $1,000,000 increases the use of a species currently in excess supply and provides additional jobs for six woodsworkers and 25 sawmill workers. It extends the Nation's supply of softwoods lumber by substituting an underused species for species that are already in great demand throughout the Nation.

(4) The Forest Service and State foresters are involved in rural development to insure that proper consideration is given to forest resources in rural areas. In Virginia, forestry officials on the rural development committees worked with the Lions Club to construct a special trail for the visually handicapped and the public.

(5) The small size and large numbers of woodland ownerships contribute to the problem of furnishing technical assistance and accomplishing forest protection and improvement work on these ownerships. Financial and technical assistance was given to the New Hampshire State forester for the organization of a non-profit Timberland Owners Association. From the 40,000 woodland owners in the State, early results show that 343 members have joined the Association. This membership represents 774,972 acres of private woodlands. Considerable success is already evident from the joint efforts of members in planning and carrying out projects in forest management, fire protection and suppression, and insect and disease control work.

(6) Assistance was given in the improvement and application of sampling with probability proportioned to prediction (known as 3P sampling). This system coupled with the STX computer program makes possible rapid reinventories of large forest areas and results in a 66 percent cost reduction. It can provide critical forest product data estimates which are not available under the continuous forest inventory remeasurement system. Short courses on the application of this new inventory technique have been developed and are offered by colleges and universities periodically.

LAND EXCHANGE PROGRAM

Mr. VEYSEY. I want to ask about your policy and practices with respect to land exchanges and purchases of forest land. I note that you do this for purposes of simplifying your problems of management, that is roads and access and other things. I suppose you refer to the enclaves of private land in the forest.

Mr. MCROREY. This is right. The exchange program is primarily geared to improving the ownership pattern of the National Forest System.

Mr. VEYSEY. Somewhere I did see an item relating to either purchase or exchange in the San Bernardino National Forest in California. So I might be informed, could you give me what that is?

Mrs. HANSEN. I think what he would like to have explained perhaps is, are you trying to achieve the management to eliminate checkerboards or whether they are in-holdings that you are acquiring.

Mr. VEYSEY. Yes. I believe some of your program is directed toward improvement of watershed situations. I suspect that that is what they might be here, but do you know offhand what that particular transaction is.

Mr. MCROREY. There is one proposal currently being considered, Congressman, in the San Bernadino area which involves an adjustment around a private recreation area. I am aware of that. I would be very happy to give you a report on the exchange situation in the San Bernardino National Forest.

Mr. VEYSEY. I would appreciate that.

[The information follows:]

There are three exchanges currently being processed on the San Bernardino National Forest. The United States will acquire 1,500 acres and will transfer to private ownership 220 acres. The offered lands are key watershed tracts which will consolidate ownership and increase management efficiency. One exchange will result in the acquisition of 1.5 miles of the Pacific Crest Trail.

The lands being transferred to private ownership will provide for the orderly expansion of the communities of Running Springs and Big Bear City. One tract of 135 acres will be used for a Riverside County Park.

IMPROVEMENT OF LAND OWNERSHIP PATTERN

Mr. VEYSEY. To your knowledge, do you have forest lands in California or anywhere out in the West that you don't need or don't consider as essential in the national forests and would exchange for other lands that are more important to your management concern?

Mr. MCROREY. This is correct. Each of the field units develops a land ownership adjustment plan considering whether or not the lands under the jurisdiction of the Forest Service are best suited for that purpose.

Frequently we find that there are areas which are better suited in private ownership while some of the private lands within the exterior boundaries would be desirable additions to the national forests. The thrust of the whole exchange program is one of improving the ownership pattern.

Mr. VEYSEY. In those cases, to make that improvement, you have to find a willing private individual who has land that you want and was willing to exchange for some that you don't regard as important.

Mr. McRorey. This is right, Congressman. In each instance an exchange transaction is one in which both parties have to agree.

LAND ACQUISITION UNDER SPECIAL ACTS

Mr. Veysey. I had occasion to work on a possible exchange in that National Forest out my way. They reported to me that there was no forest land in California that was available for exchange, that the Forest Service would be willing to exchange.

I wonder if that was really correct.

Mr. McRorey. No, it is not, Congressman. The California region has an active exchange program which is continuing.

Mr. Veysey. It did not continue very far after that statement was made, in this instance.

Mr. McRorey. I was speaking of the program regionwide. You made reference to or mention of the San Bernardino Forest.

On page 137 in the explanatory notes, there is reference to this. There is a listing there of acquisition of lands for National Forests under special acts. You were correct there, these are special acts outside of our general exchange authorities which provide for acquiring lands primarily for watershed improvement purposes.

Mr. Veysey. Yes. That is the item I had seen. It is the one that attracted my attention.

Mr. McRorey. These particular programs are outside of the general Exchange Act.

POWER LINE RESTRICTIONS

Mr. Veysey. Another question.

With relation to permits for powerlines crossing forest lands, I have heard from some of the utilities in my area that there is a restriction when they are seeking rights-of-way; where some part of their power capacity on that line has to be devoted to governmental use. Do I have correct information on that?

Mr. McGuire. Are you talking about wheeling of power, that sort of thing?

Mr. Veysey. Yes. They represent to me that a powerline crossing a National Forest has a restriction in it that requires their excess capacity to be made available to the Government for wheeling purposes to balance up powerload. They do not object to that, but they see no chance to get that capacity back when they need it.

In other words, a line is necessarily built with excess capacity at the start, for 10 or 20 years in the future, and if the Government takes over that excess capacity, they have no growth. Is that the way that restriction works?

Mr. McGuire. This policy is not under our jurisdiction.

Mr. Veysey. It is not?

Mr. McGuire. We, however, would comply with the policy formulated by the Secretary of the Interior with respect to the power distribution. Our principal interest here is in holding down the number of rights-of-way so that we do not have a new right-of-way going in all the time.

We would like the power distributors to utilize the same system to the extent possible. We recognize that the power companies, too, have their problems, but——

Mr. VEYSEY. That is not a forest land problem; it comes from some other source.

Mr. MCGUIRE. That is true.

Mr. VEYSEY. Thank you.

COOPERATION IN FOREST FIRE CONTROL

Mrs. HANSEN. A decrease of $9 million is budgeted for cooperation in forest fire control. You will recall last year Congress increased this activity by $5 million at the urgent request of various States.

How many States participate in this program, all 50 of them?

Mr. NELSON. That is right, all 50 States participate.

Mrs. HANSEN. What is the average State participation in relation to the Federal?

Mr. NELSON. I have that in total, Madam Chairman.

The average would include figures all across the board, from States with small participation such as North Dakota, in fiscal 1972 which expended approximately $20,000 of State and private funds, as compared with the State of California, which expended——

Mrs. HANSEN. North Dakota expended $20,224 and then the Federal $36,000. Will you explain why the Federal provided so much?

Mr. NELSON. The State of North Dakota has not had a large forestry program, Madam Chairman, and has not until recently developed it.

Mrs. HANSEN. We were giving them a bonus for not doing much.

In Oregon, the State expended $4.414 million, and the Federal Government $691,993, and in 1973 the allocation was $538,000 and $538,400 for 1974.

The State of Washington was $4.534 million and Federal allocation $694,457. Then in 1973, because they made such a big contribution to the State, the Federal went down to $538,500. Yet you indicate North Dakota was getting rewarded for not doing more.

Mr. NELSON. The allocation to the States are made on a formula which applies to all of the States in distributing these funds. It recognizes two factors. One is the extent of the fire protection job and the other factor is the State and local performance as represented by expenditures.

PAYMENT FORMULA

Mrs. HANSEN. Do you have a short guideline on these matching funds?

Mr. NELSON. Yes, ma'am.

Mrs. HANSEN. Would you place that in the record?

Mr. NELSON. The formula, yes, ma'am.

[The information follows:]

GUIDELINES FOR ALLOCATING FEDERAL FUNDS OF THE COOPERATIVE FOREST FIRE CONTROL PROGRAM

Funds are distributed to States by use of a complex formula. The formula was devised so it could be applied uniformly to all States. It recognizes the two factors most directly related to fire control: (1) extent of the protection job, and (2) State and local performance as represented by expenditures. At the present time, each of these factors is given equal weight. The half based upon need is termed the "regular allotment" and is determined by a periodic fire protection analysis. The most recent analysis was made in 1965. The half based upon expenditures uses the average of the most current 3-year State and private expenditures and is termed the "extra allotment." These two parts added together become the Federal allotment to each State. A sliding scale reduction is used on both "regular" and "extra" costs. The first $300,000 is recognized at 100 percent, the second $300,000 unit at 90 percent, and so on until all expenditures over $3 million are valued at 5 percent. The sliding scale reduction is necessary because both need and expenditures exceed the amount of Federal funds available. Also, the sliding scale reduction levels the costs and expenditures to broaden the distribution of Federal funds between States.

In fiscal year 1971 the congressional add-on funds of $2 million in the C-M 2 program were distributed by determining the percentage of the Federal appropriation each State received in fiscal year 1969 and applying this percentage to the add-on funds. This amount, plus the amount distributed by formula, became the total Federal allotment for each State in fiscal year 1971.

In fiscal year 1972 a slight variation was used to distibute the C-M2 Federal funds. A total of $13,266,500 was distributed by formula with $5,225,000 being distributed by the percentage each State received of the fiscal year 1971 Federal allotment. This change was agreed to by the Executive Committee of the National Association of State Foresters. It was necessary because if all Federal funds had been distributed by formula, seven States would not have received any increase in allotment. The seven States are: Arizona, Delaware, Hawaii, Iowa, Massachusetts, North Dakota, and Vermont. The Forest Service position was that all States should share in the increase, inasmuch as the costs for all States to maintain a basic fire organization had increased.

Mrs. HANSEN. Last year the Congress passed a bill on May 5, 1972, H.R. 8817. This bill was signed by the President. It increased the authorized funding for this program to $40 million.

Mr. NELSON. Yes, ma'am; that is the authorized funding under that amended act.

FORMULA FOR MATCHING OF STATE FUNDS

Mr. VEYSEY. I would like to ask about the formula to which you referred, which I assume governs the distribution on page 105. I do not like to complain, but it seems there are disproportionate amounts here.

California expended in State and private funds maybe six or seven times what Washington or Oregon spent, but received only twice as much Federal allotment. Is that the way it works?

Mr. NELSON. That is true.

Mrs. HANSEN. Why is it true?

Mr. NELSON. The expenditures in the State of California, and these are occasioned in large measure by the large fires they have in the southern portion of the State, are so great that it would be very easy under a type of allotment to the States to provide the majority of the funding under cooperative fire control individually to the State of California. This is a problem that we have.

Mr. VEYSEY. That is to say that the money does not go where the fires are?

Mr. NELSON. We have attempted to crank into this formula a portion of the State and local expenditures.

Mr. VEYSEY. You had said that.

Mr. NELSON. We also have attempted to crank into the formula the base for a fire organization with each State, for them to exercise some type of fire control.

Mr. VEYSEY. Is that to say then that California is deficient in its fire organization?

Mr. NELSON. No, sir, not at all.

Mr. VEYSEY. They did not get as much money.

Mrs. HANSEN. Their fires are more expensive to fight, is this correct?

Mr. NELSON. They are.

Mr. VEYSEY. Wait a minute.

On that point, is not the purpose of this to assist the States in warding off the financial impact of the heavy cost of firefighting? Is that not the purpose of this?

Mr. NELSON. Yes, sir.

Mr. VEYSEY. Then why does not the money go where the fires are?

Mr. NELSON. Part of this is the extent of the acreage that must be protected and the size of the basic job.

Southern California has lots of fires, bad fire conditions, and it would be exceedingly easy in working out a formula to devise one that, based entirely or principally on the performance of the California organization, that practically all the funds would accrue to the State of California.

Mrs. HANSEN. Please give us the acreage of State and private forest lands in southern California.

Mr. NELSON. Yes, I will provide it for the record.

[The information follows:]

STATE AND PRIVATE LANDS IN SOUTHERN CALIFORNIA

The accepted division between Northern California and Southern California is the Tehachapi Mountain Range. Acres of State and private lands are:

State	5,265,224
Private	4,921
Total	5,270,145

Mrs. HANSEN. How much of this is State land and how much private land?

Mr. NELSON. I will provide it. It is primarily private land we are referring to.

FIRE PROTECTION IN SOUTHERN CALIFORNIA

Mr. VEYSEY. What are the factors and how have you weighed them so it comes out in that way?

I cannot see but that you are missing the objective of your program to distribute it in that way. I do not understand how the computation comes about.

Mrs. HANSEN. How much of this private forest land, say in Southern California, is almost urban in nature rather than the typical forest situation?

Mr. NELSON. A great deal of the land in Southern California does have housing of some nature, not in any close proximity that we have here in the Washington area, but certainly there are a number of housing developments in that area which do fall in the fire protection situation.

Mrs. HANSEN. Still not far away, where they need the fire protection, there are not fire protection districts; is this correct?

Mr. NELSON. This is correct. There are some county districts in Southern California, however, and county expenditures also in the field of fire protection.

Mrs. HANSEN. How about their water districts?

Mr. NELSON. I cannot answer that question, Madam Chairman.

Mrs. HANSEN. Is there any difference in labor costs between the Southern California area and, for example, northwest Oregon?

Mr. NELSON. I am not able to tell you you specifically for these two places. I do know, Madam Chairman, that there is a difference in labor costs in firefighting among the States. For example, some of the Mountain States have relatively low wage scales for firefighting, vis-a-vis some of the higher scales on the West Coast.

PARTICIPATION OF STATE FORESTERS

Mr. VEYSEY. Is the formula on page 105 determined by statute?

Mr. NELSON. No, it is not determined by statute. This is determined by the Forest Service in consultation with the State foresters. We work with the 50 State foresters in arriving at this particular allocation of funds. The State forester from California is involved in this exercise.

ESCALATING FIREFIGHTING COSTS

Mrs. HANSEN. Would you tell us the rate of escalation in the cost of these firefighting programs? That is, give us the annual costs from 1965 to 1972.

Mr. NELSON. Be happy to.

(The information follows:)

Year:	*Fire control expenditures* [1]
1965	$76, 561, 950
1966	85, 857, 794
1967	90, 949, 330
1968	96, 069, 619
1969	100, 955, 413
1970	113, 548, 499
1971	124, 674, 281
1972	123, 994, 107

[1] These costs represent the State, private, and Federal funds expended on forested and nonforested watershed lands which qualify under the Clarke-McNary Act.

Mrs. HANSEN. Hasn't the escalation been very sharp?

Mr. NELSON. Yes, ma'am. The costs of firefighting for the States has escalated in the same manner that it has on the Federal lands. The equipment is more expensive, labor costs are more expensive, and the like.

Mrs. HANSEN. And so we have a cut?

Mr. NELSON. Yes, ma'am.

AUTHORIZED CEILING OF $40 MILLION

Mrs. HANSEN. Can you ignore the $40 million ceiling?

Mr. NELSON Madam Chairman, I think it should be said that it was quite a number of years before the authorized ceiling was reached at the $20 million level. This $40 million level was just enacted by the Congress.

Mrs. HANSEN. Now we come to this year when our costs are escalating, and the remark is made "Well, this is a revenue-sharing opportunity" I suspect most of the recipients of revenue sharing did not anticipate that the money would be applied to this program. Did they?

Mr. NELSON. I cannot answer that question, Madam Chairman.

Mrs. HANSEN. I just met a Congressman downstairs with a letter from his State forester and he certainly did not anticipate that his State was expected to bear the increasing costs. The contracts were already entered into. Now they suddenly have to go to the Governor; the money is already appropriated for some other program. That leaves them in the unpleasant job, when many of their legislatures are out of session already, of going back to find a way to finance this forest fire protection cost.

Is this not true?

Mr. NELSON. That is true.

CHANGES IN FORMULA

Mrs. HANSEN. I would say it is going to be a little difficult for some of them.

Do you plan any changes in the current formula, in the distribution of funds to the States?

Mr. NELSON. No, ma'am; we do not plan any changes in the current formula.

Mrs. HANSEN. Have the foresters suggested any changes?

Mr. NELSON. No, ma'am; they have not.

REACTIONS OF STATE FORESTERS

Mrs. HANSEN. Have you had any letters from State foresters on this matter?

Mr. MCGUIRE. We have had much mail from the State foresters, Madam Chairman.

Mrs. HANSEN. Do you mean they are not quite so enthusiastic with revenue sharing in this category as they were led to believe?

Mr. MCGUIRE. They do not talk about that as much as they talk about the problems connected with having proceeded on the basis of having at least $20 million available. Some of the States, as you mentioned, are having difficulty with that.

Mrs. HANSEN. We mentioned this in the supplemental hearing. Will you place in the record the States which had the new allotments and those which did not have it, but which were proceeding to contract.

STATE FINANCIAL PLANS EXECUTED

Mr. NELSON. All of the States had an allotment at the $20 million level. We had not signed the financial plans with all of the States.

We will furnish the States for the record that had not signed financial plans at that time.

[The information follows:]

The 38 States with approved financial plans as of January 10, 1973, are:

Alaska	Louisiana	Ohio
Arizona	Maine	Oklahoma
Colorado	Massachusetts	Oregon
Connecticut	Minnesota	South Dakota
Delaware	Mississippi	Tennessee
Florida	Montana	Texas
Georgia	Nebraska	Utah
Hawaii	Nevada	Virginia
Idaho	New Jersey	Washington
Indiana	New Mexico	West Virginia
Iowa	New York	Wisconsin
Kansas	North Carolina	Wyoming
Kentucky	North Dakota	

In most instances the remaining 12 States had tentative approval on the C–M2 portion of their financial plan. Due to the multiprogram nature of the financial plan, full approval was delayed due to a variety of circumstances.

The States of Oregon, Montana, Louisiana, and Florida had been reimbursed at the $20 million level.

LEGAL PROBLEMS

Mrs. HANSEN. I believe you have severe legal problems, have you not?

Mr. NELSON. We have asked for a legal opinion from our Office of General Counsel on this question.

COOPERATION IN FOREST MANAGEMENT AND PROCESSING

Mrs. HANSEN. You could conceivably wind up in court; $5 million is budgeted for cooperation in forest management and processing. The

authorization was recently raised from $5 million to $20 million. What are the details on this?

Mr. NELSON. Yes, ma'am. This past Congress raised the authorization of this particular program. In this area technical assistance is given to the forest landowner, loggers, sawmill, and other plant operators. This is a program carried out through the State forester.

Mrs. HANSEN. The dollar level for this program has been almost constant for 3 years.

Mr. NELSON. That is correct.

Mrs. HANSEN. But now there is a higher authorized ceiling?

Mr. NELSON. Yes, ma'am.

Mrs. HANSEN. When did that bill pass?

Mr. NELSON. It was in the second session of the 92d Congress.

Mrs. HANSEN. Congress might as well have gone home. Everything was either vetoed or landed in the deep freeze, except foreign aid. Do you anticipate a time when you will recommend increasing this?

Mr. NELSON. When the budgetary situation permits——

Mrs. HANSEN. That will be never. So let's be practical about it.

Mr. NELSON. I am sure we will attempt to raise this particular area of activity. This area is one in which we have had a great deal of success in bringing about private forest land management practices with the small amounts of money that have been expended. This has been a program that has helped to increase our timber supply.

SPECIFIC ACCOMPLISHMENTS

Mrs. HANSEN. I see two programs here that I am particularly interested in:

Two sawmill clinics were conducted in the villages of Tanana and Ruby, Alaska by State and Forest Service teams. Instruction was given in proper sawing of lumber and processing logs for house construction. The potential benefit to the residents of these communities is great in terms of improved housing for residents of Native villages. The Alaska State Housing Administration in cooperation with the Bureau of Indian Affairs is initiating a program to construct 1,200 homes in Native villages. Locally manufactured lumber will play an important role in this construction effort. The end result will be to increase availability of quality construction lumber and raise the quality of the living structures in these remote areas.

Let me turn to the BIA gentleman. Could this not be applicable to other Indian areas?

Mr. WILCOX. Yes, ma'am, it could.

Mrs. HANSEN. So the techniques you develop, benefit are not only for the narrow segment of one part of the Forest Service, but it could be used in other areas.

Mr. NELSON. That is correct.

Mrs. HANSEN. Then you have item 3:

Forest products utilization personnel in Wisconsin conducted a session in log bucking and grading for a large wood-using firm in that State. Direct results noted by a company official include an increase of log recovery volume by 55 percent and an increase of veneer-grade recovery by 100 percent. No. 1 log recovery increased by 46 percent while No. 2 recovery moved up 40 percent. Based on information gained at the training session, the company began paying more for graded logs. The cutters earnings have increased considerably since the new rates became effective and better quality logs are being brought to the mill. This kind of activity increases the supply of softwood lumber from the same volume of logs.

This subcommittee handles three large agencies dealing with timber: the Forest Service, the BIA, and the BLM. Actually the work of the Forest Service should not be just charged against the national forests, is this not correct?

Mr. McGuire. That is correct.

Mrs. Hansen. So what you develop cooperatively with the industry the States and with the universities spills over to assist the BIA and the Bureau of Land Management?

Mr. Nelson. That is correct, Madam Chairman.

Mrs. Hansen. Do you have any other details on this part of your budget?

Mr. Nelson. I would like to just state that one of the major efforts here at the present time is to extend our timber supply with respect to its effect on lumber prices, in our short-term and long-term timber problems.

Mrs. Hansen. The only chance, since you do not reforest adequately, is to make the best possible use of the timber that you have.

Mr. Nelson. That is correct.

Mrs. Hansen. That is the only alternative you have at this time?

Mr. Nelson. Is it a major alternative—the other one—yes, I would say that is correct.

Cooperative Range Improvements

We will insert justification 115 in the record at this point.

(Page 115 follows:)

COOPERATIVE RANGE IMPROVEMENTS

Appropriation, 1972	$700,000
Appropriation, 1973	700,000
Budget estimate, 1974	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.

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 1974 appropriation request of $700,000 necessarily represents the best current approximation of the amount which will become available in the calendar year 1973 under the animal-months-permitted formula.

For calendar year 1971, the latest available figures, animal months permitted were 6,512,000 for cattle and horses, and 4,728,000 for sheep and goats. This calculates to $745,760 available under the formula.

Mrs. HANSEN. For the new members on the committee, I would recommend reading this page so that you can understand how this sum of money becomes available for the Forest Service.

CONSTRUCTION AND LAND ACQUISITION

We will insert justification pages 116 through 131 in the record at this point.

(The pages follow:)

CONSTRUCTION AND LAND ACQUISITION

Appropriation Act, 1973	$48,581,900
Budget estimate, 1974	25,498,000
Decrease	-23,083,900

SUMMARY OF INCREASES AND DECREASES
(On basis of appropriation)

	1973 Appropriation	1974 Estimate	Increase or decrease
Forest land management construction:			
Development of recreation-public use areas--It is proposed that $1,452,900 of 1973 unobligated funds be applied to the development of camping, picnicking, and other recreation facilities	$7,170,400		-$7,170,400
Water resource development construction--It is proposed that $1,725,000 of 1973 unobligated funds in addition to the 1974 budget estimate (total program level of $1,772,000) be made available for the construction of recreation facilities at water development projects of other agencies	3,182,000	$47,000	-3,135,000
Construction for fire, administration, and other purposes--It is proposed that $1,138,000 of 1973 unobligated funds in addition to the 1974 budget estimate (total program level $2,241,000) be made available to provide communications systems and water and sanitary systems essential to proper National Forest protection and administration	2,316,500	1,103,000	-1,213,500
Research construction--Decrease is due to non-recurring construction projects. It is proposed that $134,000 of 1973 unobligated funds be made available for two small research facilities	5,143,000	- -	-5,143,000
Pollution abatement--It is proposed that $8,152,000 of 1973 unobligated funds in addition to the 1974 budget estimate (total program level of $31,300,000) be made available to continue the alleviation of existing pollution problems at recreation, research, and administrative facilities	29,470,000	23,148,000	-6,322,000
Land acquisition, Weeks Act--An amount of $1,200,000 is proposed for the acquisition of key inholdings within the National Forests and the National Forest purchase units	1,300,000	1,200,000	-100,000
Total	48,581,900	25,498,000	-23,083,900

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PROJECT STATEMENT
(On basis of appropriation)

Project	1972	1973 estimate	1974 estimate	Increase or decrease
(1) Forest land management construction:				
(a) Development of recreation-public use areas	$4,509,200	$7,170,400	- -	-$7,170,400
(b) Water resource development construction	1,885,000	3,182,000	$47,000	-3,135,000
(c) Construction for fire, administration, and other purposes	2,431,000	2,316,500	1,103,000	-1,213,500
(2) Research construction	5,037,000	5,143,000	- -	-5,143,000
(3) Pollution abatement	20,541,000	29,470,000	23,148,000	-6,322,000
(4) Land Acquisition, Weeks Act	1,300,000	1,300,000	1,200,000	-100,000
Total appropriation	35,703,200	48,581,900	25,498,000	-23,083,900

PROJECT STATEMENT
(On basis of available funds)

Project	1972	1973 estimate	1974 estimate	Increase or decrease
(1) Forest land management construction:				
(a) Development of recreation-public use areas	$3,853,320	$3,147,784	$1,452,900	-$1,694,884
(b) Water resource development construction	2,240,043	1,932,000	1,772,000	-160,000
(c) Construction for fire, administration, and other purposes	2,326,189	1,679,000	2,241,000	+562,000
(2) Research construction	3,558,420	1,668,923	134,000	-1,534,923
(3) Pollution abatement	17,719,582	33,275,337	31,300,000	-1,975,337
(4) Land Acquisition, Weeks Act	1,224,382	1,542,016	1,200,000	-342,016
Total obligations or estimate	30,921,936	43,245,060	38,099,900	-5,145,160
Unobligated balance brought forward	-2,483,796	-7,265,060	-12,601,900	-5,336,840
Unobligated balance carried forward	7,265,060	12,601,900	- -	-12,601,900
Total appropriation or estimate	35,703,200	48,581,900	25,498,000	-23,083,900

CONSTRUCTION AND LAND ACQUISITION

Appropriation Act, 1972	$35,703,200
Appropriation Act, 1973	48,581,900
Budget estimate, 1974	25,498,000
Decrease	-23,083,900

A decrease of $23,083,900 is proposed.

The program provides for the construction and improvement of buildings, utilities, other physical facilities, and land acquisition throughout the National Forests and National Grasslands estimated to cost more than $25,000. The financing for the numerous relatively minor construction projects is provided by the operating and research programs of which such minor construction items are an integral part.

(1a) Development of recreation-public use areas (No new budget authority is requested, a decrease of $7,170,400. On the basis of program level there will be a decrease of $1,694,884 from the 1973 level of $3,147,784.)

It is proposed that $1,452,900 of fiscal year 1973 funds that are not planned for use in 1973 be used in fiscal year 1974 for high priority items.

The proposed program level will provide for essential quality improvement measures, new construction in 3 areas, completion of construction started in previous years at 3 sites, reconstruction at 8 sites, and development of minor visitor information facilities.

Projected recreation use in 1974 will reach 198.2 million visitor-days, an increase of 17 percent over 1970. The following table illustrates this increase in use and the capacity of National Forest campgrounds and picnic grounds.

Comparison of Capacity and Use Increases at Campgrounds and Picnic Grounds

	Fiscal Year				
	1970	1971	1972	1973*	1974*
Campgrounds					
Capacity (thousands of people-at-one-time)	411.0	420.0	423.0	426.7	428.5
Increase in capacity over previous year (percent)	2.4	2.2	0.7	0.9	0.4
Measured and projected increase in use over previous year (percent)	9.1	6.0	3.0	3.0	2.0
Picnic Grounds					
Capacity (thousands of people-at-one-time)	113.6	115.6	116.6	118.2	118.2
Increase in capacity over previous year (percent)	0.4	1.8	0.9	1.4	- -
Measured and projected increase in use over previous year (percent)	8.0	6.0	3.0	3.0	2.0

* Projected

The program includes:

Quality improvement which consists of replacing or upgrading worn-out, vandalized, or inadequate facilities, including water and sanitation systems, tables, stoves, traffic control structures, bathhouses, and refuse handling facilities. Increases in capacity do not normally result from this kind of work. Benefits are derived from extending the service life of facilities, maintaining and improving the opportunity for a recreation experience, and preventing unnecessary site deterioration and degradation of the surrounding environment through pollution.

New construction will begin at 3 sites, eventually resulting in an increased capacity of 460 people-at-one-time. Construction started in previous fiscal years will continue at another 3 sites resulting in an increased capacity for 890 people-at-one-time. The increased capacity will relieve some overcrowding and use at existing sites and provide facilities to accommodate increased use. It will alleviate sanitation and cleanup problems and soil and vegetation deterioration in some general forest areas.

Emphasis is being placed on completion of projects started in previous fiscal years and on rehabilitation of worn-out facilities at heavily used recreation sites. A list of proposed projects is included in Exhibit I.

Minor Visitor Information Service facilities will be developed to meet visitor needs for orientation and environmental education dealing with natural resource management of the National Forests. There will be minor construction of visitor center exhibits, interpretive trails, amphitheaters, wayside exhibits and scenic overlook interpretive signs. Emphasis will continue to be placed on the development of low cost, high quality facilities and services. A list of proposed facilities is included in Exhibit II.

(1b) Water resource development construction ($47,000, an appropriation decrease of $3,135,000. On the basis of program level there will be a decrease of $160,000 from the fiscal year 1973 level of $1,932,000.)

In addition to the $47,000 requested in this budget, it is proposed that $1,725,000 of funds not planned for use in 1973 be used for obligation for high priority items in 1974; thus making a total program level of $1,772,000.

This program level will allow construction of non-deferrable projects (facilities that should be constructed prior to impoundment of water) at 9 reservoirs constructed by other agencies and essential minimum facilities at 7 other reservoirs. A list of proposed fiscal year 1974 projects follows:

State	Forest	Project	Estimated Cost
Montana	Kootenai	Libby Reservoir (water and sanitation system for camp-swim site)	$250,000
Colorado	Pike	Rampart Reservoir (camp and completion of boat ramp and picnic ground)	86,000
Wyoming	Ashley	Flaming Gorge NRA - Firehole (water and sanitation system at camp-swim site)	49,500
California	Tahoe	Stampede Reservoir (Tomson campground)	54,000
Washington	Olympic	Wynoochee Reservoir (Coho campground)	38,000
Arkansas	Ouachita	Poteau River Reservoir - Lake Hinkel (day use site and water and sewer system)	54,000
Georgia	Chattahoochee-Oconee	Lauren Shoals Reservoir (boat ramp)	62,000
Kentucky	Daniel Boone	Laurel Reservoir (boat ramps)	268,000
		Cave Run Reservoir (water and sewer system; picnic-swim sites)	343,500
Texas	National Forests of Texas	Lake Conroe (boat ramp and beach)	44,000
		Toledo Bend (campground)	350,000
Illinois	Shawnee	Cedar Lake (boat ramp and beach)	50,000
		Dutchman Lake (boat ramp completion)	5,000
Indiana	Wayne-Hoosier	Willow Island-Leith Run (boat ramp)	32,000
		Middle Fork Anderson River (camp and picnic ground)	39,000
Pennsylvania	Allegheny	Allegheny Reservoir (campground)	47,000
Total			1,772,000

The Forest Service is responsible for designing and developing public use facilities on National Forest System lands at, and adjacent to, project reservoirs built by other agencies. Impact survey findings and recommendations provide for the protection of water quality and fulfillment of other project purposes by pointing the way to carefully designed public use development tailored to individual project needs. Facilities include sanitation improvements, camping and picnic sites, swimming beaches, boat ramps, and other public use and information facilities. To serve their intended purpose, these facilities should be installed in time to meet the initial impact of visitor use when a reservoir fills. Installation during the construction period is generally less expensive than after completion of the project.

Examples of Recent Accomplishments

In National Forest developed sites, there was an increase in persons-at-one-time capacity of 8,193 in fiscal year 1972. Capacity of sites developed under concession and recreation use permits also increased during fiscal year 1972 by 19,874 persons-at-one-time.

One of the more spectacular construction projects in fiscal year 1973 includes Blanchard Springs Caverns in the Ozark-St. Francis National Forests in Arkansas. Facilities are being developed so the caverns can be opened for safe use by the public in the spring of 1973.

Other projects include continuing construction previously started at 15 public use sites resulting in increased capacity of over 2,000 persons-at-one-time; construction at 10 reservoirs resulting in additional capacity for more than 2,500 persons-at-one-time; reconstruction of worn-out facilities at 21 sites--mostly water and sewer systems; and new construction at 11 sites was commenced which will eventually result in additional increased capacity for over 1,800 persons-at-one-time.

(1c) Construction for fire, administration, and other purposes ($1,103,000, an appropriation decrease of $1,213,500. On the basis of program level there will be an increase of $562,000 from the fiscal year 1973 level of $1,679,000.)

It is proposed that in addition to the $1,103,000 requested in this budget, the amount of $1,138,000 not planned for use in 1973 in this appropriation be used for obligation in 1974 for high priority items. Total program level proposed for 1974 is $2,241,000, an increase in program level of $562,000.

Construction funds are planned for use as follows:

Water and sanitation systems--to replace worn out, improve existing or construct new systems that will comply with Federal and State water quality standards:

Specific project locations are as follows:

State	Location	Amount
Arizona	Sitgreaves National Forest	$104,000
California	Statewide (several projects)	283,000
Colorado	4 projects	49,400
Idaho	4 projects	59,400
Montana	Kootenai National Forest	49,000
	Custer National Forest	51,000
Oregon	Wallowa-Whitman National Forest	34,700
	Fremont National Forest	35,700
	Umpqua National Forest	101,000
	Siuslaw and Willamette National Forests	29,600
Washington	Snoqualmie National Forest	47,900
West Virginia	Bartow Administrative Site	60,000
Miscellaneous projects		125,700
	Total	1,030,400

Communications systems (radios and telephones) -- systems will be improved through installation of new equipment.

Specific project locations are as follows:

State	Location	Amount
Alaska	Statewide	$194,000
Arizona-New Mexico	Apache National Forest	24,500
California	Statewide fire service net	102,000
	Los Padres National Forest	29,300
	Klamath National Forest	28,000
	Stanislaus National Forest	26,500
Colorado	Gunnison National Forest	83,300
Idaho	Sawtooth National Forest (begin conversion to HiBand)	150,200
Montana	Lolo National Forest (convert to HiBand)	201,700
New Hampshire	White Mountain National Forest	102,100
Oregon	Siuslaw National Forest	95,400
	Winema National Forest	77,000
Miscellaneous projects in Southern States		96,600
	Total	1,210,600

Examples of Recent Accomplishments

The following units were constructed or construction contracts awarded in fiscal year 1972:

Units	No.
Dwellings and barracks	5
Experimental, low-cost housing units	12
Fire lookouts	1
Offices	1
Denver Fire Center - utilities system	1
Service and storage building	1
Purchase administrative site	1
Water and sanitation systems	7

Approximately $910,000 was used to replace, upgrade or install new communications systems and to reconstruct or improve the quality of existing structural facilities.

(2) Research construction (No funds are requested, an appropriation decrease of $5,143,000. On the basis of planned program level there will be a decrease of $1,534,923 from the 1973 level of $1,668,923.

In fiscal year 1973 $5,143,000 was appropriated. These funds are not planned for use in fiscal year 1973. It is proposed that $5,009,000 be used in 1974 for the pollution abatement program and that $134,000 be used to construct or improve water and sanitation systems at the following research locations to meet present safe water and pollution standards:

Location	Item	Cost
San Joaquin Experimental Range, O'Neals, California	Water system	$54,000
Sierra Ancha Experimental Forest, Tonto National Forest, Arizona	Sanitary and sewer systems	80,000

(3) Pollution abatement ($23,148,000, an appropriation decrease of $6,322,000)

It is proposed that in addition to the budget authority of $23,148,000 requested in this budget, the amount of $8,152,000 not planned for use in 1973 for other activities in this account be used for pollution abatement in 1974. Total program level proposed for 1974 is $31,300,000, a decrease of $1,975,337 in program level.

The funds will be used to comply with Executive Order 11507, which directs that abatement of water and air pollution at existing Federal facilities be completed or underway by December 31, 1972, and the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500).

These programs are vitally needed to protect and maintain the resources and environment of the National Forests. They will:

(a) Help prevent a general degradation of the National Forests.
(b) Insure a continued flow of high quality water for domestic and irrigation use.
(c) Eliminate uncontrolled dumping and burning of solid waste from Federal facilities on National Forest lands.

Water pollution abatement ($20,608,000, a program level decrease of $6,214,663)

The decrease is due to the systematic funding and/or completion of those projects which have been identified as being required for compliance with EO 11507.

These funds will provide for the construction of 79 water pollution abatement projects and the design of four others whose construction has been deferred until fiscal year 1975 in order to cooperate with local communities. An estimated $7.5 million will be required in fiscal year 1975 to complete the work under the deadlines of EO 11507. In addition, $5,067,000 will be used to bring all facilities into compliance with PL 92-500 and related State and Federal standards. Where corrective action is found to be necessary, these funds will be used for analysis and preliminary design.

The following is a summary of the proposed program for fiscal year 1974. Construction projects are identified by name with those costing less than $25,000 being listed under the heading of "Other."

Region	State	Project Name	Project No.	Estimated Cost
Northern	Idaho	Luby Bay	1700	$81,000
	Montana and Idaho	2 Design projects	- -	39,000
	Montana and Idaho	PL 92-500	- -	848,000
		Subtotal		968,000
Rocky Mountain	Colorado	Dillon	11	60,000
	Colorado	Grand Mesa	33	200,000
	Colorado, Wyoming, & North Dakota	PL 92-500	- -	513,000
		Subtotal		773,000
South-western	New Mexico	Battle Ship Rock	605	193,000
	Arizona	Alpine Work Center	1754	248,000
	Arizona	Central Disposal	738	105,000
	Arizona and New Mexico	PL 92-500	- -	513,000
		Subtotal		1,059,000

Region	State	Project Name	Project No.	Estimated Cost
Inter-mountain	Idaho	Redfish Lake	5	$1,200,000
	Idaho	Flat Rock	122	250,000
	Wyoming	Fremont Lake	276	71,000
	Nevada	Lehman Creek	139	370,000
	Utah	Lodgepole	232	243,000
	Utah	Provo River	191	364,000
	Utah	Duck Creek	240	443,000
	Utah	Blackhawk	1170	71,000
	Utah	Westside	805	53,000
	Idaho	Big Smoky	1183	120,000
	Utah	Moon Lake	1194	29,000
	Utah, Idaho, and Nevada	PL 92-500	- -	580,000
		Subtotal		3,794,000
California	California	June Lake Loop	50	62,000
	California	Mammoth Lake Basin	1621	60,000
	California	Mammoth Community	1618	40,000
	California	Oak Knoll Ranger Station	748	49,000
	California	Eagle Lake	156	875,000
	California	Corral Creek	1076	215,000
	California	Bishop Creek	1622	1,540,000
	California	Ukonom Ranger Station	184	89,000
	California	Clair Engle	832	172,000
	California	Lake Alpine Silver	432	541,000
	California	Rock Creek	1617	60,000
	California	Convict Lake	1616	30,000
	California	Medicine Lake	695	65,000
	California	Clark Fork	241	166,000
	California	Tioga Junction	1615	259,000
	California	Whitney Portal	1614	367,000
	California	Agnew Meadows	1098	129,000
	California	Aikens Central Disposal	683	109,000
	California	Dogwood	1136	175,000
	California	Reds Meadow	1116	340,000
	California	Big Bend	701	52,000
	California	Lake Hemet	992	42,000
	California	Grout Bay	1612	69,000
	California	Dinkey Creek	815	50,000
	California	Gray's Meadow	1620	190,000
	California	Applewhite	867	81,000
	California	Onion Valley	18	55,000
	California	Pumice Flat	1623	507,000
	California	Green Valley	1195	159,000
	California	3 Other	- -	51,000
	California	2 Designs	- -	331,000
	California	PL 92-500	- -	1,038,000
		Subtotal		7,968,000
Pacific Northwest	Washington	South Shore Lake Quinault	229	60,000
	Washington	Lake Wenatchee	157	30,000
	Washington	Naches Ranger Station	546	35,000
	Washington	Tieton Ranger Station	1090	25,000
	Oregon	Bly Ranger Station	103	165,000
	Oregon	Mt. Hood Disposal #1	93	198,000
	Washington	La Wis Wis	272	513,000
	Oregon	North Umpqua	575	151,000
	Oregon	Deschutes	362	350,000
	Washington	Salmon La Sac	593	907,000
	Washington	Mt. Baker Disposal #2	505	62,000
	Washington	Mt. Baker Disposal #4	514	62,000

Region	State	Project Name	Project No.	Estimated Cost
Pacific Northwest (Cont'd.)	Washington	Mt. Baker Disposal #1	708	$62,000
	Washington	Tumwater	761	460,000
	Washington	Nason Creek	731	266,000
	Oregon	3 Other	- -	24,000
	Washington and Oregon	PL 92-500	- -	449,000
		Subtotal		3,819,000
Southern	Louisiana	Valentine Lake	186	447,000
	North Carolina	Lake Powhatan	736	69,000
	North Carolina	Jack Rabbit	336	53,000
	North Carolina	Neuse River	434	86,000
	Arkansas	Lake Wedington	483	131,000
	North Carolina	North Mills River	498	86,000
	Arkansas	Cedar Lake	282	140,000
	Texas	Lake Fannin	204	47,000
	Mississippi, Florida, and Georgia	4 Other	- -	42,000
	Regionwide	PL 92-500	- -	467,000
		Subtotal		1,568,000
Eastern	Regionwide	PL 92-500	- -	458,000
		Subtotal		458,000
Alaska	Alaska	PL 92-500	- -	201,000
		Subtotal		201,000
		Total		20,608,000

Air pollution abatement ($10,692,000, a program level increase of $8,190,000)

The increase will be used to bring 120 solid waste systems into full compliance with Federal and State standards for solid waste disposal and fully meet the requirements for air pollution under Executive Order 11507.

This program permits Forest Service coordination of solid waste disposal problems with local authorities, special use permittees, private citizens, States, and other Federal agencies. It will eliminate duplication of efforts in developing sanitary landfill sites, equipment manpower, and collection routes. It also will provide for the closing of over 5,000 open dumps, a reduction in the total number of sanitary landfills required, and in general, better land management.

The following is a project listing of the proposed program for fiscal year 1974. Projects under $25,000 are listed as "Other."

Region	State	Project Name	Project No.	Estimated Cost
Northern	Washington	Colville	101070	$28,100
	Montana	Custer	101080	27,500
	Montana	Gallatin	101110	96,500
	Idaho	Kaniksu	101130	43,000
	Montana	Lolo	101160	89,300
	Idaho	St. Joe	101180	29,000
	Montana and Idaho	9 Other	- -	86,000
		Subtotal		399,400

Region	State	Project Name	Project No.	Estimated Cost
Rocky Mountain	Wyoming	Bighorn	102020	$65,000
	South Dakota	Black Hills	102030	234,000
	Colorado	Grand Mesa	102040	132,000
	Colorado	Gunnison	102050	134,000
	Wyoming	Medicine Bow	102060	35,000
	Nebraska	Nebraska	102070	81,000
	Colorado	Pike	102080	98,000
	Colorado	Rio Grande	102090	64,500
	Colorado	Roosevelt	102100	64,000
	Colorado	San Juan	102130	36,000
	Wyoming	Shoshone	102140	54,000
	Colorado	White River	102150	41,000
		Subtotal		1,038,500
South-western	Arizona	Apache	103010	143,000
	New Mexico	Carson	103020	372,000
	New Mexico	Cibola	103030	192,600
	Arizona	Coconino	103040	115,000
	Arizona	Coronado	103050	262,000
	New Mexico	Gila	103061	143,200
	Arizona	Kaibab	103070	155,500
	Arizona	Prescott	103090	219,500
	New Mexico	Santa Fe	103100	225,000
	Arizona	Sitgreaves	103110	144,800
	Arizona	Tonto	103120	344,100
		Subtotal		2,316,700
Inter-mountain	Utah	Ashley	104011	193,700
	Idaho	Boise	104020	36,800
	Wyoming	Bridger	104030	50,000
	Utah	Cache	104040	33,600
	Idaho	Caribou	104050	80,500
	Utah	Dixie	104070	54,000
	Utah	Fishlake	104080	152,000
	Nevada	Humboldt	104090	268,400
	Utah	Manti-LaSal	104100	186,400
	Idaho	Payette	104120	30,200
	Idaho	Salmon	104130	66,200
	Idaho	Targhee	104150	251,900
	Nevada	Toiyabe	104170	76,800
	Utah, Idaho, and Wyoming	5 Other	- -	41,200
		Subtotal		1,521,700
California	California	Inyo	105040	31,800
	California	Lassen	105060	37,500
	California	Los Padres	105070	367,400
	California	Modoc	105090	82,400
	California	Six Rivers	105100	87,500
	California	Plumas	105111	66,500
	California	San Bernardino	105120	49,600
	California	Sequoia	105130	157,000
	California	Shasta-Trinity	105140	133,300
	California	Sierra	105151	95,700
	California	Stanislaus	105160	254,800
	California	5 Other	- -	48,400
		Subtotal		1,411,900

Region	State	Project Name	Project No.	Estimated Cost
Pacific Northwest	Oregon	Deschutes	106011	$157,000
	Oregon	Fremont	106020	48,000
	Oregon	Malheur	106040	32,700
	Washington	Mt. Baker	106050	29,500
	Oregon	Mt. Hood	106060	154,600
	Oregon	Ochoco	106070	58,400
	Washington	Okanogan	106080	130,700
	Washington	Olympic	106090	33,500
	Oregon	Siskiyou	106110	98,200
	Oregon	Siuslaw	106120	41,000
	Oregon	Umatilla	106140	140,900
	Oregon	Umpqua	106150	47,800
	Oregon	Wallowa-Whitman	106160	26,000
	Washington	Wenatchee	106170	90,000
	Oregon	Willamette	106180	86,300
	Oregon	Winema	106200	39,200
	Washington and Oregon	3 Other	- -	43,000
		Subtotal		1,256,800
Southern	Alabama	Alabama	108010	32,800
	Georgia	Chattahoochee-Oconee	108030	64,300
	Tennessee	Cherokee	108040	118,300
	Florida	Florida	108050	222,700
	Louisiana	Kisatchie	108060	123,000
	Virginia	George Washington	108080	124,000
	Arkansas	Ouachita	108090	201,200
	Arkansas	Ozark-St. Francis	108100	139,700
	North Carolina	North Carolina	108111	98,500
	South Carolina	Francis Marion-Sumter	108120	80,400
	Texas	Texas	108131	99,800
	Virginia	Jefferson	108140	165,600
		Subtotal		1,470,300
Eastern	Wisconsin	Chequamegon	109020	49,700
	Minnesota	Chippewa	109030	62,200
	Missouri	Clark	109050	120,800
	Wisconsin	Nicolet	109060	106,400
	Michigan	Ottawa	109070	108,500
	Illinois	Shawnee	109080	90,900
	Minnesota	Superior	109090	54,100
	Michigan	Hiawatha	109100	100,100
	Indiana and Ohio	Wayne-Hoosier	109110	52,500
	Missouri	Mark Twain	109180	68,300
	Pennsylvania	Allegheny	109190	44,900
	Vermont	Green Mountain	109200	13,400
	West Virginia	Monongahela	109210	126,200
	New Hampshire	White Mountain	109220	196,100
		Subtotal		1,194,100
Alaska	Alaska	North Tongass	110030	42,000
	Alaska	Chugach	110041	14,000
	Alaska	South Tongass	110050	26,600
		Subtotal		82,600
		Total		10,692,000

Examples of Recent Accomplishments

In fiscal year 1973, the analysis and design of 122 solid waste systems and 81 water pollution abatement systems will have been completed. This leaves only four water pollution abatement projects requiring design under Executive Order 11507 and these designs are being deferred to fiscal year 1974 in order to cooperate with local communities.

Seventeen solid waste systems will have been fully implemented in fiscal year 1973 and will serve to finalize a systematic approach for the analysis and design of solid waste systems in rural areas. This system is tentatively scheduled for release to the public by July 1973.

The fiscal year 1973 program level of $33,275,337, for pollution abatement will enable the Forest Service to meet the design requirements of EO 11507 and to undertake corrective action on approximately 78 major sources of water pollution.

(4) Land acquisition, Weeks Act ($1,200,000, an appropriation decrease of $100,000)

The $1.2 million included in the fiscal year 1974 estimate will be used to acquire an estimated 8,100 acres in the Redbird Purchase Unit in eastern Kentucky at a cost of $524,500. The remaining $675,000 will be used to continue the acquisition programs in purchase units in the eastern United States, plus a minor program in Nebraska. These funds are considered adequate to acquire properties of high priority that are expected to be available in fiscal year 1974. Emphasis is given in this part of the program to the National Forests in Arkansas, Illinois, Michigan, Missouri, and Ohio.

The acquisition of key inholdings within the National Forests and the National Forest purchase units become increasingly urgent as the demands upon wildlands and farm lands for highway construction, industrialization, and summer home development increase. The development program for the National Forests recognizes the need to acquire additional 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, disturbed mineral exploitation areas, and submarginal or marginal farms that should be removed from farming operations and managed for timber production and/or grazing. These are lands located primarily in economically depressed areas. Sound management of acquired areas will contribute to:

(a) Stabilization of the local economy.
(b) Environmental enhancement.
(c) Prevention of stream pollution in rural America.
(d) Improved timber production.

Lands primarily valuable for recreation are not included in this program, since acquisition of such lands is financed under the Land and Water Conservation Fund Act program.

See the tabulation at the end of this section for more detailed information on the actual and planned accomplishments in fiscal years 1972-1974 (Exhibit III).

Examples of Recent Accomplishments

In 1972 a total of 138 tracts were contracted for purchase under authority of the Weeks Act using regular appropriated Weeks Act funds. These cases involved the acquisition of 15,786 acres at a total cost of $1,224,383. 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.

EXHIBIT I--Recreation-Public Use--FY 1974
Capital Investments--Distribution by National Forests

PROJECTS OTHER THAN MINOR VISITOR INFORMATION CENTER FACILITIES

Region	Forest and Project	Quality improvement of existing sites: Water and sewage systems (No.)	Quality improvement of existing sites: Estimated cost	New sites, expansion, and planning: Camp and picnic sites (Capacity)	New sites, expansion, and planning: Water and sewage systems (No.)	New sites, expansion, and planning: Estimated cost	Total capital investment
Northern	Gallatin (Red Cliff Campground)				2	$70,000	$70,000
Rocky Mountain	Roosevelt (Poudre River Campground)		$39,000				39,000
Southwestern	Coronado (Rucker and Riggs Flat Campground)		28,000				28,000
Intermountain	Sawtooth (Sawtooth NRA)					862,000	862,000
	Bridger (Boulder Lake Campground)			320*	1	65,000	65,000
California	Sequoia (Princess Campground)			495*	1	43,000	43,000
	Stanislaus (Pinecrest Beach extension)			460		65,000	65,000
Pacific Northwest	Mt. Hood (Multnomah Falls Lodge)	1	23,000				23,000
	Wenatchee (Nason Creek Campground)	1	16,000				16,000
Eastern	White Mountain (Black Brook)			75*	1	20,000	20,000
	Green Mountain (Hapgood Pond)		17,000				17,000
	Monongahela (Spruce Knob-Seneca Rocks)		30,000				30,000
	Wayne (Burr Oak Campground)	1	14,000				14,000
	Wayne-Hoosier (Project Mainstream)		11,900				11,900
	Totals	3	178,900	1,350	5	1,125,000	1,303,900

* Completion of project previously started.

EXHIBIT II--Recreation-Public Use--FY 1974
Capital Investments--Distribution by National Forests

MINOR VISITOR INFORMATION SERVICE FACILITIES

Region	Forest	Number of sites	Total capital investment
INTERMOUNTAIN	Teton	1	$16,000
	Sawtooth	2	41,500
	Subtotal	3	57,500
PACIFIC NORTHWEST	Deschutes	1	22,500
SOUTHERN	Ouachita	1	30,000
EASTERN	White Mountain	2	30,000
ALASKA	North Tongass	4	9,000
	TOTAL, ALL REGIONS	11	149,000

EXHIBIT III -- WEEKS ACT PURCHASES 1972-1974

	FY 1972 Actual			FY 1973 Estimated			FY 1974 Estimated		
	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation
Alabama - Talladega	1	1	$200						
Arkansas - Ozark	5	1,245	69,442	11	844	$99,000	8	1,110	$99,000
Illinois - Shawnee	5	297	35,999	6	485	69,000	10	650	75,000
Indiana - Hoosier	17	1,470	177,236	15	1,976	181,000	5	550	63,000
Kentucky - Redbird Purchase Unit	37	8,437	406,990	34	9,722	667,250	20	8,100	524,500
Daniel Boone	1	150	12,750						
Michigan - Hiawatha	1	80	2,400	3	280	20,000	2	210	10,000
Huron-Manistee	25	556	42,467	7	180	27,000	10	500	40,000
Ottawa	2	80	2,300	1	40	1,000	2	200	10,000
Minnesota - Chippewa	3	360	7,800	1	37	1,000	3	500	10,000
Missouri - Clark	1	320	17,600	3	360	25,000	5	300	30,000
Mark Twain	6	291	18,246	5	765	41,000	5	325	30,000
Nebraska - Nebraska				2	300	18,000	1	200	19,000
New Hampshire - White Mountain	1	50	3,250						
North Carolina - Uwharrie				1	100	16,500			
Ohio - Wayne	22	1,745	127,131	10	594	39,000	10	1,200	100,000
South Carolina - Francis Marion				1	60	93,000			
Tennessee - Cherokee	1	175	11,934	1	16	1,700			
Pennsylvania - Allegheny	1	52	5,200						

EXHIBIT III -- WEEKS ACT PURCHASES 1972-1974
(continued)

	FY 1972 Actual			FY 1973 Estimated			FY 1974 Estimated		
	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation	Options to be accepted	Acres	Obligation
Vermont - Green Mountain	1	70	7,000	1	75	18,000			
Virginia - George Washington	1	25	2,977	1	84	4,665	1	45	6,700
Jefferson	1	25	1,683	1	120	20,250	1	120	2,800
West Virginia - Monongahela	1	1	500	1	205	27,000	4	300	30,000
Wisconsin - Chequamegon	2	160	3,640	2	320	8,500			
Nicolet	3	196	8,600	3	120	8,000	2	80	10,000
Subtotal	138	15,786	965,345	110	16,683	1,385,865	89	14,390	1,060,000
Surveys and related acquisition costs			259,038			156,151			140,000
Unobligated balance carried forward			242,016						
Unobligated balance brought forward			-166,399			-242,016			
Total appropriation			1,300,000			1,300,000			1,200,000

REPROGRAMING OF FUNDS

Mrs. HANSEN. $25.498 million is budgeted for construction and land acquisition, a reduction of $23,083,900. In addition to the $25.498 million budgeted, you propose to spend $12,601,900 of "1973 funds that are not planned for use in 1973 for high priority items in fiscal year 1974."

This is, in essence, a reprograming of 1973 funds for use in fiscal year 1974. Please insert in the record, by project, a listing of the $12,601,900 of 1973 funds you plan to use in fiscal year 1974 and indicate for what purpose they will be expended.

(The information follows:)

FY 1973 CONSTRUCTION AND LAND ACQUISITION FUNDS PROPOSED FOR USE IN FY 1974

Funds in reserve as of June 30, 1973:

Water system, Kootenai NF, Montana	$ 48,000
Water system, Custer NF, Montana	50,000
Water system, Coeur d'Alene, Idaho	70,000
Dwellings, Flathead NF, Montana	64,000
Dwelling, Beaverhead NF, Montana	28,000
Low cost housing, Custer NF, Montana	20,000
Communications, Grand Mesa-Uncompahgre NF, Colorado	8,600
Dwelling, San Juan NF, Colorado	35,000
Water/Sanitation System, Arapaho NF, Colorado	9,200
Low cost housing, Rio Grande NF, Colorado	23,000
Mixing facilities, Denver Fire Center	51,000
Warehouse, San Isabel NF, Colorado	33,000
Boulder picnic ground, Tonto NF, Arizona	52,400
Low cost housing, Prescott NF, Arizona	45,400
Oak Creek - VIS, Coconino NF, Arizona	14,900
Dipping Vat Campground, Gila NF, New Mexico	35,800
Rose Canyon picnic ground, Coronado NF, Arizona	15,400
Dwelling/warehouse, Targhee NF, Idaho	76,000
White Pine, Humboldt NF, Nevada	121,700
Miscellaneous-general planning projects	31,200
Firehole, Ashley NF, Wyoming	126,000
Currant Creek B.R., Uinta NF, Utah	74,900
Boulder Lake Campground, Bridger NF, Wyoming	35,300
Princess Campground, Sequoia NF, California	94,000
Dinkey Creek Campground, Sierra NF, California	31,500
Silver Creek Campground, Eldorado NF, California	5,500
Low cost housing, Sequoia NF, California	16,000
Cedar Springs, San Bernardino NF, California	33,400
Water system, Wallowa-Whitman NF, Oregon	34,000
Bly water system, Fremont NF, Oregon	35,000
Office, Willamette NF, Oregon	40,000
Cave Run, Daniel Boone NF, Kentucky	126,500
Quality improvement, Southern States	162,500
Council Bluff-Lake Huzzah, Clark NF, Missouri	125,000
Rochester complex, Green Mountain NF, Vermont	114,000
Burr Oak Campground, Wayne NF, Ohio	14,000
Miscellaneous projects, Wayne NF, Indiana	11,900
Miscellaneous recreation projects, Service-wide	52,900

Boundary Waters Canoe Area Work Study Program, Minnesota	200,000
North Cascades Highway, Okanogan NF, Washington	182,900
Deschutes NF, Oregon	150,000
Robert S. Kerr Memorial Arbotetum and Nature Center, Oklahoma	285,000
Lava Lands Visitor Center and Benham Falls Campground, Oregon	239,500
Charleston Recreation Area, Nevada	525,000
Angel Lake Campground, Nevada	150,000
Corney Lake, Kisatchie NF, Louisiana	250,000
Eagle Lake Dam, West Virginia	815,000
Lake of the Clouds Dam, West Virginia	25,000
Flaming Gorge NRA, Utah and Wyoming	404,000
Mt. Rogers NRA, Virginia	187,000
Council Bluffs Dam, Clark NF, Missouri	514,000
Allegheny NF, Pennsylvania	300,000
Kincaid recreation project, Louisiana	500,000
Laurel Reservoir, Kentucky	473,000
LaCroix Ranger District, Superior NF, Minnesota	293,500
Laboratory, Corvallis, Oregon	1,500,000
Land exchange-purchase, Madison, Wisconsin	963,000
Redwoods Laboratory, Arcata, California	800,000
Shrub improvement laboratory, Provo, Utah	760,000
Headhouse-greenhouse, Rhinelander, Wisconsin	$335,000
Addition to Forest Products Marketing Laboratory, Princeton, West Virginia	660,000
Forestry Sciences Laboratory, Charleston, South Carolina	125,000
Total	12,601,900

Proposed use of reserve funds in fiscal year 1974:

Development of recreation-public use areas	$1,452,900
Construction of recreation facilities at water development projects of other agencies	1,725,000
Provide communications systems and water and sanitary systems	1,138,000
Construct or improve water and sanitation systems at research locations in Arizona and California	134,000
Pollution abatement	8,152,000
Total	12,601,900

IMPOUNDMENT OF RESEARCH CONSTRUCTION FUNDS

Mrs. HANSEN. Now please go over this list rather rapidly for us.

Mr. WYATT. Alongside of that, could they list the specific construction—research construction projects that have been funded by this committee but whose funds have been frozen, at this point?

Mrs. HANSEN. Which includes Corvallis?

Mr. WYATT. Right.

Mrs. HANSEN. Would you give us the list right now?

Mr. MCGUIRE. All right. The research list includes Corvallis, Oreg., $1.5 million; Madison, Wis., $963,000; Arcata, Calif., $800,000; Provo, Utah, $760,000; Rhinelander, Wis., $335,000; Princeton, W. Va., $660,00; Charleston, S.C., $125,000.

(Discussion off the record.)

PROPOSALS USE OF IMPOUNDED FUNDS

Mrs. HANSEN. What purpose do you plan to put these funds to?

Mr. MCGUIRE. The unobligated balance would be carried forward in the amount of $12.6 million, of which $10.6 million consists of moneys added by the committee last year. This includes not only the research items that I mentioned, but also a number of items for recreation and public use construction, water resources development construction, and fire, administration and other construction purposes.

We plan to use that $12.6 million plus the additional appropriated funds for a variety of purposes.

Mrs. HANSEN. Such as?

Mr. MCGUIRE. We will want some moneys for water resource development construction.

Mrs. HANSEN. Where?

Mr. HOUSLEY. The list of projects that are planned is on page 119 of the explanatory notes, Montana, Colorado, and——

Mrs. HANSEN. Why did you substitute the priorities?

Mr. HOUSLEY. These were the projects at the current time that had the most prominence and where the need was apparently the greatest.

Mrs. HANSEN. By whose standards?

Mr. WYATT. Apparent to whom?

Mr. HOUSLEY. The water-related development projects are associated largely with areas where the newly impounded water is rising in reservoirs.

Mrs. HANSEN. You have included the Libby Reservoir; the Rampart Reservoir; Wynoochee Reservoir; in Arkansas; Ouachita-Poteau River Reservoir; Chattahoochee in Georgia; Daniel Boone in Kentucky, Lauren Shoals Reservoir, and Cave Run in Kentucky; and Texas. You have the Shawnee in Illinois; the Wayne-Hoosier in Indiana; Willow Island; and the Allegheny Reservoir in Pennsylvania.

Mr. MCGUIRE. The argument we have made for including these particular items in the budget is that most of these reservoirs are under construction and it is important to do the recreation-related construction before the water rises.

CAVE RUN, KENTUCKY

Mrs. HANSEN. Yes, we agree with you because we added funds for the last 2 years for Cave Run Reservoir in Kentucky, did we not?

Mr. MCGUIRE. That is correct.

Mrs. HANSEN. So it had low priority at that time.

Mr. MCGUIRE. That is farther along now. Now it is essential that we get in there.

Mrs. HANSEN. But it was necessary to do what was done at that time, also?

Mr. MCGUIRE. That is right.

Mrs. HANSEN. So we added funds to get it moving faster.

Mr. MCGUIRE. It would have been better to have more lead time with Cave Run. Now we cannot wait any longer.

Mrs. HANSEN. I understand. But it was not the committee that gave this such low priority.

Mr. MCGUIRE. I understand that, too.

Mrs. HANSEN. You would not even be to those ramps if we had not put the money in. This is why I have a dismal view of your casting all our add-ons into the ash can.

The cast-offs are now coming back here with a priority.

I just happen to believe that you have to meet the demands for the recreation and public use.

UNOBLIGATED AND UNEXPENDED BALANCES AS OF JUNE 30, 1972

Mrs. HANSEN. What was your unobligated balance for construction as of June 30, 1972?

Mr. MCGUIRE. On June 30, 1972, it was $2.484 million in the construction and land acquisition appropriation.

Mrs. HANSEN. What was your unexpended balance as of the same date?

Mr. CAMPBELL. That was $25.092 million.

Mrs. HANSEN. $25.092 million?

Mr. CAMPBELL. Yes, ma'am.

Mrs. HANSEN. How does it happen you had such large unobligated and unexpended balances? I can see why the unexpended balance was high because you did not pay for uncompleted contracts; is that right?

Mr. CAMPBELL. Yes, ma'am.

Mrs. HANSEN. Why the high unobligated amount?

Mr. CAMPBELL. Most of it was water pollution abatement projects for which we were not able to get good contracts and were carried over to this year for award.

Mrs. HANSEN. How much of the impounded construction projects do you propose to perform in 1974?

Mr. MCGUIRE. We propose to carry on all of these that were——

Mrs. HANSEN. I am talking about our impounded add-ons.

Mr. MCGUIRE. Yes, ma'am.

Mrs. HANSEN. These are no-year funds, you know.

Mr. MCGUIRE. We propose to do all of them in 1974; is that not correct? I guess we will have to furnish that for the record.

Mrs. HANSEN. You propose to do none, is that not the truth?

Mr. McGuire. Well, I have to compare the two lists, because the list did include such items as the Laurel Reservoir in Kentucky, for example, which is on the list.

Mrs. Hansen. Did it include Corvallis?

Mr. McGuire. No, none of the major research construction would be done.

Mr. Wyatt. Would you yield at this point?

Mrs. Hansen. I certainly will.

LABORATORY AT CORVALLIS, OREG.

Mr. Wyatt. Chief, I wonder if you could supply for the record the most current estimate as to the cost for constructing the wing of the Forest Science Laboratory at Corvallis, which wing we added the money for in fiscal 1973 budget.

Also I ask you to supply for the record the amount of money to complete the facility once that wing is built?

Mr. Arnold. I have that information, Mr. Wyatt.

Mr. Wyatt. Would you put it in?

Mr. Arnold. Yes, sir.

The estimates for fiscal year 1974 to complete the east wing is $1.610 million, which accounts for about a 7-percent increase in construction cost over the $1.5 million. The total to complete the planned construction at Corvallis——

Mr. Wyatt. Above and beyond that figure?

Mr. Arnold. Yes, sir. It is $2.125 million for the west wing. That is the final part of the planned program.

Mr. Wyatt. Then the construction will be completed when those items are done?

Mr. Arnold. Yes, sir, those two items complete the construction.

LABORATORY AT PROVO, UTAH

Mrs. Hansen. I think Mr. McKay has a question on the Provo, Utah, Laboratory.

Mr. McKay. Your perception is very keen. You indicated that was not projected for 1974, either, is that correct?

Mr. McGuire. That is right.

Mr. McKay. When do you have it projected for?

Mr. McGuire. It is still on our high priority list.

Mr. McKay. You had it on your high priority list last year, that is why it got put in.

Mr. McGuire. It is still there.

Mr. McKay. Now you turn around and cut it back.

Mr. McGuire. Hopefully we will be able to propose it in fiscal 1975. We are going to need that facility, everyone has agreed.

Mr. Wyatt. Almost everyone, chief.

Mr. McGuire. It is a question of when.

Mr. McKay. Almost everyone.

The postponement of that would do what to its cost?

Mr. Arnold. In this year, the postponement of 1 year adds about 7 percent, which is the national average. This would make the cost of that laboratory estimated in fiscal 1974 at $815,000 in place of the $760,000 appropriated last year.

Mr.McKAY. That would increase at least that rate for every year postponed?

Mr. ARNOLD. If the rate of construction cost continues at about 7 percent as it has in the past.

Mr. McKAY. I think the average has run between 5 and 10 percent for the last 20 years, has it not?

Mr. ARNOLD. Yes, sir.

Mr. McKAY. So there is no reason to suspect it is going to reduce unless we get into a calamity.

Mrs. HANSEN. Your list of impoundments goes on ad infinitum, project after project.

LAND EXCHANGE AT MADISON

Mrs. HANSEN. What about the $963,000 for the land exchange at Madison? Please insert in the record the details on what the university is going to do, what is going to happen to this entire facility.

(Information requested follows:)

The university is moving along on the development of their new medical facilities. It is our understanding that construction for the first phase is about ready to start. The second phase is moving ahead but at this point the time schedule, although urgent, is not clear. It is our understanding that the university plans to go ahead hoping that when the land is needed that funds to complete the exchange will be forthcoming.

LAND ACQUISITION

Mr. McKAY. Could they provide some information, Madam Chairman, on the number of acres they are holding for acquisition; that have been authorized or that you anticipate on your own that you would like to acquire along the way here, so we know what kind of a backlog you are looking at in acquisitions.

Mr. McGUIRE. We will, sir.

(The information follows:)

The Weeks law of March 1, 1911, as amended, authorizes the acquisitions of lands for the protection of the watersheds of navigable streams and for the production of timber. Of the total 20,360,000 acres of non-Federal lands remaining within the boundaries of the eastern national forests it is estimated that two-thirds, or about 13.5 million acres, qualify for acquisition under authority of the Weeks law. Some of this total qualifies for purchase using Land and Water Conservation Fund Act money, but most of the acreage will not have a primary value for recreation and will have to be acquired with funds appropriated under authority of the Weeks law. If Weeks law funds were available, it is estimated that 150,000 to 200,000 acres of land could be acquired annually on a willing seller-willing buyer basis to consolidate the eastern national forests and to place in public ownership lands that are needed for watershed protection and timber production.

Mrs. HANSEN. Not too much of this is land acquisition. The reason it bears that title is that there are some rather limited amounts here; is that not correct?

Mr. McGUIRE. That is correct.

Mrs. HANSEN. These are largely construction items, mostly relating to the use of the public, to help solve the recreation problems.

Mr. McKAY. It is necessary to acquire some land to do that, though.

Mr. McGUIRE. Yes, sir. There is also $1 million or so for Weeks Act acquisitions in this group. Much of our acquisition these days comes under the Land and Water Conservation Fund.

Mrs. HANSEN. That is correct.

Mr. MCKAY. It would be an interesting figure to see the backlog. My guess is we have a lot of areas which we have authorized to be purchased but which you never have purchased.

Mr. MCGUIRE. That is true.

LABORATORY AT RHINELANDER, WIS.

Mrs. HANSEN. The funds for Rhinelander, was for the final phase, was it not?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. In other words, this was the greenhouse?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. Which is a vital part of the particular research?

Mr. ARNOLD. That is right.

Mrs. HANSEN. By the way, that is a very fascinating laborataory. They have some very interesting work going on.

Mr. ARNOLD. It is one of our most imaginative programs.

Mr. YATES. Off the record.

(Discussion off the record.)

LABORATORY AT ARCATA, CALIF.

Mrs. HANSEN. The laboratory at Arcata, Calif., is a part of your redwood program. You are not going to get off the drawing board with replenishment of redwoods until you develop some techniques; is that not right?

Mr. ARNOLD. Yes, ma'am.

Mrs. HANSEN. Do you not think you ought to stop logging redwoods until your laboratory is completed?

Mr. ARNOLD. The research deals with that critical sedimentation problem on the steep slopes and the regeneration of redwoods.

Mrs. HANSEN. Do you not think you ought to stop your logging until the laboratory develops some answers?

Mr. ARNOLD. We have had a small research program going without the laboratory, but the laboratory is needed for the kind of research that needs to be done now.

Mr. MCGUIRE. We log very little redwood. The redwood we had was in an experimental forest which was used in compensation to purchase the Redwood National Park.

Mrs. HANSEN. I understand. But your problem up there is trying to develop a whole group of answers to some of the problems that you have as a result of continuing use of the redwood.

Mr. ARNOLD. Yes, ma'am.

RECREATION-PUBLIC USE AREAS

Mrs. HANSEN. On your recreation and public use areas, no funds are requested. You have a decrease of $7,170,400. The program level is $1,452,900 in carryover funds. You indicate that visitations will increase 17 percent over 1970 in 1974. Please give us some facts and information for the record on this apparent lack of your preparation for the increased visitor use?

Mr. McGuire. We will do what we can on that subject, Madam Chairman. As you know, we are going to simply have to postpone some of these urgent projects for awhile.

Mrs. Hansen. Mr. McGuire, I think it has come to the attention of this committee repeatedly in agency after agency—such agencies as the BOR, the BLM, the BIA, the National Parks, and so on—that money we spent on recreation was not a wasteful expenditure. It was cheaper in the long run to provide people with outdoor recreation than it was to pay for the ever-escalating costs of crime.

It doesn't seem to me that your recreation budget conforms to that.

Mr. McGuire. That is true.

Mrs. Hansen. It's kind of a sad commentary, isn't it?

Mr. McGuire. The budget will permit only a beginning at three new sites, and completion of several projects previously started.

Mrs. Hansen. Which are?

Mr. McGuire. That can handle a capacity of 1,350 people at one time.

Mrs. Hansen. That is going to be helpful in a country of 210 million people.

Mr. Housley. On the Sawtooth National Forest; the Boulder Lake campground on the Bridger National Forest; Princess campground in the Sequoia National Forest; and on the Stanislaus National Forest the Pinecrest Beach extension, both in California; and Red Cliff campground on the Gallatin National Forest.

Mrs. Hansen. Aren't these tremendously heavy use areas?

Mr. Housley. Yes, ma'am. All of those are showing increased use.

NORTH CASCADES HIGHWAY

Mrs. Hansen. There will be a lot of complaints from people who are going to be users, and who have been users, of the North Cascades. Your facilities are very inadequate there, aren't they?

Mr. Housley. That is correct. We haven't made a good start on the facilities associated with the North Cascades Highway as yet.

Mrs. Hansen. Yet your travel and visitation is going to escalate because of the proximity of that area to the urban areas around Spokane in the east and Wenatchee and Seattle in the west. Isn't this correct?

Mr. Housley. Yes, ma'am. We anticipate further increases.

Mrs. Hansen. You have a highway going through there which is going to spill over. You have every national magazine in the United States heralding the beauties of the North Cascades with which I completely agree, but you have no public facilities there of any consequence. Isn't that correct?

Mr. Housley. That is correct.

Mr. McGuire. That is right. We can furnish in many instances just the most rudimentary, primitive facilities which are far from satisfactory with the crowds of people arriving there.

TOP PRIORITY GUIDELINES

Mrs. Hansen. You have a list of items. These are apparently your top priorities. Give us the basic guideline that made these the top priority.

Mr. McGUIRE. The principal reason for putting these particular projects on the list was that we felt we could no longer defer construction because the impounded water was going to be approaching the construction sites this year.

Mrs. HANSEN. Is this true of all of this list? Is that correct, of $1,172,000?

Mr. HOUSLEY. Some of those are already completed projects, such as Flaming Gorge National Recreation Area. That impoundment has been completed for a long time, but the use pressure is building up very heavily there.

Mrs. HANSEN. That is not the only place pressure is building up.

CONSTRUCTION FOR FIRE, ADMINISTRATION, AND OTHER PURPOSES

The construction for fire, administration, and other purposes is budgeted at $1,103,000. This is a decrease of $1,213,500. The program level is $2,241,000. What about the adequacy of this program?

Do you consider that an adequate program? I want a frank answer.

Mr. McGUIRE. No, ma'am. Of course, it is not adequate.

Mrs. HANSEN. What would be an adequate program?

Mr. McGUIRE. Overall in this area of construction and land acquisition we think a more adequate program, one that might be called optimum, would be in the neighborhood of $125 million.

Mr. YATES. Optimum or adequate?

Mr. McGUIRE. We couldn't make everything adequate in 1 year, but to go toward an adequate level and, say, over a 10-year period we ought to be spending in the neighborhood of about $125 million a year.

Mrs. HANSEN. So you are spending $25 million. This is construction of your facilities for the use of the people of the United States. Isn't that correct?

Mr. McGUIRE. That is correct.

Mr. McDADE. Are you saying, Mr. McGuire, that the $25 million figure is a figure that you think is not adequate and that an adequate figure is $125 million in each fiscal year?

Mr. McGUIRE. Yes, for about a period of 10 years to get these facilities brought up to a level where they could more properly accommodate the increasing number of people who are using them, to provide for water and sanitary facilities for administrative buildings. for research construction, and things of that sort.

Mr. YATES. Does OMB know about this?

Mr. McGUIRE. Yes, sir, they know that present request is inadequate in our opinion.

Mr. YATES. And they cut it back to $25 million?

Mr. McGUIRE. Yes, on the grounds that it is meritorious to have these facilities but it is the kind of thing that could be deferred for the time being.

Mr. YATES. For how long?

Mr. McGUIRE. I don't know.

Mrs. HANSEN. It will take you 125 years to get them done.

RESULTS OF INADEQUATE FUNDING

Mr. YATES. What happens if you don't get the $125 million? You defer it, of course, but what happens to the establishment?

Mr. McGuire. In some places where we don't have adequate facilities we are just going to have to close them to the public. We cannot allow the public to go into an area where the water supplies, for example, are contaminated.

Mr. Yates. Can you list those areas? What areas will you have to close?

Mr. McGuire. It will vary, depending on what makeshift arrangements we can make in the meantime. Some places we can put in temporary toilets or we can patch up the water system or do something of that sort and drag it out a little longer.

Mrs. Hansen. Suppose your State health departments come along and say we are not going to stand for this kind of an installation anymore.

Mr. Yates. Can they stop it?

Mrs. Hansen. Oh, yes, they can. If it impinges on the public health and safety of any citizen of that State; yes.

Mr. McGuire. We would certainly follow the advice of the State health department.

Mr. McDade. But this is not limited only to recreation.

Mr. McGuire. No, sir. This includes research construction, for example, and pollution abatement, and land acquisition, although we didn't allow more money there particularly.

INSECT AND DISEASE LOSSES

Mrs. Hansen. Let's just get one figure since we are on research. Let's get the figure of what the destruction is in the forest of the entire Nation in board feet and their current market value due to insects and disease that we have no means of answering for lack of research facilities?

Mr. McGuire. We can give you the volume of mortality. It's in the neighborhood of 10 billion board feet annually on lands of all ownerships.

Mrs. Hansen. What is that worth?

Mr. McGuire. It's probably worth somewhere around $300 million annually.

Mr. Veysey. Could you, at the same time, tell us what the effect would be of another $1 million in changing that situation? That is more difficult, I appreciate.

Mr. McGuire. There are two approaches there. One is to spend more money on research to find ways of decreasing insect and disease losses in the longer run.

The immediate solution, however, might be to increase the salvage by logging of the material that is killed. This would require more money than we would require for regular sales because these trees are scattered.

Mrs. Hansen. Also you run into a great many environmental problems in this area.

Mr. McGuire. Yes, you do. It has to be done carefully. It takes more supervision. The trees would have to be located, marked, appraised, and offered to industry purchasers.

Mr. Veysey. That is as a salvage function. But as an on-going management function, can we ascertain that an additional $1 million, just to take a round number, would produce such and such a result?

Mr. McGuire. We asked the committee for money to salvage 300 million board feet at a cost of $2½ million several months ago.

Mrs. Hansen. That is right.

Mr. McGuire. It would be approximately $8 million to get another 1 billion board feet of salvage material.

SUPPLEMENTAL REQUEST

Mr. Wyatt. At this point in the record I think it would be appropriate to point out that the 300 million additional board feet of harvest of salvage timber that was going to waste was requested by the President to alleviate the wood fiber shortage but that the OMB never came forward with a request for the $2½ million to permit these sales to go forward and instead forced the Forest Service to come to this committee to ask for reprograming of reforestation money to provide this $2½ million.

We felt it was a very short-term view, was pennywise and pound foolish, and we refused to approve the program. Isn't that approximately correct, Chief?

Mr. McGuire. That is correct. The committee told us to go back and come up like gentlemen with a regular supplemental request.

Mrs. Hansen. To come up with a request for the budget and admit you needed it to harvest this amount which would bring in revenue?

Mr. McGuire. Yes, ma'am. We carried messages back and forth between this committee and downtown several times.

Mr. Wyatt. But you were never authorized to come back with the request for the $2½ million?

Mr. McGuire. That is correct.

FISCAL YEAR 1974 REQUEST

Mr. McDade. What was your request from the Department of Agriculture to OMB on this construction account here that went through the Department, was approved through the Department and went over to OMB?

Mr. McGuire. On the whole item of construction and land acquisition, the Department asked for a program level of $42 million.

We are asking the committee for $25.5 million plus authority to reprogram $12.6 million of the add-ons and other savings in 1973.

Mrs. Hansen. What is your experience concerning fire, management, and law enforcement, under supervised areas?

Mr. McGuire. With dispersed recreation, as we call it, with people going to areas away from the developments, we incur higher costs of cleanup and maintenance. We run greater risks of fires getting started.

LAW ENFORCEMENT

With regard to law enforcement, however, I don't know that we have any clear idea. There are problems with law enforcement in these developed areas, as you know, because people congregate there. Perhaps the law enforcement problem is a little less in the case of dispersed areas.

Mrs. HANSEN. But apparently it's growing or you wouldn't ask for a cooperative program.

Mr. MCGUIRE. That is right. We are finding groups, where they don't have campground facilities available, will go off by themselves and create problems in law enforcement.

Mr. VEYSEY. Chief, are your personnel peace officers? Do they have the authority to arrest somebody?

Mr. MCGUIRE. They only have authority to enforce the Secretary's regulations. We do not have exclusive jurisdiction the way the Park Service has in the national park. We must rely largely on local and State law enforcement agents.

Mr. VEYSEY. So your recourse is to call on someone else if the situation demands it?

Mr. MCGUIRE. That is right. We work with the local law enforcement agents.

RESEARCH CONSTRUCTION

Mrs. HANSEN. We have discussed the sad state of your research construction, a decrease of $5,143,000. You have a program level of $134,000. Once again, what is the rationale for requesting no funds for this activity? Was it your desire?

Mr. ARNOLD. The $134,000, Mrs. Hansen, is for two pollution-related items. One is the sewer system at the Sierra Ancha Experimental Forest outside of Phoenix. The other one is for the water system at the San Joaquin Experimental Range in California. Those establishments would have had to be closed if it were not for the expenditures.

Mrs. HANSEN. You made no request for the research facilities that were provided last year?

Mr. MCGUIRE. Our original request to the Department did include those items, Madam Chairman, because they are on our high priority list.

POLLUTION ABATEMENT CONSTRUCTION

Mrs. HANSEN. You have $23,148,000 requested for pollution abatement, a decrease of $6,322,000. What are the priorities that you observed in selecting these particular pollution abatement projects?

Mr. MCROREY. Madam Chairman, these came under, and meet the requirements of, Executive Order 11/507 with respect to pollution abatement. The requested funds here will enable us to comply with that Executive order.

Mrs. HANSEN. That is what you told us last year about the pollution funds that you impounded. Every one of those projects which this committee honored in pollution abatement was described by the Forest Service as essential to meeting the President's order.

Mr. MCROREY. The projects that we have completed up to the present time, plus the ones that are in this program, will bring us in compliance with the Executive Order.

Mrs. HANSEN. Are you through now with all pollution abatement?

Mr. MCROREY. No, not all pollution abatement.

Mrs. HANSEN. How much do you have left to do?

Mr. MCROREY. In part, this is an indeterminate amount now.

Mrs. HANSEN. You mean there is going to be a continuing inadequacy?

Mr. MCROREY. No, but there is going to be a need for continual upgrading and replacing of facilities as they become obsolete and wear out.

ENACTMENT OF PUBLIC LAW 92–500

Also, during this last Congress, Public Law 92–500 was enacted, which in effect amended the Clean Water Act. It imposes certain problems on us. All Federal facilities must comply with State water standards. The law also provides for suits against the Federal Government. This, of course, means that we will have to continually monitor all of our activities.

In effect, what it does is, it gives a greater and more extensive job and undertaking to be sure that we aren't in violation of State standards for water pollution.

In this particular program we are including $5 million as a first step in identifying and correcting the deficiencies under the congressional guidelines that are imposed by Public Law 92–500.

POLLUTION ABATEMENT IN COLORADO

Mr. EVANS. On page 122, Colorado has two projects, one for $60,000 and another for $200,000. These represent 1 percent of the total of $20,608,000 which was budgeted. What formula or values were used in deciding to go ahead with these projects?

Mr. MCROREY. May we place those in the record?

Mrs. HANSEN. Yes.

(The information follows:)

The distribution of water pollution abatement funds is based on the amount needed in each State to correct those facilities which are sources of pollution and subject to the deadlines of Executive Order 11507. All work of this nature has been funded in Colorado with the exception of the two projects listed on page 122—Dillon and Grand Mesa.

LOW-COST HOUSING UNITS

Mr. VEYSEY. I have a question in the middle of page 121 about the experimental low-cost housing units reported there. Would that be housing for your own personnel in remote locations?

Mr. MCGUIRE. Yes, sir.

Mr. VEYSEY. Why would you be going in for experimental low-cost housing units?

Mr. MCGUIRE. Our research people at Madison have developed techniques for low-cost housing, eliminating frills, and using improved design.

Mrs. HANSEN. I have never seen any frills in employee housing in any Federal installation, yet, except for the Defense Department.

Mr. MCGUIRE. When these are built we will have some pilot examples of good, low-cost housing.

Our thought was combining these with low-cost employee housing.

Mrs. HANSEN. One of the saddest commentaries on our Government is that we send hundreds of teachers out to remote areas with inadequate housing. We put people in Alaska for the winter long in two-bedroom houses with four children.

In addition, in some of these areas there is a lot of firewood you could have afforded a fireplace for these long winters. But there are none. I have been all over this country and I am, frankly, ashamed of some of the establishments people live in. It's a wonder to me we have doctors left in the Indian Health Service down in the Southwest, considering the kind of quarters they have to live in. And the teachers! I have seen teachers in Alaska living in terrible conditions.

OBJECTIVES OF LOW-COST HOUSING RESEARCH

Mr. MCGUIRE. We also have some people in resort areas where all the available housing is just too high priced for our employees. We attempt to provide housing for people in those areas as well as the areas mentioned by Mrs. Hansen. We thought we would combine the work we are doing in research with these experimental houses and kill two birds with one stone by putting up the pilot models in places where employees could use them.

Mr. VEYSEY. I was asking about the appropriateness of research and experimental work on low-cost housing being done within your operation. The Federal Government is working in this in many other ways, but I am just not sure that your particular expertise is developing experimental low-cost housing.

Mrs. HANSEN. You are doing it in relation to wood products, I assume.

Mr. ARNOLD. Yes, and to reduce the amount of wood required in housing. Also these were designed as part of the Department of Agriculture's concern for rural area development. These were really developed to provide low cost housing for rural areas. The work was to provide 12 designs and to test those. It isn't a continuing program. Those are now completed.

Mr. VEYSEY. The objective of this was to develop housing that wouldn't use very much wood?

Mr. ARNOLD. The objective was to see how house construction could be completed at a lower cost and still provide adequate housing, particularly for rural areas.

Mr. VEYSEY. Is this part of a broader program you have, of trying to minimize the use of wood products?

Mr. ARNOLD. A major part of our forest products research is to make the existing supply of timber go as far as it possibly can.

Mr. VEYSEY. Does that go to the point of recycling paper that we were speaking of a moment ago?

Mr. ARNOLD. Yes, sir. We have a research program at Madison, Wis., on recycling paper and other urban wastes. It has been quite

successful. It's in the pilot model stage in the city of Madison now.

Mrs. HANSEN. This relates to the items on air pollution abatement. This gives us the coordination of solid waste disposal problem with local authorities and eliminates duplication of effort.

POLLUTION ABATEMENT FUNDS

Mr. MCROREY. Madam Chairman, may I supplement my remarks on pollution abatement?

Mrs. HANSEN. Yes.

Mr. MCROREY. There were no pollution abatement funds impounded. There were funds impounded under construction for water systems, as an example.

Mrs. HANSEN. I used water systems in the broad pollution context because, as I understand, you had to comply with the President's program of pollution abatement standards. Also you had to have water supplies that came up to the standards imposed by the States. Isn't this correct?

Mr. MCROREY. This we will have to do.

LAND ACQUISITION, WEEKS ACT

Mrs. HANSEN. You are requesting $1.2 million, a decrease of $100,000 for land acquisition, under the Weeks Act. Do you consider the budgeted rate adequate?

Mr. MCROREY. This is an amount that has been rather stable over the last few years, Madam Chairman. Since 1965, with the advent of the Land and Water Conservation Fund Act, the land acquisition program for the Forest Service combined has averaged in the neighborhood of $18 million. The Weeks law funding is for the acquisition of lands primarily for the production of timber and watersheds. There are many acres of these types of lands, private ownership within the existing national forest that need attention.

Mrs. HANSEN. Do you propose to go into the Redbird purchase area?

Mr. MCROREY. This is right. About one-half of the moneys in this program would go into the Redbird Area.

FORESTS ROADS AND TRAILS

Mrs. HANSEN. Insert justification pages 132 through 136 in the record.

(The pages follow:)

FOREST ROADS AND TRAILS

Appropriation Act, 1972	$148,740,000
Appropriation Act, 1973	158,840,000
Budget estimate, 1974	87,700,000
Decrease	-71,140,000

PROJECT STATEMENT

The following tabulation reflects the total program for the construction and maintenance of roads and trails on the National Forests and Grasslands by combining the funds available under the appropriation "Forest roads and trails" with the permanent appropriation of 10 percent of National Forest receipts.

Project	1972	1973 estimate	1974 estimate	Increase or decrease
1. Construction of roads and trails	$136,813,838	$119,702,955	$76,800,000	-$42,902,955
2. Maintenance of roads and trails	38,119,944	36,795,000	35,000,000	-1,795,000
Total obligations	174,933,782	156,497,955	111,800,000	-44,697,955
Transfer from Roads and Trails for States a/	-22,661,542	-33,871,106	-40,900,000	-7,028,894
Program under Forest Roads and Trails contract authority	152,272,240	122,626,849	70,900,000	-51,726,849
Obligations incurred under unfunded contract authority	-3,532,240	36,213,151	16,800,000	-19,413,151
Appropriation or estimate	148,740,000	158,840,000	87,700,000	-71,140,000

a/ The annual appropriation language and the Department presentation combine the appropriation for Forest roads and trails made pursuant to 23 USC 205 and the appropriation of 10 percent of forest receipts for construction and maintenance of roads and trails pursuant to 16 USC 501. This merger of funds is made in order to simplify the programing, allotment, and accounting of funds at the field level.

A decrease of $71,140,000 is proposed to meet cash requirements for liquidation of contract authority. This appropriation provides for the liquidation of obligations incurred for the construction and maintenance of forest roads and trails pursuant to the authority contained in the Federal-Aid Highway Act. An appropriation of $87.7 million for 1974 is required to:

(1) Pay for obligations of the prior years which will be due for payment in fiscal year 1974.

(2) Pay the portion of the 1974 obligations of $70.9 million contract authority which will require cash payment in that year.

Following is a summary of the road and trail construction and maintenance to be undertaken in fiscal year 1974 as compared with fiscal year 1973:

	FY 1973		FY 1974		Change	
	Miles	Amount (in thousands)	Miles	Amount (in thousands)	Miles	Amount (in thousands)
Recurrent road maintenance	96,598	$30,585	91,818	$30,000	-4,780	-$585
Recurrent trail maintenance	51,802	6,210	29,656	5,000	-22,146	-1,210
Road construction	719	69,158	173	13,100	-546	-56,058
Trail construction	400	2,510	- -	- -	-400	-2,510

	FY 1973		FY 1974		Change	
	Miles	Amount (in thousands)	Miles	Amount (in thousands)	Miles	Amount (in thousands)
Surveys, plans, and supervision (timber purchaser roads) ..	3,678	37,925	6,580	53,700	+2,902	+15,775
Supplementing timber purchaser construction	660	9,910	433	10,000	-227	+90
Road purchase		200		- -		-200
Total program level		156,498		111,800		-44,698

The $44,697,955 program decrease has been made possible by shifting priorities to timber access and by assigning a greater degree of responsibility for this access to the timber purchaser. Mileage of timber purchaser roads will be increased by 670 miles in 1974.

The shift in the proposed fiscal year 1974 forest road and trail program from direct construction to support activities for timber purchaser road construction is a result of increased timber needs, and the need to reduce direct Federal outlays.

The proposed program provides for continued maintenance of the existing transportation system and provides environmental protection through assuring the necessary support for timber purchaser construction. The requested construction funds will be used primarily for bridge construction and reconstruction on major timber access routes and the requested supplementation funds will be used to increase opportunities for larger timber yields.

The proposed work will be in accord with the National Environmental Policy Act (NEPA), standards promulgated by the Highway Safety Act of 1966 and bridge standards established by the 1968 Federal-Aid Highway Act. NEPA necessitates the examination of a wider range of technical alternatives and leads to project modifications after resource planning has established the administrative desirability and feasibility of access. This generates increased costs due to intensified analysis and review in the planning stages as well as higher cost technical solutions to reduce identified adverse impacts.

The Federal Highway Administration proposes to make applicable to Federally administered areas all Highway Safety Standards (23 CFR II) on February 15, 1973. Until that time only Standard No. 13 dealing with traffic engineering services is applicable. It has generated increased costs by requiring the development of a program for applying more intensive traffic engineering measures and techniques, including the use of traffic control devices, to reduce the number and severity of traffic accidents.

Federal Highway Administration bridge standards are directed to bridges located on Federal Aid systems; however, because of their applicability these standards have been adopted by the Forest Service as being appropriate for over 7,000 road bridges and 1,600 trail bridges under its jurisdiction. As a result, increased costs are generated by required inspections, inventories, and, where bridges are found to be below standard, corrective actions, that will insure public safety.

The following tabulation shows the current status of the forest roads and trails system and projected needs:

Item	Existing Mileage	Estimated Mileage Needing Reconstruction	Estimated Additional Mileage Needed
Roads	198,206	143,665	140,183
Trails	99,687	49,409	23,862

Summary of Work Progress and Accomplishment

	By the Government			By Timber Purchaser		
	FY 1972	FY 1973	FY 1974	FY 1972	FY 1973	FY 1974
Roads (miles)	844	719	173	6,904	6,630	7,300
Trails (miles)	542	400	- -	- -	- -	- -

Status of Unfunded Authorizations

Unfunded contract authority beginning of 1973	$486,096,000
Appropriation, 1973	-158,840,000
Total unfunded beginning of 1974	327,256,000
Unobligated contract authority lapsing	-39,480,000
1974 Budget estimate (cash requirements)	-87,700,000
Balance to remain unfunded as of June 30, 1974	200,076,000

Analysis of Cash Requirements

1.	Unliquidated obligations, June 30, 1972		$93,295,632
2.	Estimated cash requirements to finance 1973 program		66,750,956
3.	Total cash requirements by June 30, 1973		160,046,588
4.	Less cash on hand 1973: Balance from 1972	10,206,588	
	Appropriation, 1973	158,840,000	169,046,588
5.	Cash carried forward to 1974		9,000,000
6.	Obligations in 1973 and prior years for which cash was not provided in items 1 and 2		43,500,000
7.	Estimated cash required to finance 1974 program	a/	53,200,000
8.	Cash brought forward from 1973		-9,000,000
9.	Total cash required in 1974		87,700,000

a/ An estimated 75 percent of the $70.9 million new obligations will require cash payments during the fiscal year.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS
Forest Roads and Trails

	FY 1973 (estimate)	FY 1974 (estimate) 1/
Alabama	$568,000	$122,000
Alaska	3,450,000	334,000
Arizona	3,922,000	822,000
Arkansas	1,668,000	420,000
California	27,282,000	10,038,000
Colorado	7,619,000	396,000
District of Columbia	4,056,955	- -
Florida	839,000	272,000
Georgia	1,569,000	166,000
Idaho	15,995,000	2,025,000
Illinois	378,000	18,000
Indiana	221,000	7,000
Kentucky	862,000	51,000
Louisiana	820,000	623,000
Maine	100,000	5,000
Michigan	2,629,000	146,000
Minnesota	1,443,000	77,000
Mississippi	956,000	772,000
Missouri	911,000	288,000
Montana	11,428,000	2,007,000
Nebraska	135,000	11,000
Nevada	1,767,000	68,000
New Hampshire	884,000	71,000
New Mexico	6,086,000	361,000
North Carolina	1,055,000	114,000
North Dakota	135,000	- -
Ohio	194,000	11,000
Oklahoma	171,000	62,000
Oregon	28,657,000	15,283,000
Pennsylvania	1,110,000	150,000
Puerto Rico	113,000	1,000
South Carolina	893,000	293,000
South Dakota	1,623,000	62,000
Tennessee	649,000	45,000
Texas	802,000	392,000
Utah	3,597,000	96,000
Vermont	712,000	68,000
Virginia	1,740,000	35,000
Washington	13,381,000	4,887,000
West Virginia	2,020,000	51,000
Wisconsin	1,371,000	96,000
Wyoming	2,686,000	154,000
Total	156,497,955	40,900,000

1/ Above planned obligations for fiscal year 1974 include only the distribution of the 10% Fund (Roads and Trails for States) pursuant to 16 USC 501. Distribution of obligations under Forest Roads and Trails contract authority will be made as soon as program shifts are finalized.

FOREST ROADS AND TRAILS (LIQUIDATION OF CONTRACT AUTHORITY)

Proposed Change in Language

Change in language is proposed as follows. Deleted matter is enclosed in brackets.

> For expenses necessary for carrying out ..... shall be merged with and made a part of this appropriation[; Provided further, That not less than the amount made available under the provisions of the Act of March 4, 1913, shall be expended under the provisions of such Act].

Deletion is proposed to simplify and shorten the wording of this item. The proviso is not essential since the Act of March 4, 1913 (16 USC 501), provides for the method to be used for distribution to the States under that Act.

Allocation to the various States of total available merged funds will continue to be made on the basis of planned program needs. The total amount allocated will not be less than the amount which would be available from the 10 percent of National Forest receipts as provided by the Act of March 4, 1913. This deletion will not affect, in any way, the purposes or areas in which these funds have heretofore been used.

SHIFT TO TIMBER PURCHASER ROADS

Mrs. HANSEN. You are requesting a reduction of $71,140,000 for forest roads and trails. You have already discussed the fact that you plan to shift priorities by assigning a greater degree of responsibility to the timber purchaser. If you have any supplementary details to those that we have already discussed, will you please give those briefly?

Mr. MCGUIRE. We have already covered most of the main points here.

We are going to try to get the timber purchasers to go as far as they can with building roads as part of their timber purchase contracts. We will not be building any recreation roads.

Mrs. HANSEN. You are not building recreation roads, but these timber roads, once the timber has gone, are they not used rather widely for recreation?

Mr. MCGUIRE. Yes, they are. But there are many areas in the national forests where there is insufficient timber to finance road construction; southern California, for example.

Mrs. HANSEN. I am beginning to wonder if Angeles National Forest belongs in the National Forest or the national parks.

Mr. VEYSEY. It is not that kind of a National Forest.

Mrs. HANSEN. Do you consider this the more efficient and economical way to do business?

Mr. MCGUIRE. For the long run, I think it is clear that the Government would be better off building the roads first, and building them to multipurpose standards, and then selling the timber along the roads to all commerce.

EFFECTS OF SHIFT ON SMALL TIMBER PURCHASER

Mrs. HANSEN. In order to be able to construct a road, a purchaser is going to have to have sizable capital if he is going to comply with your standards. Are you going to impose the standards?

Mr. MCGUIRE. We have some small sales that may not require much roadbuilding.

Mrs. HANSEN. Talk about the majority.

Mr. MCGUIRE. In the majority of cases, sizable working capital is required.

Mrs. HANSEN. What you are doing is eliminating the small timber purchaser, you are putting the little fellow out of business; is that not right?

Mr. MCGUIRE. Unless he has access to credit——

Mrs. HANSEN. How many loggers do you know of who have access to credit?

Mr. MCGUIRE (continuing). He will wind up working for larger purchasers. I think this will encourage the small logger to become a subcontractor to the larger purchasers.

Mrs. HANSEN. What does this do to the small business set-aside?

Mr. MCGUIRE. We still plan to maintain the system we have in effect now, the small business set-aside.

Mrs. HANSEN. At the time of the sale, do you propose to have the road-building standards clearly laid out to the purchaser?

Mr. MCGUIRE. Yes, we do.

Mrs. HANSEN. Supposing they do not comply?

Mr. McGUIRE. We will have to supervise the work that they do to be sure that they do comply.

(Discussion off the record.)

RISKS IN ROAD BUILDING

Mrs. HANSEN. Let's take the example of northern California, when you had your slides and heavy rains about 3 years ago. You have a purchaser. He is a marginal purchaser. He has built a road. You have a terrific rainstorm and a slide comes along. His road, his logs, his whole operation washes away. What is going to happen to him?

Mr. McGUIRE. It depends on the individual case. We will try to work out a solution in each case. But I think the operators do take something of a risk here and so do we.

Mrs. HANSEN. So this is risk capital?

Mr. McGUIRE. That is right.

Mrs. HANSEN. And you take a great risk?

Mr. McGUIRE. We have a responsibility in the first place to be sure the road is put in locations where that is less likely to happen. A lot depends on who is at fault when this does happen.

Mrs. HANSEN. Nobody is at fault.

Mr. McGUIRE. We still try to estimate what kind of rainfall we are going to get in any particular area.

Mrs. HANSEN. That is just like forecasting snow in Washington, D.C. You know that, Mr. McGuire.

Mr. McGUIRE. Yes, ma'am.

Mrs. HANSEN. I remember when the whole side of a mountain fell into the Columbia River. Nobody anticipated that.

Mr. McGUIRE. Along the Columbia River though, I think you could be a little more certain of heavy rain than you could be of snowfall in Washington.

Mrs. HANSEN. They anticipated heavy rain but they did not anticipate a heavy landslide where it washed out the land.

I am going to be very frank, I have a dismal view of this shift for a wide variety of reasons. You are going to decrease revenues to the Federal Government, decrease revenues to the counties, and you are going to impose on yourself a tremendous supervisory job in the construction. Thus I suspect you are going to shut out the small operator.

Mr. McGUIRE. All of those things may happen. We will just have to try to avoid them.

Mrs. HANSEN. How can you avoid it if you are going to have to build a half-million dollar road?

Mr. McGUIRE. For small operators we will have to reserve a certain portion of the offerings and allow only the small operators to bid on those offerings.

Mrs. HANSEN. The committee is going to be interested in a list of your sales.

How many miles of road is the AID Agency building abroad?

Mr. McGUIRE. We will try to find out. I have no idea.

(The information follows:)

According to the office of engineers, foreign aid program, Department of State, the 3-year average (1970–72) of miles of new road construction abroad financed by AID is 382 miles each year.

SUPERVISION OF ROAD BUILDING PROGRAM

Mr. McRorey. Madam Chairman, may I add some remarks on the supervision of the road program?

Mrs. Hansen. Yes.

Mr. McRorey. In the development of the proposed program for fiscal year 1974, we, like you, have real concerns in terms of planning, designing, and supervision. As a consequence, in contrast to the past fiscal year, the proposed 1974 program provides for increasing the dollars for preparation of plans and the supervision of purchaser roads by almost $16 million. We feel that this is essential and necessary. If we are going to shift the construction to the timber purchaser and still redeem our responsibilities for an environmentally sound facility in the national forests this is of great concern to us.

Mrs. Hansen. Because you are going to get the blame?

Mr. McRorey. That is correct. We anticipate this need and we are gearing to meet it.

Mrs. Hansen. Now when the road is built, the logs are out, and the road has gone to pieces, who is going to rebuild them?

Mr. McRorey. For those roads that are to be placed on the system and maintained, we do not anticipate that they will go to pieces.

Mrs. Hansen. But you will have to set some very high standards when you accept them.

Mr. McRorey. This is correct, we recognize this.

We also anticipate that under this short-term situation, hopefully a short-term situation, that it might be necessary to place closures on some roads.

Mrs. Hansen. That is going to make some hunters happy.

Mr. McRorey. Make them unhappy.

Mrs. Hansen. Please insert in the record your unobligated and unexpended balances as of June 30, 1972, and January 31, 1973.

(The information follows:)

Balances in forest roads and trails account are as follows:

[In thousands]

	June 30, 1972	Jan. 31, 1973
Unobligated	$403,007	$356,204
Unexpended	10,207	95,907

Acquisition of Lands

Mrs. Hansen. Insert justification pages 137 through 139 in the record at this point.

(The pages follows:)

ACQUISITION OF LANDS FOR NATIONAL FORESTS, SPECIAL ACTS

Appropriation Act, 1972	$80,000
Appropriation Act, 1973	80,000
Budget estimate, 1974	94,000
Increase	+14,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
1. Cache National Forest, Utah, Act of 5/11/38, as amended	$12,310	$20,000	$20,000	- -
2. Uinta-Wasatch National Forests, Utah, Act of 8/26/35, as amended	20,000	20,000	20,000	- -
3. Toiyabe National Forest, Nevada, Act of 6/25/38, as amended	7,963	8,000	8,000	- -
4. Angeles National Forest, California, Act of 6/11/40	32,000	32,000	14,000	-$18,000
5. San Bernardino and Cleveland National Forests, California, Act of 6/15/38	- -	- -	32,000	32,000
Unobligated balance reverted to National Forests Fund	7,727	- -	- -	- -
Appropriation or estimate	80,000	80,000	94,000	+14,000

The Congress has enacted several special laws which authorize appropriation from the receipts of specified National Forests for the purchase of lands to minimize erosion and flood damage. Amounts appropriated and laws under which authorized are shown above.

These 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. The results will be reflected in improved watershed conditions, social benefits, and development of economic strength in local communities.

Cache National Forest. In fiscal year 1972, funds were available from two sources for the 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 1972, $189,219 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 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 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 State of Utah would receive 25 percent of these receipts for roads and school purposes in the local counties involved. 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 almost thirty years and shared in by both the local agencies and the Federal Government through the National Forests.

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 money and lands valued at $189,219. The remainder of the contributions in the amount of $10,781 are expected in fiscal year 1973.

Through fiscal year 1972, 29,352 acres have been approved for purchase pursuant to the Receipts Act of 1938, and 15,957 acres under the Special Act of 1956. The 1973 objective is to acquire 840 additional acres of these critical watershed lands. A similar acreage is expected to be acquired in 1974.

Uinta-Wasatch. In fiscal years 1963 through 1972, an appropriation of $200,000 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 2,841 acres has been approved for purchase through fiscal year 1972, and an estimated 400 acres will be acquired each year during 1973 and 1974.

Toiyabe National Forest. $8,000 was appropriated under this Act in each of fiscal years 1972 and 1973. The 1973 and 1974 objective is to acquire 40 acres each year.

Angeles National Forest. $32,000 was appropriated in fiscal years 1972 and 1973 and $14,000 is proposed for 1974 to purchase important watershed lands. Acquisition is needed to minimize erosion and flood damage. The 1973 objective is to acquire 80 acres. The 1974 objective is to acquire 30 acres.

San Bernardino and Cleveland National Forests. The $32,000 proposed for fiscal year 1974 is to acquire 80 acres of important watershed lands. Acquisition is needed to minimize erosion and flood damage.

Proposed Change in Language

Change in language is proposed as follows. New language is underscored.

> For acquisition of land to facilitate ..... Angeles National Forest, California, Act of June 11, 1940 (54 Stat. 299) $_____; San Bernardino and Cleveland National Forests, California, Act of June 15, 1938 (52 Stat. 699), as amended, $32,000; in all, ...

This change in language is proposed to facilitate the acquisition of 80 acres of important watershed lands. Acquisition is needed to minimize erosion and flood damage.

ACQUISITION OF LANDS TO COMPLETE LAND EXCHANGES

Appropriation, 1972	$26,035
Appropriation, 1973	- -
Budget estimate, 1974	55,300
Increase	+55,300

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Purchase of land, State of:				
California	$26,000	- -	$54,585	+$54,585
Montana	- -	- -	750	+750
Unobligated balance brought forward	- -	-35	-35	- -
Unobligated balance carried forward	35	35	- -	-35
Total available or estimate	26,035	- -	55,300	55,300

As of June 30, 1972, 80 acres were acquired on the Sierra National Forest in California, at a cost of $26,000. It is estimated that 153 acres will be acquired in 1974.

Proposed New Language Under Existing Legislation

For acquisition of lands in accordance with the Act of December 4, 1967 (16 U.S.C. 484a), to remain available until expended, $55,300, to be derived from deposits by public school authorities under said Act.

Explanation of New Language

This new language is necessary to make provision for financing the purchase of certain lands in Montana and California.

Present legislation stipulates that deposits made by public school districts or public school authorities to provide for cash equalization of certain land exchanges are, when appropriated, used to acquire similar lands suitable for National Forest System purposes in the same State as the National Forest lands conveyed in the exchange.

The following deposits have been made:

Fiscal Year	State	Amount
1970	Montana	$750
1971	California	9,800
1972	California	44,750

LAND ACQUISITION

Mrs. HANSEN. You are requesting an increase of $14,000 for "Acquisition of lands for national forests, special acts." What is involved in this request?

Mr. MCROREY. It is a request for a purchase of critical watershed lands, primarily.

Mrs. HANSEN. You are not going to buy much for $14,000.

Mr. MCROREY. These are particular tracts of land within the Angeles Forest.

Mrs. HANSEN. You are going to buy one tract?

Mr. MCROREY. This is available now, and we propose to acquire it.

Mrs. HANSEN. Insert some details in the record for us.

[The information follows:]

The increase of $14,000 in special act funding will be used to complete the acquisition of a total property of 160 acres, part of which, 135 acres, was acquired from previous years' appropriations. The property is a key watershed tract within the Angeles National Forest.

ASSISTANCE TO STATES FOR TREE PLANTING

Mrs. HANSEN. Insert justification pages 140 and 141 in the record.

[The pages follow:]

ASSISTANCE TO STATES FOR TREE PLANTING

Appropriation Act, 1972	$1,028,000
Appropriation Act, 1973	1,020,000
Budget estimate, 1974	1,020,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Assistance to States for tree planting	$1,012,596	$1,118,830	$1,035,000	-$83,830
Unobligated balance brought forward	-98,426	-113,830	-15,000	+98,830
Unobligated balance carried forward	113,830	15,000	- -	-15,000
Appropriation or estimate	1,028,000	1,020,000	1,020,000	- -

The program authorized under Section 401 of the Agricultural Act of 1956 (16 USC 568e) provides assistance to States in their forestation and tree improvement programs. Needed rehabilitation on State and county forest lands has resulted from this program.

New and expanded tree improvement programs which are partially or totally funded under this program are underway in 41 States. Nationally, the States expend three times more than they receive under this program for tree improvement.

Assistance will emphasize seed orchard establishment aimed at the production of improved genetic quality tree seed. Reforestation work will be carried out to restore low-yielding or non-productive forest lands to fuller production of commercial wood. In addition, attending benefits include:

(1) Erosion control
(2) Wildlife habitat improvement
(3) Expanded recreational land use potentials
(4) Environmental enhancement

Examples of Recent Accomplishments

Superior cottonwood cuttings made available. A special project under this program was set up to rapidly increase foundation stock of a superior strain of cottonwood. Results of tests showed that this superior strain of cottonwood can grow 20 percent more wood per acre than ordinary cottonwood. The foundation stock was made available to States in the lower Mississippi Valley area where the growing material is available to the public for planting on an estimated 1,000 acres during the 1972-73 season.

New planting techniques on State lands. A large reforestation project is being done in Washington so the land will be most productive with full consideration for enhancing and maintaining environmental quality. Washington State Department of Natural Resources is harvesting old growth spruce-hemlock on a 98,000 acre tract. About 5,500 acres are scheduled for planting during the 1972-73 season. This tract is an excellent demonstration of the best known silviculture practices. Container-grown seedlings are being planted, streams are protected, and yarding techniques, road layout and other measures are used to protect watershed values. Pre-commercial thinning is being done where needed and some of the area has been fertilized since recent research has shown that much gain can be expected from fertilization.

GEOGRAPHIC BREAKDOWN OF APPROPRIATION

Assistance to States for Tree Planting

State	1972 (actual)	1973 (estimate)	1974 (estimate)
Alabama	$19,000	$22,000	$24,000
Arkansas	10,000	10,000	10,000
California	18,000	18,000	18,000
Colorado	5,000	5,000	5,000
Connecticut	4,000	4,000	4,000
Florida	29,500	30,000	30,000
Georgia	19,000	20,000	20,000
Hawaii	35,000	35,000	35,000
Idaho	10,000	10,000	10,000
Illinois	8,000	8,000	8,000
Indiana	12,400	12,500	12,500
Iowa	7,000	7,000	7,000
Kansas	10,000	10,000	12,000
Kentucky	12,000	12,000	12,000
Louisiana	16,500	16,500	16,500
Maine	15,000	15,000	15,000
Maryland	5,000	5,000	5,000
Michigan	30,000	30,000	30,000
Minnesota	75,000	73,000	50,000
Mississippi	11,500	12,000	14,500
Missouri	26,000	28,000	28,000
Montana	14,500	14,000	14,000
New Hampshire	10,000	10,000	10,000
New Jersey	12,000	12,000	12,000
New York	30,000	30,000	30,000
North Carolina	12,000	13,000	14,000
Ohio	14,000	14,000	14,000
Oklahoma	10,000	10,000	10,000
Oregon	80,000	78,000	60,000
Pennsylvania	24,000	29,000	29,000
South Carolina	22,000	22,000	22,000
Tennessee	11,100	11,500	14,000
Texas	14,900	15,000	15,000
Vermont	5,500	5,500	5,500
Virginia	23,000	23,000	23,000
Washington	80,000	76,000	60,000
West Virginia	9,600	10,000	10,000
Wisconsin	20,000	20,000	20,000
Wyoming	10,000	10,000	10,000
Special project--seed harvester	- -	- -	2,000
Special project--Cottonwood increase	8,000	- -	- -
Total to States	788,500	786,000	741,000
Forest Service administration and technical assistance	239,500	234,000	279,000
Total	1,028,000	1,020,000	1,020,000

Mrs. HANSEN. Insert page 142 of the justifications in the record at this point.

[Page 142 follows:]

CONSTRUCTION AND OPERATION OF RECREATION FACILITIES

Appropriation Act, 1972	- -
Appropriation Act, 1973	- -
Budget estimate, 1974	$3,546,000
Increase	+3,546,000

PROJECT STATEMENT

Project	1973	1974 estimate	Increase or decrease
Recreation construction, administration, operation, and maintenance	- -	$3,546,000	+$3,546,000

These are funds proposed for appropriation from admission and user fees collected under the Land and Water Conservation Fund Act of 1965, as amended by PL 92-347.

They will be used:

(1) To issue the Golden Age passport (free annual entrance permit to persons 62 years of age or older) within limits established by PL 92-347, July 11, 1972.

(2) To bring facilities on the 3,053 fee-designated sites on National Forest lands to an acceptable standard of repair for visitor use, safety, and resource protection.

(3) For increased efforts in law and regulation enforcement to assure visitor safety and to reduce the vandalism which causes more than $2 million damage annually. Past and projected receipts are shown in Figure 40.

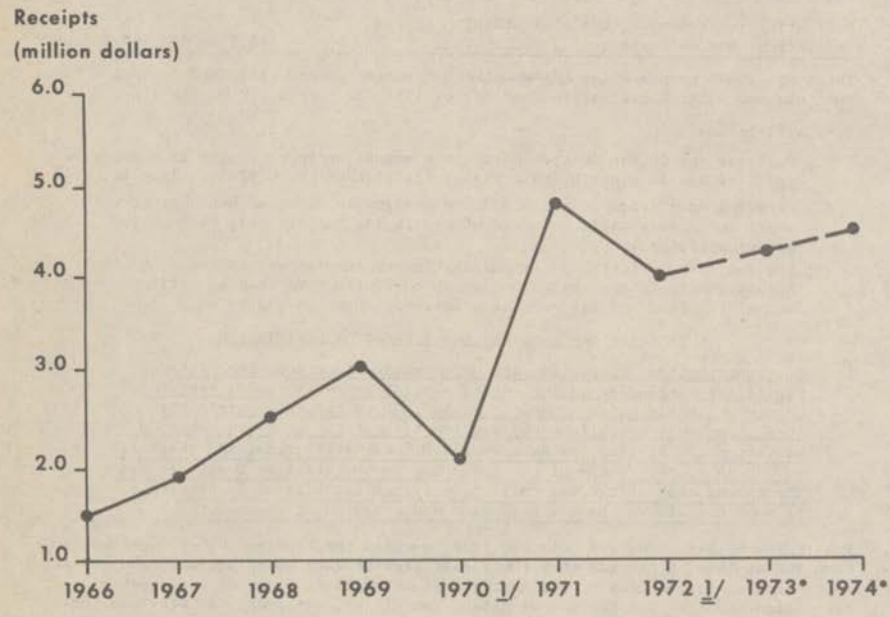
Proposed New Language Under Existing Legislation

For construction, operation, and maintenance of outdoor recreation facilities, including collection of special recreation use fees, to remain available until expended, $3,546,000 to be derived from the special account established by section 4(e) of the Land and Water Conservation Act of 1965, as amended (16 U.S.C. 460l): Provided, That not more than 40 per centum of the foregoing amount shall be available for the enhancement of the fee collection system established by section 4 of such Act, including the promotion and enforcement thereof.

Public Law 92-347, approved July 11, 1972, amended the Land and Water Conservation Fund Act of 1965 to provide that the Forest Service (and other bureaus) may collect recreation admission fees at designated National Recreation Areas and "special recreation use fees for the use of sites, facilities, equipment, or services furnished at Federal expense." After distribution to the States and Counties and Roads and Trails for States appropriation as required under the Acts of 5/23/08, 7/22/37, and 3/14/13, the remaining fees (approximately 65 percent of total collected) are to be deposited into a "special account in the Treasury of the United States to be administered in conjunction with, but separate from, the revenues in the Land and Water Conservation Fund. Revenues in the special account shall be available for appropriation without prejudice to appropriations from other sources for the same purposes, for any authorized outdoor recreation function of the agency by which the fees were collected." The proposed language provides for a new special appropriation account to implement this provision of the Act.

The 1974 estimate includes receipts from January 1, 1972, under the provisions of Public Law 90-401, as well as estimated receipts to be collected in 1973 under Public Law 92-347.

Admission and User Receipts From National Forest Recreation Sites



* Projected

1/ Fee provision of L&WCF Act expired for a portion of the year causing loss of receipts.

SOURCE OF FUNDS REQUESTED

Mrs. HANSEN. You are requesting $3.546 million for "Construction and operation of recreation facilities." This is a new activity; please provide us with the details.

Mr. HOUSLEY. This money will be used, as we mentioned earlier in the hearing on this, to supplement the operation and maintenance and some of the rehabilitation work on facilities. It will be available for both of those purposes.

Mr. MCGUIRE. The law passed last year amended the Land and Water Conservation Fund Act of 1965 to provide that the Forest Service can collect fees at designated recreation areas. After the 25-percent payments are made to the States, and the 10 percent for roads is taken out, the remaining 65 can be deposited into a special account in Treasury.

Mrs. HANSEN. Do you feel this money will increase sales of user tickets?

Mr. HOUSLEY. We think that trend will rise.

Mrs. HANSEN. No more than 40 percent of these funds can be used for the enhancement of the fee collection system. How would you define "enhancement"?

Mr. HOUSLEY. This would have to do with——

Mrs. HANSEN. Television advertising?

Mr. HOUSLEY. Possibly, but more likely the facilities and personnel for manning the campground entrances or enforcing the fee system user charges.

SCIENTIFIC ACTIVITIES OVERSEAS

Mrs. HANSEN. Please insert justification pages 143 and 144 in the record at this point.

(The pages follow:)

SCIENTIFIC ACTIVITIES OVERSEAS (SPECIAL FOREIGN CURRENCY PROGRAM)

Appropriation Act, 1972	- -
Appropriation Act, 1973	- -
Budget estimate, 1974	$1,000,000
Increase	+1,000,000

PROJECT STATEMENT

Project	1973	1974 estimate	Increase or decrease
Scientific activities overseas	- -	$1,000,000	+$1,000,000

This research program relates directly to the goal of helping the Nation meet its requirements for timber while meeting environmental quality standards. It is carried out through funding with foreign currencies which the Treasury Department determines is in excess of the normal requirements of the United States. Research is carried on through agreements negotiated with research institutions and organizations in foreign countries and directly backstops the ongoing domestic research program aimed at solving forest resource management problems. This research capability represents a major supplement to the domestic Forest Service research program.

The close coordination of the special foreign currency research program and domestic research activities would make possible a comprehensive international, multilateral effort in forestry research.

The proposed funding of $1 million would be used to intensify research in various aspects of forest resource management. Special emphasis will be placed on:

(1) Plant physiology and genetics to provide improved strains of forest trees with faster growth rates and more insect and disease resistance.

(2) Use of municipal and industrial wastes in fertilization of forest stands.

(3) Fate of applied fertilizers in different forest and range ecosystems.

(4) Effects of tree fertilization on wood quality.

(5) Influences of ditching and fertilization on the quantity and quality of ground and surface water.

(6) Effects of selected parasites and predators on populations of destructive forest and range insect pests.

(7) Effects of air and water pollutants on the ecology of plant and animal communities.

(8) Relationship between improved timber harvesting machinery or methods and site damage.

Proposed New Language Under Existing Legislation

For payments in foreign currencies owed to or owned by the United States for forestry research and other functions related thereto authorized by section 104(b)(3) of the Agricultural Trade Development and Assistance Act of 1954, as amended (7 U.S.C. 1704(b) (3)), $1,000,000, to remain available until expended: Provided, That this appropriation shall be available, in addition to other appropriations for these purposes, for payments in the foregoing currencies; Provided further, That funds appropriated herein shall be used for payments in such foreign currencies as the Department determines are needed and can be used most effectively to carry out the purposes of this paragraph.

The 1974 Budget estimate for the Forest Service provides $1 million for a special foreign currency research program on forestry projects. In 1973 and prior years such projects were funded by the special foreign currency appropriation of the Agricultural Research Service.

To avoid establishing a separate new administration for this overseas research the administrative costs of the forestry research program will continue to be funded in the Agricultural Research Service account.

The translation of foreign research documents currently carried out by the National Science Foundation under contract will be funded for agricultural research documents by ARS and for forestry research documents by the Forest Service.

The above language, therefore, provides funds to the Forest Service for making agreements for forestry research as authorized under Section 104(b) (3) of the Agricultural Trade Development and Assistance Act of 1954, as amended (7 U.S.C. 1704(b)(3)).

Mrs. HANSEN. $1 million is budgeted for "Scientific activities overseas," a special foreign currency program. This again is a new account. Give us the details.

You did tell us yesterday, I believe, that you were contemplating work in Poland, Yugoslavia, India——

Mr. ARNOLD. Poland, a little bit in Yugoslavia, because I believe the funds are about gone there, a great deal in India and Pakistan.

Mrs. Hansen, if I may show it, I have a chart here. We have been using the foreign currency funds as appropriated to the Agricultural Research Service since 1965. So this is not a new program.

Mrs. HANSEN. But it is the first time you identified it in your budget.

Mr. ARNOLD. That is right. We did it for several reasons.

We found we can supplement our research with critical studies in foreign countries. I will give you some examples in just a minute.

Also, we have identified between $1 million and $3 million a year in this research that is appropriate for the Forest Service research mission. We thought it now best to have all of our forestry research come before this committee. Those are the reasons that we thought we should request this funding to come to us rather than to have it come through the Agricultural Research Service.

We have actually had a total of about $5 million. I could give you the results of all the work, but I will give you four examples and any more you might want.

In Poland we have had a study of the genetics of Norway spruce. It is largely planted for Christmas trees here. That research has helped to improve tree planting here, particularly in locating seed, site, climate, and soils with reference to seed source.

In Spain, the effect of trace elements in fertilizers and soils on growth of Monterey pine was studied. This work has direct application worldwide. It has helped us to study the effect of trace elements on other trees here, also.

We use the foreign currency research quite often to develop new approaches, or to develop guides that we can go ahead with.

We have had, in Yugoslavia, a study on the gypsy moth—the parasites, predators, viruses that affect gypsy moth there. We are making a direct application of that research into our gypsy moth program.

Mrs. HANSEN. Are the Czechoslovakian, Yugoslavian, and Polish people actually doing the research?

Mr. ARNOLD. Yes, the scientists there must do it themselves.

Mrs. HANSEN. Who does the translation?

Mr. ARNOLD. Most of the reports come in English, though not all. Part of this program allows the translation of the reports; part of the currencies can be used for translations.

Mrs. HANSEN. I understand that. But what type? Do you use one of their people to do the translation?

Mr. ARNOLD. It is done in both places; sometimes over there, sometimes through the regular State Department facilities here, where they are translated.

We have a program in the translation of international reports in science.

We see a particular opportunity at this point in time where we have a backlog of about $2 million worth of proposals. They are of particular interest in the fields of fertilization and nutrient recycling.

Mrs. HANSEN. I am glad they are interested because we are cutting our research program.

Mr. ARNOLD. We plan to make use of their work to supplement our research.

Genetics is very important. There is a blue pine in the Himalayan Mountains that appears to be resistant to all rusts. We have a proposal to begin breeding that into our pine trees to see if we can breed rust resistance into pines, which would be a great accomplishment.

ADMINISTRATIVE COSTS

Mrs. HANSEN. I notice the administrative cost will still continue to be funded through ARS.

Mr. ARNOLD. Yes, ma'am. We supply about $70,000 as our part of the administrative costs to the Agricultural Research Service. We don't plan to duplicate the administration of this work.

YOUTH CONSERVATION CORPS

Mrs. HANSEN. Please insert justification pages 145 and 146 in the record.

(The pages follow:)

YOUTH CONSERVATION CORPS

NOTE: For budgetary purposes, the entire appropriation is shown under the Forest Service. However, one-half of the appropriation each year is transferred to the Department of the Interior.

Appropriation Act, 1972	$3,500,000
Appropriation Act, 1973	3,500,000
Budget estimate, 1974	10,000,000
Increase	+6,500,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Youth Conservation Corps	$2,757,525	$3,500,000	$10,037,000	+$6,537,000
Unobligated balance brought forward	-1,354,906	-2,097,381	-2,097,381	- -
Unobligated balance carried forward	2,097,381	2,097,381	2,060,381	-37,000
Appropriation or estimate 1/	3,500,000	3,500,000	10,000,000	+6,500,000

1/ Includes allocation to Department of the Interior: 1972 and 1973, $1,750,000; 1974, $5,000,000.

An increase of $6.5 million is proposed. These funds will be used for:

(1) Increasing total number of youth participating, with emphasis on providing more opportunities for urban and disadvantaged youth.

(2) Awarding grants to States. Preference will be given to States with fewer Federal lands assuming competing applications are otherwise comparable. Preference will also be given to State applications where no more than 50 percent of the cost of a pilot project is to be financed by Federal grant.

The Act of August 13, 1970 (84 Stat. 794), as amended by Public Law 92-597, authorizes continuation of the Youth Conservation Corps Program on Federal lands, and establishes a pilot grant program to assist States in establishing YCC projects on non-Federal public lands. The Departments of the Interior and Agriculture share the program equally.

The primary purposes of the program are to:

(1) Provide gainful employment to 15 through 18 year old youths representing all segments of society.

(2) Further development and maintenance of the natural resources of the United States by the youth, upon whom will fall the ultimate responsibility for maintaining and managing these resources for the American people.

(3) Develop an understanding and appreciation in Corps participants of the Nation's natural environment and heritage.

This integrated conservation work, learn, and employment program is designed to accomplish needed conservation work, provide employment and income to youth, teach proper work habits, encourage greater appreciation of the management of natural resources, and increase individual pride and dignity. Conservation work-learn projects on public lands include recreation facilities maintenance and construction, range and wildlife habitat improvement, timber stand improvement, trail improvement and construction, and visitor information services. Recruiting guidelines have been established to meet the mandate of the Congress that there be a representative mix of youth from all economic, social, and racial backgrounds.

Evaluation of the Federal pilot YCC programs in 1971 and 1972 by Department personnel and the University of Michigan's Institute for Social Research indicate that the purposes of the Act were achieved. With $3.5 million provided for the

1972 summer program, the 3,495 young men and women employed accomplished conservation work appraised at a value of $2.6 million. Ninety-four percent were satisfied with the program, and 99 percent thought it was worthwhile. Only four percent of the youth were unable to complete the summer program. Environmental education showed significant gains.

Proposed Change in Language

Change in language is proposed as follows. New language is underscored and deleted matter is enclosed in brackets.

For expenses necessary to carry out the provisions of the Act of August 13, 1970 [(Public Law 91-378), establishing the Youth Conservation Corps, $3,500,000] as amended by Public Law 92-597, $_____, to remain available until [expended] the end of the fiscal year following the fiscal year for which appropriated: Provided, That .....

Change 1 is necessary to reflect reference to the amendment to the Act of August 13, 1970.

Change 2 is proposed to include in the language the provisions of Public Law 92-597. The August 13, 1970, Youth Conservation Corps Act set up a three-year pilot program with the proviso that the funds appropriated be made available until expended. The October 27, 1972, amendment provides that the funds be available for expenditure for two years.

LEVEL OF FUNDING REQUESTED

Mrs. HANSEN. You are requesting an increase of $6.5 million for the Youth Conservation Corps for a total of $10 million. The authorization for this program is $60 million. Why are you requesting only one-sixth of the authorization?

Mr. DEINEMA. This is another case of national priorities. How much you can adequately start in one particular area must be related to another area.

Mrs. HANSEN. This program has probably been one of your most popular programs. It helps orient young people to the outdoors; it gives them an outdoor experience; it takes them off the streets; it gets them interested in America; and gives them some sense of accomplishment.

I looked at a National Park Service program at Mount Rainier where they had rebuilt a trail that had been allowed to go to pieces. That group of young people had done a beautiful job.

Would you place in the record what the Youth Conservation Corps program accomplished for the Forest Service? Also show the areas, the projects, and the dollar value that you would attach if you had to go out and buy this kind of labor for things that would not be done.

Mr. DEINEMA. Yes, ma'am. I would also like to include the Department of the Interior in the figures I present. This is a cooperative program with the Department of the Interior.

Mrs. HANSEN. I know. I visited their installations. What is the average cost per young person in one of our penal institutions per year?

Mr. DEINEMA. I believe it is somewhere around $5,000.

Mrs. HANSEN. You would not take care of very many of those people for $10 million, would you?

Mr. DEINEMA. No, ma'am.

Mrs. HANSEN. Then besides, you have the prospect of having a returning criminal.

Mr. DEINEMA. Yes, ma'am.

Mrs. HANSEN. These young people usually come from city areas. You offer them an opportunity to get outside and have an outdoor experience, to do something creative and constructive. You offer them a chance to acquaint themselves with a world with which they are not too familar, but also giving the Government something for its money. It seems to me the more money that we spend on Youth Conservation Corps activity, the more we might succeed in cutting down crime and other things.

Mr. DEINEMA. I certainly agree with you.

Mrs. HANSEN. Insert in the record some details.

Mr. DEINEMA. Yes, ma'am.

(The information follows:)

YOUTH CONSERVATION CORPS PROJECTS
1972

LOCATION	NUMBER OF YOUTH PARTICIPATING
ALABAMA	
Talladega National Forest	51
Wheeler National Wildlife Refuge	21
ALASKA	
Chugach National Forest	24
Fairbanks District Office Bureau Land Management	20
Mount Edgecumbe School Bureau Indian Affairs	21
ARIZONA	
Coconino National Forest	32
Grand Canyon National Park	28
Nazlini Board School Bureau Indian Affairs	42
ARKANSAS	
Ouachita National Forest	26
CALIFORNIA	
Cleveland National Forest	44
Los Padres National Forest	34
Shasta-Trinity National Forest	40
Sierra National Forest	49
COLORADO	
Pike National Forest	25
Grand Junction District Office Bureau Land Management	26
Colorado State University Bureau of Reclamation	30
Rocky Mountain National Park	30

DISTRICT OF COLUMBIA	
National Capital Parks	40
DELAWARE	
Bombay Hook National Wildlife Refuge	20
FLORIDA	
National Forest in Florida	24
Everglades National Park	31
GEORGIA	
Chattahoochee National Forest	24
Piedmont National Wildlife Refuge	21
HAWAII	
Hawaii Volcanoes National Park	30
IDAHO	
Boise National Forest	32
ILLINOIS	
Crab Orchard National Wildlife Refuge	40
Shawnee National Forest	52
INDIANA	
Hoosier National Forest	31
IOWA	
Fairport National Fish Hatchery	15
KANSAS	
Fort Hays Kansas State College Bureau of Reclamation	30
KENTUCKY	
Daniel Boone National Forest	24

LOUISIANA	
Kisatchie National Forest	26
MAINE	
Acadia National Park	25
Moosehorn National Wildlife Refuge	42
MARYLAND	
Catoctin Mountain Park National Park Service	47
MASSACHUSETTS	
Berkshire Trout Hatchery	20
Parker River National Wildlife Refuge	20
MICHIGAN	
Hiawatha National Forest	72
Ottawa National Forest	60
MINNESOTA	
Chippewa National Forest	101
Sherburne National Wildlife Refuge	20
MISSISSIPPI	
National Forests in Mississippi	24
Noxubee National Wildlife Refuge	21
MISSOURI	
Mark Twain National Forest	71
MONTANA	
Flathead National Forest	16
Lewis and Clark National Forest	21
Lolo National Forest	24
Fort Belknap Agency Bureau Indian Affairs	15
Flathead National Forest	6

NEBRASKA

Nebraska National Forest 24

McCook Junior College
Bureau of Reclamation 30

NEVADA

Carson City District Office
Bureau Land Management 24

Desert National Wildlife Range
Bureau Sports Fisheries & Wildlife 22

NEW HAMPSHIRE

White Mountain National Forest 27

NEW JERSEY

Brigantine National Wildlife Refuge 24

NEW MEXICO

Continental Divide Training Center
Forest Service 50

Las Cruces District Office
Bureau Land Management 20

NEW YORK

Iroquois National Wildlife 14

Montezuma National Wildlife Refuge 15

NORTH CAROLINA

Pisgah National Forest 24

Cherokee Indian Agency
Bureau Indian Affairs 32

NORTH DAKOTA

Custer National Forest 12

Standing Rock Indian Reservation
Bureau Indian Affairs 39

OHIO

Wayne National Forest 71

Hebron National Fish Hatchery 24

OKLAHOMA

Jones Academy
Bureau Indian Affairs 30

OREGON

Ochoco National Forest 56

Salem District Office
Bureau Land Management 21

PENNSYLVANIA

Delaware Water Gap National Rec. Area
National Park Service 30

Gettysburg National Military Park
National Park Service 20

Lamar National Fish Hatchery 26

SOUTH CAROLINA

Francis Marion National Forest 36

SOUTH DAKOTA

Black Hills National Forest 24

South Dakota Resource Area
Bureau Land Management 20

TENNESSEE

Cherokee National Forest 25

Great Smokey Mountains National Park 42

TEXAS

National Forests in Texas 32

Laguna Atascosa National Wildlife Refuge 20

Uvalde National Fish Hatchery 22

UTAH	
Wasatch National Forest	52
Opportunities for Youth Inc. Bureau of Reclamation	44
Weber State College Bureau of Reclamation	43
VERMONT	
Green Mountain National Forest	63
VIRGINIA	
Jefferson National Forest	46
WASHINGTON	
Gifford Pinchot National Forest	24
Snoqualmie National Forest	73
Big Bend Community College Bureau of Reclamation	30
Olympic National Park	24
Mount Rainier National Park	50
WEST VIRGINIA	
Monongahela National Forest	92
Harpers Ferry National Historical Park	30
WISCONSIN	
Chequamegon National Forest	96
Nicolet National Forest	71
WYOMING	
Teton National Forest	26
National Elk Wildlife Refuge	23
AMERICAN SAMOA	
Department of Education Office of Territorial Affairs	264
GRAND TOTAL	3,495

Youth Conservation Corps

Summer of 1972

Value of work:	
Soil and water management	$291,000
Timber management	174,000
Recreation development and maintenance	646,000
Visitor Information Service and historic restoration	208,000
Range management	121,000
Wildlife management	240,000
Engineering and construction	555,000
Fire management	27,000
Other administration	440,000
	2,702,000

Significant accomplishments:	
Soil erosion control	686 acres
Tree planting	553 acres
Timber stand improvement	2,306 acres
Maintenance of recreation family units	3,637 each
Visitor information and guide assistance	54,505 visitors
Range revegetation	3,195 acres
Fish habitat improvement	403 acres
Wildlife habitat improvement	4,424 acres
Trail construction	83 miles
Trail maintenance	447 miles
Brush disposal	240 acres

Additional accomplishments in terms of benefit to youth as reported by the Institute for Social Research, University of Michigan, and agency evaluators include:

1. Of the participating youth, 94 percent were satisfied with the program and 98.6 percent felt YCC was worthwhile.

2. Environmental knowledge gain was approximately equivalent to the learning resulting from an additional year of school.

3. Only four percent of the youths did not complete the program.

4. The racial and economic mix of participants in the program was representative of American Society.

Length of programs:

Programs varied in length from four to ten weeks, with the majority of the projects operating eight-week programs.

Mrs. HANSEN. Now you give me the answer on why you are requesting only $10 million, which is one-sixth of the authorization.

Mr. DEINEMA. Chief McGuire testified earlier that we could use more than $10 million.

ADEQUATE LEVEL OF FUNDING

Mrs. HANSEN. Could you adequately use another $5 million or $10 million?

Mr. DEINEMA. We will provide that.

Mrs. HANSEN. I realize there are probably not facilities enough to handle the entire program authorization, but give me an indication of what level of program you can handle.

Mr. DEINEMA. Yes, ma'am.

Mr. MCGUIRE. We can do that.

[The information follows:]

INTERIOR-AGRICULTURE CAPABILITY FOR AN EXPANDED PROGRAM

The Department of the Interior and the Forest Service, USDA, have identified, as a result of a field survey compiled in January 1973, a capability to accommodate approximately 21,000 youth on 550 projects on Federal lands. This capability assumes financing of approximately $30 million for the Federal portion of the program, the availability of adequate personnel and outlay ceilings, and receipt of funds at least 6 months in advance of a camp opening to provide sufficient time to rehabilitate existing facilities and to prepare new camps.

YOUTH PROGRAMS

Mr. MCGUIRE. There are other youth programs that are more specifically directed at urban youth or low-income youth.

Mrs. HANSEN. I understand.

Mr. MCGUIRE. This program is urban and rural, high income, low income, boys and girls.

One of the advantages of this program is that we have tried to keep the groups fairly small. We don't want to expand so rapidly that we have 100-person camps or something of that sort.

Mrs. HANSEN. That is why I want the answers.

DEFERMENT OF TRAIL CONSTRUCTION

We had a telephone call from Mr. Walter May at Sandpoint, Idaho. He says there are no more funds for trail and bridge construction. He is sending us a letter. He has been engaged in this work for several years and will be out of work if there are no more funds.

Mr. MCGUIRE. We have been hearing from some of these trail contractors. There are quite a few of them.

Mr. MCROREY. This, of course, is due to the fact that in the budget proposal we now have for roads, which is oriented towards the continuing production of timber and the shifting of our costs for timber roads to the timber industry, we are deferring other projects. We have deferred trails work in fiscal year 1974. In this budget there are no specific funds for trail construction.

We can respond to him that we have no money for trails in our budget.

Mrs. HANSEN. He has discovered that. That is his problem. So we are just moving him from a payroll over to unemployment or welfare. Nobody seems to have a very good answer.

OTHER JUSTIFICATION MATERIAL

Please insert justification pages 147 to 168 in the record.
[The pages follow:]

ACQUISITION OF LANDS FOR UINTA NATIONAL FOREST

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate
Acquisition of lands for Uinta National Forest	$105	$96,659	- -
Unobligated balance brought forward	-96,764	-96,659	- -
Unobligated balance carried forward	96,659	- -	- -
Appropriation or estimate	- -	- -	- -

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.

As of June 30, 1972, 8,847 acres have been acquired at a cost of $203,341.

ACQUISITION OF LANDS FOR WASATCH NATIONAL FOREST

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate
Acquisition of lands for Wasatch National Forest	- -	$52,593	- -
Unobligated balance brought forward	-$52,593	-52,593	- -
Unobligated balance carried forward	52,593	- -	- -
Appropriation 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 to aid in control of floods and to reduce soil erosion. The full amount of this authorization has been appropriated with the funds remaining available until expended.

As of June 30, 1972, approximately 12,741 acres had been approved for purchase under this authority. It is expected that the remaining lands will be acquired by the end of fiscal year 1973.

ACQUISITION OF LANDS FOR SUPERIOR NATIONAL FOREST

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate
Acquisition of lands for Superior National Forest	$25	$5,190	- -
Unobligated balance brought forward	-5,215	-5,190	- -
Unobligated balance carried forward	5,190	- -	- -
Appropriation 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.

This purchase program is in its final stages. The remaining balance of $5,190 is held in reserve principally for possible excess awards for purchase cases currently in condemnation proceedings.

ACQUISITION OF LANDS FOR CACHE NATIONAL FOREST

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate
Acquisition of lands for Cache National Forest	$25	$10,781	- -
Unobligated balance brought forward	-10,806	-10,781	- -
Unobligated balance carried forward	10,781		
Appropriation 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 under the appropriation, Acquisition of lands for national forests, special acts.

ADMINISTRATIVE PROVISIONS

Proposed Changes in Language

Changes in language are proposed as follows. New language is underscored and deleted matter is enclosed in brackets.

Appropriations to the Forest Service for the current fiscal year shall be available for: (a) purchase of not to exceed [two hundred seventy-four] three hundred eight passenger motor vehicles of which [one hundred fifty-two] two hundred sixty-two shall be for replacement only, and ..... to research acquisition at Madison, Wisconsin; [and] (g) expenses incident to acquisition by donation ..... (7 U.S.C. 428a[.]; and (h) not to exceed $100,000 for expenses pursuant to the Volunteers in the National Forests Act of 1972 (16 U.S.C. 558a-558d, 558a note).

Changes 1 and 2 would provide authority to purchase 308 passenger motor vehicles of which 262 will be replacements.

PASSENGER CARRYING VEHICLES

Replacements

During fiscal year 1974, it is proposed that the Forest Service replace 262 passenger carrying vehicles. Of these, 257 will meet replacement standards and five will require replacement because of accidents or excessive maintenance costs.

Dependability of passenger carrying 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-aged 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 carrying vehicles 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 recognize that some units will be retired under the age standards 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 passenger carrying 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 pools.

Additions

It is proposed that the Forest Service purchase 46 additional passenger carrying vehicles to replace pickups, carryalls and sedan deliveries. Since sedans and station wagons are better suited to our needs and are less costly to operate, we prefer replacement with PCV's.

Sedans or station wagons cost less to operate and maintain than a truck. During fiscal year 1973, the Forest Service is replacing 119 light trucks, such as carryalls, pickups, panels, and sedan delivery trucks, with sedans and station wagons. The total estimated cost savings is $23,800 per year. The substitution of 46 passenger carrying vehicles for light trucks in fiscal year 1974 would result in an additional savings of about $9,200 each year.

The Forest Service analyzes current work plans and program in determining its overall passenger carrying vehicle 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.

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.

Number of Vehicles

The Forest Service had a net active fleet of 930 passenger carrying vehicles at the start of fiscal year 1973. It will add 119 units during the year, making a total of 1,049 units available at the start of fiscal year 1974, excluding possible transfers to other agencies. It is proposed that the total number of passenger carrying vehicles be increased to 1,095 by the end of fiscal year 1974.

As of June 30, 1972, the age and mileage classes of the passenger carrying vehicles on hand, exclusive of 26 buses, were:

Age Data

Year	No. of Vehicles
1967 and older	164
1968	238
1969	203
1970	160
1971	82
1972	43
Total	890*

Mileage Data

Miles	No. of Vehicles
60,000 and over	206
50,000 to 59,999	159
40,000 to 49,999	154
30,000 to 39,999	134
20,000 to 29,999	109
10,000 to 19,999	89
0 to 9,999	39
Total	890*

* Excludes 14 vehicles on order, but not received at this time.

Use of Vehicles

Passenger carrying 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 carrying 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 574 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 Regional and Forest 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.

AIRCRAFT

Replacement of Aircraft

The 1974 estimates propose replacement of four aircraft by purchase and replacements with more suitable aircraft by transfer from other agencies as available. The Forest Service currently has 57 aircraft:

6	Single-engine reconnaissance and transport airplanes
25	Light twin-engine reconnaissance and transport airplanes
17	Medium and heavy cargo and transport airplanes (9 medium, 8 heavy)
7	T34-B lead planes (2-place scout)
1	Helicopter
1	Multi-engine airplane converted to an air tanker
*57	

*Excludes 3 aircraft on hand awaiting disposal, as well as a number of airplanes acquired from military surplus which are being inspected for possible renovation and use. Any such planes subsequently overhauled and put into use may replace some of the airplanes included in the above table.

The helicopter is used for experimental development of techniques and equipment, for direct tactical suppression of forest fires and in training Forest Service personnel in tactical use of helicopters.

The T34-B lead airplanes are primarily single-purpose military model aircraft used by air tanker bosses to direct and control the dropping of retardants on forest fires by contract air tankers. These are to be replaced with light twins to provide two-engine safety.

One light twin-engine airplane is modified, equipped, and used primarily for fire mapping with infrared equipment in low visibility of smoke and at night.

The multi-engine airplane obtained from the military was converted to air tanker configuration for test and evaluation project to determine if suitable for dropping retardants. On project completion it will be used for training purposes.

The multipurpose reconnaissance and transport airplanes are used primarily to transport smokejumpers, firefighters, administrative personnel, equipment and supplies to remote and inaccessible areas where commercial services are inadequate or not available for protection and suppression of forest fires. Other use is 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 medium twin-engine is modified, equipped and used primarily for high altitude fire detection usually at night with infrared equipment.

The replacements by purchase will be primarily light and medium twin-engine airplanes. They will be utility airplanes that may be used for several purposes but primarily for providing essential service in dropping smokejumpers and paracargo and lead planes directing contract air tankers. The airplanes will be new, standard manufacture airplanes to upgrade with greater efficiency and utility some of the old military surplus aircraft currently providing essential services. These replacements will provide more effective operations with greater safety margin. The Forest Service aircraft are operated to a large extent over rough, mountainous terrain in turbulent air conditions, and from unimproved landing fields.

Four heavy twin-engine transport airplanes are leased and operated for dual purpose in transporting firefighting crews or dropping smokejumpers. Three leased light twins fill additional requirements for lead planes in directing air tanker retardant attack on fires.

The services of suitable airplanes to perform Forest Service missions are becoming increasingly more difficult to obtain from commercial sources. In most locations only the Forest Service needs the type of flights and they are insufficient in number to warrant furnishing the service. Aviation operators must therefore give first consideration to furnishing services for best revenue. In many instances the aircraft available is not suitable for Forest Service work.

Although a policy does not permit transfer, the Navy Department has made available twenty-five Lockheed SP-2E airplanes on loan. This is the make and model the Forest Service tested and determined suitable for dropping retardants on fires. The plan is to have the airplanes converted and operated by qualified commercial aviation firms under government furnished equipment contract as needed. Two single-engine T-28's on loan from the Navy are used as air tanker lead planes especially where faster speed is needed.

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. The transport type may be obtained and other aircraft currently in use be replaced as newer or more suitable models and types become available from military services as excess property.

Aircraft purchases are financed from either appropriated funds or the Forest Service Working Capital Fund, or a combination of both. Replacement costs of aircraft partially or completely destroyed in a crash accident are financed from program funds in relationship to anticipated use.

Change 3 would provide use of benefiting funds appropriated to the Forest Service to carry out the Volunteers in the National Forests program pursuant to PL 92-300, approved May 18, 1972.

ROADS AND TRAILS FOR STATES, NATIONAL FORESTS FUND

(Permanent appropriation)

Appropriation, 1972	$22,661,542
Appropriation, 1973	33,871,106
Budget estimate, 1974	40,900,000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1973)	+7,028,894

The permanent appropriation of 10 percent 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
(Permanent appropriation)

Appropriation, 1972	$18,008,351
Budget estimate, 1973	18,000,000
Budget estimate, 1974	18,000,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Brush disposal	$16,182,780	$18,328,000	$19,157,000	+$829,000
Unobligated balance brought forward	-17,060,396	-18,885,967	-18,557,967	+328,000
Unobligated balance carried forward	18,885,967	18,557,967	17,400,967	-1,157,000
Appropriation or estimate	18,008,351	18,000,000	18,000,000	- -

Timber cutting normally increases the fire hazard because of dry fuel increase in the form of logging slash. This slash may also:

(1) Impair reforestation.
(2) Contribute to the buildup of insect populations.
(3) Cause damage to stream channels.
(4) Degrade esthetics of the forest environment.

The objective of this program is the disposal of brush and other debris resulting from timber sale operations. When disposal is necessary National Forest timber sale contracts require treatment or deposit of funds for treatment of debris from cutting operations. When economical and expedient the work is performed by the timber purchaser. When not done by the purchaser, it is done by the Government, using deposits 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. Brush disposal may be accomplished in several ways such as crushing, chipping, burning, or extra fire protection through the critical phase of natural disposal. Combinations of these are often used.

In the Eastern Regions, low volume cut per acre, high utilization, and rapid decomposition reduce the slash disposal work necessary. Exceptions occur in sales where a heavy cut per acre is made, such as the jack pine stands of Minnesota. In such areas, slash is crushed and mixed with mineral soil by disking 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, more slash disposal is required on most sale areas of the West. High volumes per acre generally produce heavy slash. Long dry periods with lightning and man-caused fire risk result in extremely hazardous fire potential. The warm, humid conditions necessary for rapid slash deterioration seldom occur. Treatment varies greatly with different methods of cutting, but generally requires some burning to reduce volumes of slash fuels. Slash may be burned in place or piled and burned under varied weather conditions. Fuel arrangements are planned which allow burning at times when smoke dispersal is favorable and will not influence air quality in population areas.

Within regions, slash disposal follows general prescriptions. Individual needs of each sale are planned and appraised prior to advertisement of the sale. The appropriate specific requirements are incorporated into each timber sale contract. In each instance, the method used will require adequate ecological, environmental, and resource protection at the least expense.

FOREST FIRE PREVENTION
(Permanent appropriation)

Appropriation, 1972	$211,071
Budget estimate, 1973	215,000
Budget estimate, 1974	250,000
Increase	+35,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Forest fire prevention	$152,826	$261,000	$275,000	+$14,000
Unobligated balance brought forward	-122,081	-180,326	-134,326	+46,000
Unobligated balance carried forward	180,326	134,326	109,326	-25,000
Appropriation or estimate	211,071	215,000	250,000	+35,000

The Smokey Bear licensing program is an important part of the Cooperative Forest Fire Prevention Campaign, and accomplishes its purpose through dissemination to the public of Smokey Bear's forest fire prevention message on commercial products licensed by the Chief of the Forest Service, and by support of the Smokey Bear Junior Forest Rangers, exhibits, and the Smokey Bear awards program through contribution of fees and royalties by licensees. Among the educational items presently available under this authority are books, games, bookcovers, television shows, Viewmaster reels, litterbags, children's clothing, musical recordings, and exhibits, to name a few. These items carry the forest fire prevention message to millions of Americans each year.

Examples of Recent Accomplishments

(1) Appointment of more than 230,000 Junior Forest Rangers, with each receiving his kit at home in response to his personal card or letter to Smokey Bear Headquarters.

(2) Development of a Smokey Bear float for the 1973 Rose Parade (in cooperation with the Native Sons and Daughters of the Golden West), which will be seen by 100 million TV viewers on two networks.

(3) Display of over 93,600 cards on forest fire prevention in buses and commuter trains in all major metropolitan areas.

(4) Production and distribution of other mass media materials that resulted in the donation of time and space that would have cost a commercial advertiser $31.6 million.

RESTORATION OF FOREST LANDS AND IMPROVEMENTS
(Permanent appropriation)

Appropriation, 1972	$12,220
Budget estimate, 1973	50,000
Budget estimate, 1974	50,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Restoration of forest lands and improvements	$9,030	$50,000	$50,000	- -
Unobligated balance brought forward	-5,588	-8,778	-8,778	- -
Unobligated balance carried forward	8,778	8,778	8,778	- -
Appropriation or estimate	12,220	50,000	50,000	- -

Recoveries from cash bonds or forfeitures under surety bonds by permittees or timber purchasers, who fail to complete performance of improvement, protection, or rehabilitation work required under the permit or timber sale contract, are used to cover the cost to the United States of completing such 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
(Permanent appropriation)

Appropriation, 1972	$259,038
Appropriation, 1973	259,038
Budget estimate, 1974	259,038

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Payment to Minnesota from the National Forests Fund (total available or estimate)	$259,038	$259,038	$259,038	- -

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 from any National Forest receipts not otherwise appropriated 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
(Permanent appropriation)

Appropriation, 1972	$529,502
Budget estimate, 1973	523,750
Budget estimate, 1974	548,750
Increase	+25,000

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Payment to counties (appropriation or estimate)	$529,502	$523,750	$548,750	+$25,000

At the end of each calendar year, 25 percent 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
(Permanent appropriation)

Appropriation, 1972	$69,316
Appropriation, 1973	114,043
Budget estimate, 1974	115,000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1973)	+957

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Payments to school funds (appropriation or estimate)	$69,316	$114,043	$115,000	+$957

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 percent 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 percent 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. Payments in fiscal year 1973 to Arizona were $113,212 and to New Mexico $831.

PAYMENTS TO STATES, NATIONAL FORESTS FUND
(Permanent appropriation)

Appropriation, 1972	$56,648,064
Appropriation, 1973	84,676,129
Budget estimate, 1974	102,012,000
Increase (due to an estimated increase in National Forest receipts in fiscal year 1973)	+17,335,871

PROJECT STATEMENT

Project	1972	1973 estimate	1974 estimate	Increase or decrease
Payments to States (appropriation or estimate)	$56,648,064	$84,676,129	$102,012,000	+$17,335,871

The Act of May 23, 1908, as amended (16 USC 500) requires, with a few exceptions, that 25 percent 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 from the sale of National Forest timber, grazing, special use permits, power, mineral leases, and admission and user fees, before the 25 percent is applied are listed below:

1. Payment to the State of Minnesota covering certain National Forest lands in 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 percent payment to the State of Minnesota is computed.

2. For lands in certain counties in Utah, Nevada, and California, the States receive 25 percent 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

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 (16 USC 579b). 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 following services were provided by the Working Capital Fund in fiscal year 1972:

1. Equipment service.--This service owns, operates, maintains, and replaces approximately 13,500 pieces of common use motor driven and similar equipment. This equipment is rented to a total of 146 administrative units, i.e., National Forests, Experiment Stations and other units, and in some cases to 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. This service operates 74 repair shops.

2. Aircraft service.--This service operates and maintains 57 Forest Service owned aircraft used in fire surveillance and suppression and in other Forest Service programs. The aircraft are based at 16 locations and are rented to National Forests, Experiment Stations, and in some cases to other agencies, at rates which recover the cost of depreciation, operation, maintenance, repair, and improvements in the airworthiness of the aircraft. Aircraft replacement costs are financed from either appropriated funds or the Forest Service Working Capital Fund, or a combination of both. This service operates three aircraft maintenance shops.

3. Supply service.--This service operates the following common services:

   Central Supply.--This service has two locations for procurement, warehousing, and supply of common use items, such as work project tools, provisions, and supplies. Grass seed is procured, stored and issued from two other locations. Issuances and sales are made to National Forests, Experiment Stations, and others at prices which recover cost.

   Photo reproduction.--Six photo reproduction laboratories 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.

   Sign shop.--These include four 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.

   Subsistence.--There are 26 facilities which prepare and serve meals at cost to Forest Service work crews working in remote areas where adequate public restaurant facilities are not available.

   Cribbing.--This facility is located on the Angeles National Forest, California to manufacture special concrete structural material used in embankments for erosion control purposes along access roads in the National Forests. This material is sold to National Forests at prices which recover costs.

4. Nurseries.--This service operates 13 forest tree nurseries and cold storage facilities for storage of tree and seed stock and one seed extractory. Tree seed is procured, cleaned, bagged, and stored in refrigerated facilities. Tree and seed stock is sold to National Forests, States, and other Federal agencies at cost.

Volume of Business for the Various Major Activities of the Working Capital Fund

(In thousands)

	1972 Actual	1973 Estimate	1974 Estimate
Equipment service	$25,663	$26,285	$27,658
Aircraft service	1,192	1,414	1,497
Supply service	2,867	2,461	2,393
Nursery service	3,260	3,523	3,548
Totals	32,982	33,683	35,096

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 is required that expansion is financed by Forest Service regular appropriations and the resulting assets are donated to the fund.

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 Non-Federal Lands. The Act of June 30, 1914 (16 USC 498) authorizes the acceptance of contributions 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 deposits for the protection of non-Federal 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 non-Federal forest land intermingled with Federal ownership on the National Forests. The lands in non-Federal 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 non-Federal 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. 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 duration. 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 Non-Federal Lands. The Act of March 3, 1925, as amended by Section 5, Act of April 24, 1950 (16 USC 572) authorizes the acceptance of deposits for the administration of non-Federal lands. These deposits are made by non-Federal 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 deposits for reforestation of non-Federal lands situated within or near a National Forest. This work is limited to areas of non-Federal 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, 1971	Actual Fiscal Year 1972			Estimate Fiscal Year 1973			Estimate Fiscal Year 1974		
		Funds Received	Obligations	Balance	Funds Received	Obligations	Balance	Funds Received	Obligations	Balance
1. Construction and maintenance of roads and trails	$5,019,255	$7,747,429	$6,076,133	$6,690,551	$7,750,000	$6,535,000	$7,905,551	$7,750,000	$6,160,000	$9,495,551
2. Construction and maintenance of other improvements	655,397	837,030	731,363	761,064	840,000	800,000	801,064	840,000	800,000	841,064
3. Protection on National Forests and adjacent private land:										
(a) Fire	415,546	2,548,471	2,374,129	589,888	2,550,000	2,500,000	639,888	2,550,000	2,500,000	689,888
(b) Other	2,356,820	2,521,934	2,271,191	2,607,563	2,540,000	3,300,000	1,847,563	2,540,000	3,300,000	1,087,563
4. Sale area betterment on National Forest lands (including reforestation)	49,370,430	38,133,374	30,557,357	56,946,447	38,200,000	32,587,000	62,559,447	39,200,000	35,408,000	66,351,447
5. Scaling of timber	229,530	1,259,447	1,242,832	246,145	1,300,000	1,135,000	411,145	1,300,000	1,240,000	471,145
6. Research investigations	251,889	702,611	709,438	245,062	700,000	800,000	145,062	700,000	800,000	45,062
7. Administration of private lands	26,760	81,674	86,715	21,719	80,000	90,000	11,719	80,000	90,000	1,719
8. Reforestation (private lands)	106,884	41,590	33,203	115,271	40,000	50,000	105,271	40,000	50,000	95,271
Total	58,432,511	53,873,560	44,082,361	68,223,710	54,000,000	47,797,000	74,426,710	55,000,000	50,348,000	79,078,710

NOTE: Balances carried forward are due primarily to necessity of deferring work for which funds are deposited until the most practicable time for accomplishment. For instance, funds for sale area betterment are received in advance of timber 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 1972 include refunds to cooperators in the amount of $235,254.

MOTOR VEHICLES

Mrs. HANSEN. Please justify your need for 308 passenger motor vehicles? You say 262 of these are replacement. What is the need for 46 additional vehicles since you are cutting down your personnel and your travel?

Mr. DEINEMA. Madam Chairman, the passenger-carrying vehicles are more efficient to use for one thing and we are replacing pickup trucks with these passenger cars.

Mrs. HANSEN. Since you are cutting down on your travel why do you need 46 additional vehicles?

Mr. DEINEMA. Because of transportation. Our ranger stations and our work projects are in outlying areas and our people have to have some way to get around.

Mrs. HANSEN. How then can you cut down on your travel?

Mr. DEINEMA. It will cost us less to use these passenger-carrying vehicles than it would to use pickup trucks. We may have to use two pickup trucks to transport the same number of people.

Mrs. HANSEN. That is on the replacement. That is fine. But you have 46 additional vehicles.

Mr. DEINEMA. I do not believe, Madam Chairman, that there are any additional vehicles. There are additional passenger-carrying vehicles, but they are replacing pickups.

AIRCRAFT

Mrs. HANSEN. What is the justification for replacement of four aircraft by purchase and replacement?

Mr. MCROREY. Madam Chairman, aircraft become, like any mechanical conveyance, outmoded, obsolete and costly to operate. This is the replacement of existing aircraft with, hopefully, those by transfer from other agencies as they become available.

Mrs. HANSEN. What other agencies?

Mr. MCROREY. Primarily in many instances we look to the Air Force, for example, for acquisition of surplus aircraft.

Mrs. HANSEN. Do those come to you in first-class condition?

Mr. MCROREY. We would not accept them unless they were in first-class condition.

Mrs. HANSEN. How come they are able to part with them then if they are in first-class condition?

Mr. MCROREY. We sometimes have to make some modifications, but essentially aircraft are expensive pieces of equipment, as you well know.

Mrs. HANSEN. I know. I am wondering how they can afford to part with them.

Mr. MCROREY. The military does have surplus equipment.

Mrs. HANSEN. What are the reasons they have so much surplus?

Mr. MCROREY. I am not aware of their reasons for surplus, Madam Chairman.

VOLUNTEERS IN THE NATIONAL FORESTS

Mrs. HANSEN. What is the requirement for your new language regarding volunteers in the national forests?

Mr. DEINEMA. Mr. Campbell will respond.

Mr. CAMPBELL. It is necessary to make that addition to the language to allow us to use our regular funds for the expenses of these volunteers.

Mrs. HANSEN. What volunteers?

Mr. CAMPBELL. The volunteers which were authorized by recent legislation to assist with the visitor information service, and so on, on a voluntary basis and for which the Forest Service pays their subsistence, travel, and miscellaneous expenses.

Mrs. HANSEN. But they don't receive a salary.

Mr. CAMPBELL. Right, they do not.

Mr. HANSEN. Does this free you of liabilities then in certain cases of accident, and so forth?

Mr. CAMPBELL. The law itself makes provision as to liability.

Mrs. HANSEN. How many of these are you going to use?

Mr. DEINEMA. I don't believe we have that information, Madam Chairman.

Mrs. HANSEN. You must have an idea of what you are going to do.

Mr. MCGUIRE. This is a new program and we hesitate because we are not too sure how it will work. We have just started. The Park Service has had this authority.

Mrs. HANSEN. They used theirs in their historical areas.

Mr. MCGUIRE. That is right. We would use these people in our visitor information centers. But what kind of response we might get is not yet apparent.

Mrs. HANSEN. The Park Service has a different problem because these people are usually oriented into the history of the area.

Mr. MCGUIRE. That is right.

Mrs. HANSEN. They dress up in costumes and are part and parcel of a program.

Mr. MCGUIRE. That is right. We also have areas like that. For example, at lava beds, a volunteer could be very helpful to direct visitors and explain the formations.

SPIRIT LAKE AND LAVA CAVES

Mrs. HANSEN. What is the status of Spirit Lake and Lava Cave?

Mr. MCROREY. Madam Chairman, last year we reported to the committee we had completed a series of exchanges with the Burlington Northern, also an exchange with the State of Washington, and that we were negotiating with Weyerhauser Co. In the areas of Spirit Lake and the Lava Caves, 1,400 acres of land are owned by Weyerhauser. We have come to general agreement with the Weyerhauser Co. on a proposed exchange.

In announcing this publicly, there were a number of organizations and people who raised questions.

We are now in the process of preparing environmental statements to accompany the cases. We are hopeful, and actually confident, that within the next several years we will finalize the exchange of lands with the company. That will then bring all of the private ownership within that area—with the exception of 640 acres owned by the State of Washington and 30 acres owned by Pacific Power & Light—into public ownership.

Mrs. HANSEN. What did the environment have to do with this exchange?

Mr. MCROREY. People have expressed a concern about, how the land that would pass from Federal ownership into private ownership would be treated.

Mrs. HANSEN. I understand.

Mr. MCROREY. In addition, evaluation by our field people concluded that the exchange was certainly in the public interest. It would not have a major impact on the environment, and they concluded that it would not be controversial. But as they surfaced this and discussed it with people, this concern did come up. As a consequence, we are preparing an environmental statement to accompany the report.

ADMINISTRATIVE EXPENSES

Mrs. HANSEN. Please insert in the record a tabulation indicating your administrative expenses for fiscal years 1973 and 1974. This tabulation should indicate the amount of administrative expenses charged to each of your activities.

(The information follows:)

Administrative Expenses

Appropriation or Fund	Est. 1973 Obligations	Est. 1974 Obligations
	(in thousands)	
Forest Protection and Utilization	$71,246	$71,602
Construction and Land Acquisition	4,151	3,845
Forest Roads and Trails	26,511	19,035
Assistance to States for Tree Planting	72	72
Expenses, Brush Disposal	4,058	4,241
Forest Fire Prevention	24	24
Youth Conservation Corps	62	124
Trust Funds	9,621	10,131
Working Capital Fund	3,085	3,085
Flood Prevention, Soil Conservation Service	570	527
Watershed Planning, Soil Conservation Service	102	102
Watershed Works of Improvement, Soil Conservation Service	90	83
River Basin Surveys and Investigations, Soil Conservation Service	186	186
Resource Conservation and Development, Soil Conservation Service	15	9
Expenses, Agricultural Stabilization and Conservation Service	35	- -
Salaries and Expenses, Agricultural Research Service	5	- -
Oregon and California Grant Lands, Bureau of Land Management	172	172
Land and Water Conservation Fund, Bureau of Outdoor Recreation	994	664
Manpower Training Activities, Manpower Administration, Labor	623	623
Federal-Aid Highways Trust Fund, Federal Highways Administration	703	- -
Advances and Reimbursements	113	113
Total	122,438	114,638

The above table reflects the administrative costs related not only to appropriated funds but to all funds available for obligation. All funds available include appropriated funds, cooperative deposits, allocations from other Federal agencies, and reimbursements. Administrative expense includes costs associated with line officers and general administrative services.

NONREIMBURSABLE DETAILS OF EMPLOYEES

Mrs. HANSEN. What is the general policy of the Forest Service on the nonreimbursable detail of employees?

Mr. MCGUIRE. Our policy is to detail people at the request of the Office of the Secretary as he needs them.

Mrs. HANSEN. Where are they detailed to?

Mr. MCGUIRE. There are not many to begin with, but what there are may perform work in the Secretary's Office that affects all of the agencies or a group of agencies.

Mrs. HANSEN. How many are detailed to the White House?

Mr. MCGUIRE. We have none detailed to the White House, but we do have one employee detailed to the Cost of Living Council. This is the only one detailed outside of the Department. They may be working on some sort of a study that affects a number of agencies, and each agency contributes somebody to the pool.

Mrs. HANSEN. Insert in the record the numbers involved for the last 4 years.

Mr. MCGUIRE. We can do that.

(The information follows:)

Number of employees on nonreimbursable details by fiscal years: 1969, 20; 1970, 24; 1971, 21; and 1972, 18.

NONREIMBURSABLE DETAILS IN FISCAL YEAR 1972

Mrs. HANSEN. Insert in the record a listing of all nonreimbursable details of employees, both in and out of your agency, for fiscal year 1972, indicating the other bureau involved and the period of detail in each instance.

Mr. MCGUIRE. We will do that.

(The information follows:)

Nonreimbursable Details
Fiscal Year 1972

Name of Detailed Employee	Detailed to	Detail Began	Detail Ended
Martha A. Lord	Office of Secretary of Agriculture	1-31-65	Indefinite
Peggy F. McDonald	Office of Secretary of Agriculture	9-21-64	Indefinite
Clifford F. Parsons	Office of Secretary of Agriculture	3-26-67	11-27-71
James L. Williams, Jr.	Office of Secretary of Agriculture	8-25-68	11-27-71
Shelia R. Perrin	Office of Secretary of Agriculture	2-14-71	10-3-71
Shelia R. Perrin	President's Departmental Reorganization Committee	10-4-71	2-19-72
Denise K. England	Office of Secretary of Agriculture	6-6-71	5-20-72
Sue Ann Wilson	White House Conference on Industrial World Ahead	8-17-71	3-3-72
Craig W. Rupp	Office of Secretary of Agriculture (Rural Development Service)	12-1-71	2-29-72
Herbert Byars	President's Pay Board and Price Commission	12-2-71	2-28-72
Patrick B. Higginbotham	President's Pay Board and Price Commission	12-2-71	2-2-72
Al Arnst	President's Pay Board and Price Commission	8-18-71	11-22-71
Billy Joe Bailey	President's Pay Board and Price Commission	11-8-71	1-10-72
Sarah T. Weatherspoon	Department of Agriculture (Dr. Ashworth)	12-22-71	1-7-72
Joan Y. Bigley	Department of Agriculture Office of Personnel	1-30-72	5-27-72
Claude O. Morin	President's Pay Board and Price Commission	11-29-71	6-16-72
Clarence Wheeler	Civil Service Regional Office, Seattle, Washington	8-8-71	Indefinite
Gay Levy	Civil Service Regional Office, Seattle, Washington	8-8-71	Indefinite

Mrs. HANSEN. Mr. McGuire, I personally want to express my appreciation for your patience and your courtesy under fire. I would like to express my appreciation to the members of your staff who have done a very able job. I want to express my appreciation to the Bureau of Indian Affairs who were courteous enough to send their representative and the Bureau of Land Management for coming up to listen. You all have similar problems as the Forest Service.

You have done a very able job. Personally, I think the Forest Service tries to maintain a standard of performance that is excellent. But don't go away with the sense of our approval of your impoundments. We are very unhappy about that.

Mr. McDade?

Mr. MCDADE. No comments, Madam Chairman.

Thank you very much, Mr. McGuire. Gentlemen, we appreciate your testimony very much.

Mr. MCGUIRE. Thank you, Madam Chairman, and thank you, Mr. McDade.

THURSDAY, MARCH 1, 1973.

PANEL ON FORESTRY

WITNESSES

KENNETH B. POMEROY, NATIONAL ASSOCIATION OF STATE FORESTERS
BROCK EVANS, WASHINGTON REPRESENTATIVE, SIERRA CLUB
JOSEPH MCCRACKEN, WESTERN FOREST INDUSTRIES ASSOCIATION
DR. ROBERT WOMBACH, DEAN, SCHOOL OF FORESTRY, UNIVERSITY OF MONTANA
RALPH HODGES, NATIONAL FOREST PRODUCTS ASSOCIATION
GEORGE ALDERSON, WASHINGTON REPRESENTATIVE, FRIENDS OF EARTH
DR. JAMES S. BETHEL, COLLEGE OF FOREST RESOURCES, UNIVERSITY OF WASHINGTON
C. CONNAUGHTON, AMERICAN FORESTRY ASSOCIATION
WILLIAM TOWELL, AMERICAN FORESTRY ASSOCIATION

INTRODUCTION OF MEMBERS

Mrs. HANSEN. The committee will come to order.

I would like to introduce the members of the Subcommittee on Interior and Related Agencies.

To my left is Congressmen Yates of Illinois, Gunn McKay of Utah, Clarence Long of Maryland, and Frank Evans of Colorado. To my immediate right is Congressman Wyatt of Oregon.

Mr. YATES. Good morning.

Mr. WYATT. I had better send for reinforcements, Madam Chairman.

NEW HEARING CONCEPT

Mrs. HANSEN. The committee traditionally hears the departmental requests from beginning to end. At the end of that time we would open the meetings to the public for 2 days for the customary 5 minutes per individual. You were required to complete your statement within that period. It is not a bad rule considering the limited time of the committee.

However, as you know, Congress has for some time been trying to reform and increase the participation of the public in committee affairs. As I have said for the many years I have been in Government, the Government is not something which should be isolated from public view. The Government is you, it is not us, because each of you has the same number of votes that we do. That is exactly why I think the attempt has been made to increase participation by the public in our affairs.

Rather than have 2 days or 3 days at the end of the hearing as the sole opportunity for anyone to express opinions on our programs, we have devised an experimental procedure. As I say, it is purely experimental.

This week we heard the Secretary of Interior and the Secretary of Agriculture in his role as counsellor for natural resources.

We then heard testimony from the Forest Service. Unlike previous hearings, these were open to the public and personnel of the BIA and the Bureau of Land Management were represented, because these agencies are all dealing with the same problem, the forests of the United States.

Today we have set aside for public participation a discussion of some of the issues and problems that face us.

We mailed to various people representing various groups a letter outlining the purposes of the hearing. You have all received the correspondence.

The committee selected participants at random, recognizing Friends of the Earth, the American Forestry Association, the Sierra Club, Western Forest Industries, the Schools of Forestry in two different segments of the country, the Rocky Mountains area and the Pacific Coast area. We also have a representative from State organizations.

We do not claim to have asked everybody. We are sorry that organized labor could not join us this morning. They are deeply interested in exports, for example. But the committee is not infallible. We did the best we could to assemble a panel for discussion.

WELCOME TO PANEL

I do want to welcome each and every one of you to the meeting this morning and we welcome your participation. I may say that we asked Mr. Ralph Nader, but he did not reply to our invitation. I want the record to show that he was asked to be present.

Now, will you each introduce yourself.

Mr. BETHEL. I am James S. Bethel, dean of the college of forest resources, University of Washington.

Mr. CONNAUGHTON. I am Charles Connaughton, president of the American Forestry Association.

Mr. ALDERSON. I am George Alderson, Washington representative of Friends of the Earth.

Mr. HODGES. I am Ralph Hodges, president of the National Forest Products Association.

Mr. LONG. Is that a business association group?

Mr. HODGES. The association is solid wood products manufacturers—lumber, plywood, and so forth, 25 associations in the United States and Canada; yes.

Mr. WOMBACH. I am Robert Wombach, dean of the school of forestry, University of Montana.

Mr. MCCRACKEN. I am Joseph McCracken, vice president of the Western Forest Industries Association, also an association of lumber manufacturers.

Mr. BROCK EVANS. I am Brock Evans, Washington representative of the Sierra Club.

Mr. POMEROY. I am Kenneth B. Pomeroy, Washington representative of the National Association of State Foresters.

GENERAL STATEMENTS

Mrs. HANSEN. Thank you very much.

We will insert in the record at this point any prepared statements from those who have prepared them.

In accordance with our letter to you, we will not have these statements presented but will insert them in the record.

[The statements follow:]

NATIONAL
ASSOCIATION OF STATE FORESTERS

OFFICERS

HAROLD G. GALLAHER, President
Manhattan, Kansas

RALPH WINKWORTH, Vice President
Raleigh, North Carolina

ADNA R. BOND, Sec'y-Treas.
Annapolis, Maryland

Founded 1920

10404 Conover Drive
Silver Spring, Md. 20902
March 1, 1973

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EXECUTIVE COMMITTEE

SAMUEL S. COBB, Immediate Past-Pres.
Harrisburg, Pennsylvania

DON LEE FRASER
Olympia, Washington

KENNETH B. POMEROY
Washington Representative
Silver Spring, Maryland

STATEMENT REGARDING COOPERATIVE FEDERAL-STATE FORESTRY PROGRAMS to the HOUSE SUBCOMMITTEE ON APPROPRIATIONS for INTERIOR AND RELATED AGENCIES

Madam Chairman:

Three periodic, nation-wide surveys of forest resources, made at intervals of a decade, projected increasing requirements for wood well into the next century. These projections indicated that much of the additional wood must be supplied by some 4,000,000 small, private, non-industrial forests because three-fifths of all the commercial forest land is in this class of ownership.

Unfortunately, many small forests are in poor condition as a result of generations of unmanaged use. They should become more productive, both for the benefit of their owners and for the welfare of the nation. Four basic programs should be strengthened.

1. Fire Protection

a. Forests and Watersheds, Sec. 2, Clark-McNary Act of 1924

About 614 million acres of forests and watersheds need protection from damage by fire. Of this area, about 40 million acres do not receive any protection at all and fire control forces on the remaining lands often are less than adequate during periods of critical fire weather.

All forest and watershed lands can be protected effectively by increasing appropriations progressively until adequate control forces are activated. Unfortunately, the Federal government has taken two long steps backward in its treatment of these vital natural resources. It has reduced appropriated funds for Fiscal Year 1973 by 36 percent, from $25,027,000 to $16,000,000. This is an unrealistic approach to a program with large public values in which State expenditures exceed Federal appropriations by 5 to 1.

It is recommended that an appropriation of $30,000,000 be authorized in F. Y. 1974, followed by subsequent increase to the full authorization of $40,000,000.

b. Rural Lands, Title IV, Rural Development Act of 1972

Fire protection for many small communities and 400 million acres of rural land was authorized under Public Law 92-419. This important cooperative program should be funded. It has not been included in the President's budget for F. Y. 1974.

2. Cooperative Forest Management

Deciding when to harvest timber, how to treat defective or over-crowded stands, and what to plant are decisions that only face the owner of a small forest a few times during his 10- to 20-year tenure of ownership. Yet each decision is vital to the future development of the forest and some degree of professional judgement is required in applying it to best advantage. Few owners possess such expertise. But they can obtain technical assistance from State Service Foresters under the Cooperative Management Act of 1950. This program also included an unfunded authority for assistance to urban communities in improving the quality of the environment through establishment of trees and shrubs.

About three percent of the owners of small forests are aided each year by some 800 Service Foresters. Results in managed forests are good. But the overall effectiveness of the program is limited by the relatively small number of owners being helped.

Good management of a forest, particularly in the Eastern hardwood type, requires that it be treated, i.e., receive a thinning, improvement, salvage or harvest cut, at least once each decade. Such a level of activity can be attained with a three-fold increase in funding. At present State expenditures exceed Federal appropriations in a ratio of 2 to 1.

3. Cooperation in Tree Planting

About 75,000,000 acres of private land need planting. At least one-half of this area must be brought into production within 10 years in order to meet wood requirements in the year 2000 and beyond. Two Federal-State programs aid this objective.

a. Section 4, Clark-McNary Act of 1924

Under this program the Forest Service provides financial and technical assistance to States for production of tree seedlings. In 1971 State nurseries shipped 643,029,000 seedlings which private and non-Federal public owners used to plant 1,300,781 acres. Here again State expenditures of $5,635,850 far exceeded Federal appropriations of $325,000.

b. Title IV of Public Law 84-540

The intent of this program is to help State and local governments produce "industrial wood". Emphasis is directed toward improving the genetic quality of trees as well as planting

non-Federal public lands. By 1971 the 39 cooperating States had established 2,400 acres of genetically improved seed orchards. In that year State and local governments planted 77,580 acres.

As in other cooperative programs, present State expenditures of $5,213,505 exceed Federal appropriations of $1,020,000 by 5 to 1.

It is recommended that both the Section 4 and Title IV programs be continued at the highest possible levels.

Although enactment of a new authorization is not a function of the Appropriations Committee, it should be pointed out here that substantial Federal assistance is needed as an incentive for small, private owners to plant the 40,000,000 acres required during the next ten years. A program of such magnitude could be financed by amending the Act for Reforestation of National Forests, PL 92-421, to permit use of import duties on wood and paper products for tree planting on any class of ownership, public and private.

4. Forest Pest Control, Act of 1947

Each year insects and disease destroy trees equal in volume to the total quantity utilized for all purposes. Leadership in prevention, detection and suppression of such destructive agents is supplied by the Forest Service for cooperative programs on both public and private lands in 32 States. Agreements with several additional States are pending.

Maximum assistance in pest control should be continued because major outbreaks of southern pine beetle, tussock moth, spruce budworm and gypsy moth are creating economic havoc over large areas.

General Forestry Assistance

Although not a cooperative program, forestry activities under the Agricultural Act of 1862 are of major importance. This project provides highly specialized guidance in utilization of wood wastes and improvement of sawmills. At present about 9.6 billion cubic feet of wood are wasted annually, nearly as much as is utilized. Finding better uses for wood residues would aid greatly in extending wood supplies.

Federal appropriations in F. Y. 1972 were $2,431,000. This program should be continued.

Kenneth B. Pomeroy

Kenneth B. Pomeroy
Washington Representative

STATEMENT OF THE AMERICAN FORESTRY ASSOCIATION

Madam Chairman and members of the committee, I am William E. Towell, executive vice president of the American Forestry Association, a citizen conservation organization of 75,000 members.

I welcome the opportunity to appear with this distinguished panel of witnesses here today but am somewhat troubled by the constraints placed upon our discussions. You call for information, commentary, and suggestions, but you do not want advocation of spending increases above the budget. So, when you ask how ongoing programs might be changed or redirected to better accomplish agency and national goals, it means that we can only recommend within budgeted totals how certain programs might be enlarged at the expense of others. The real mission of the hearing, then, appears to be to search out wasteful spending, duplication, and overlap in agency programs, and conflicting objectives. I subscribe wholeheartedly to these objectives, but feel very strongly, too, that there must be room for growth and increased funding of proven conservation efforts and will proceed on that assumption.

The American Forestry Association that I represent has for several years been trying to resolve forestry problems confronting our Nation. There are two efforts in particular I wish to discuss and commend to this subcommittee for support. Those are our Areas of Agreement Committee and Trees for People, a task force dedicated to nonindustrial, private forest lands but, first, the Areas of Agreement because it more directly affects the U.S. Forest Service.

When the timber supply bill was first considered in the 91st Congress, there were sharp differences between certain environmentalists and those who supported this legislation. In fact, feelings ran very high over this bill and sharply divided forestry interests of the country. It was at this point that AFA called together representatives from both sides of the controversy to explore for points that both could agree upon. It was not an easy task at first to stay away from points of disagreement, because tempers ran high, but through persistence we finally began to focus on areas of agreement. For lack of a better name this is what the committee was called.

The one point all agreed upon was that national forest programs as a whole were underfinanced. If the Forest Service was to do the job we all wanted and expected it would take more money. This is one thing the timber supply bill sought to do through an earmarked fund from national forest receipts, but our committee was advised by the Forest Service that additional legislation was not necessary. Sufficient authorizations existed in all areas to achieve both higher funding and better balance in national forest programs. The second point of agreement was that the various Federal programs under Forest Service multiple-use management were not in proper balance. Over the years and through the complicated funding process, not all activities were equally favored.

So, the committee set out to seek higher funding and better balance. We appeared before this subcommittee as well as the Senate the past 2 years and were favorably received. You did allow the Forest Service more money, even more than the budget called for and, in the opinion of most of us, you did provide some improvement in balance. Naturally, we could not all agree upon how much should be spent for each activity, but we accepted the Forest Service's recommendation of what they called a full opportunity budget. In an environmental program for the 1970's the Forest Service set forth what in their best judgment represented a balanced optimum program of what the Agency thought needed doing and which they could reasonably do if given the money. It was not a maximum program, but an optimum program with better balance between all the products and uses of the national forests.

Your committee was warmly receptive to this joint effort, Madam Chairman, and you did appropriate more funds for this multiple-use effort. We are grateful, yet, as you well know, even appropriations fell far short of our full opportunity budget request and neither full funding nor optimum balance have been achieved. To complicate matters ever more, the administration has withheld significant portions of funds already appropriated and proposed even further cuts in fiscal year 1974 budget. Another serious complication has been placed on the agency in the form of manpower limitations, pay increases that must be absorbed out of limited funds, and a 25-percent cut in data-processing services. In total effect, the Forest Service is being forced in the opposite direction that we feel it should be going and needed programs are falling even further behind.

We could all speak for specific programs that we feel are being hurt by these budget and manpower limitations, and our priorities likely would differ, but all of us, I feel sure, support the concept of the full opportunity budget. Several of us met yesterday with the Office of Management and Budget to plead for release of impounded funds, to seek alleviation of manpower and other constraints, and to seek future implementation of the environmental program in the administration's budget. We recognize that both the Congress and the administration must support this effort if it is to succeed.

The other forestry problem which my association has been concerned with for some time is the 60 percent of our Nation's commercial forest lands in private, nonindustrial ownership. They comprise nearly 300 million acres and are owned by more than 4 million separate landowners. They are not contributing their share of the Nation's wood products nor to recreational, esthetic, wildlife, and other beneficial needs or products either. There are just too many problems confronting the small private landowner—taxes, poor markets, high interest rates, fire, insects, diseases, and a multitude of other things that keep him from practicing good forestry. The only answer is incentives. These private forest owners must be given some help or alleviation from their problems.

Trees for People Task Force, sponsored by the American Forestry Association, has helped to identify all of these problems and has proposed a number of solutions. Legislation now before this Congress would provide an incentives program but, of course, it will be considered by other committees. If and when approved, however, this committee may have a major role in implementing the legislation through appropriation, depending upon which agency will administer the program. If it does fall within your jurisdiction, I strongly recommend its full implementation.

Currently, we are distressed over other appropriated funds affecting forestry that have been withheld. Timber management and wildlife practices in REAP are the only help available for these activities. Hopefully, they will be restored. The $9 million reduction in cooperative State fire control funds is a serious blow to forestry. Perhaps we can live without the $5 million FALCON program this year, but we will be just another year away from solving our environmental logging difficulties. Another serious blow to our total forestry efforts was the $1,500,000 McIntyre-Stennis cooperative research appropriation impounded by the President and the overall reduction of $2,482,000 in the 1974 budget. And, I cannot help but express displeasure over the small item of $418,000 for cooperative wildlife management on the national forests of Missouri that I helped obtain. At least, I want to be on record in support of these items although I realize they are not the fault of your committee.

If you really seek answers as to how we can accomplish a better forestry effort in America and do it more cheaply or at the same cost, Madam Chairman, I am afraid it cannot be done. Somehow we must bring our forest lands, both public and private, up to full production, not only of wood products but all other benefits as well. It will require comprehensive land-use planning, soil capability studies, better coordination between land uses, and better integration of compatible uses. Eventually, it will require more money and more professional manpower and, in the case of private lands, greater incentives than now exist. Whether this help is available in the form of direct cash subsidies or other types of help is a matter to be decided, but more private assistance is essential. The American Forestry Association pledges its help to you and the Congress in working out these complex problems.

National Forest Products Association

Madam Chairwoman: The last 12 months have been a rough year for virtually everyone connected with the lumber and plywood industries, either as a producer or as a consumer. Certainly, one of the roughest aspects has been the timber supply end. It has been a particularly difficult time for mills which must purchase national forest timber.

By any possible criterion 1972 was a year of record demand for lumber and plywood. There were record high prices for these products and unprecedented chaos in distribution channels. Stumpage prices advanced proportionately much more than finished products. Virtually every aspect of lumbering in the Nation was moving upward to new record highs except one. National forest timber sales declined.

It is indeed an anomaly to have a reduction in the flow of timber supply from the national forests which have half of the Nation's supply of softwood sawtimber during a year of record demand for lumber and plywood. Let us examine the causes for this illogical development.

The sale reduction was not due to cutting capacity limitations. The sawtimber allowable cutting capacity for the national forest system as of January 1, 1972, was 11.6 billion board feet. The planned sawtimber sales for fiscal year 1972 totaled 10.5 billion feet, and actual accomplishment was 9.3 billion board feet which is 2.1 billion feet or 20 percent less than rated capacity.

The sale deficiency cannot be justified as a budget economy measure. Total costs for timber sale administration now average slightly less than $7 per 1,000 board feet. The average value of timber cut is now around $30 per 1,000 board feet and is trending upward. Thus, each dollar of funds appropriated for timber sales results in receipts to the Treasury of $4.

The Forest Service has been encountering increasing difficulties in maintaining its timber sale program at allowable cutting levels in recent years, due to widespread concern over environmental impacts of timber cutting. A maze of new criteria and performance standards must be considered before a timber offering can be made. The Service has adopted a firm policy that whatever steps may be necessary for full consideration of environmental impacts and provision to contain them within acceptable standards will be taken before timber is advertised for sale. Many sales have been delayed because of alleged conflicts with other forest uses or because of contests for wilderness establishment. The slowdown in the national forest sale program is in part attributable to the inability of the Service to meet these more complex criteria and higher performance standards and these new sources of controversy.

There has been recognition of these problems in both the budget and congressional appropriations. Appropriations for timber sales have increased by almost $20 million from fiscal year 1970 to fiscal year 1973. The fiscal year 1974 budget proposes an increase of $1.4 million to a total of $69.5 million. The sad and hard facts are that these liberal increases have not been enough to deliver the established cutting capacity of the national forest system for use in the national economy in a year when solid wood products were in short supply.

In fiscal year 1970, Forest Service timber sale appropriations were $48.5 million. A record high of 13.9 billion board feet of sales was scheduled because of an abnormally low sale volume in the previous year. Accomplishment was 97 percent of 13.4 billion board feet. The ratio of sales volume to timber sale appropriations was $3.65 per 1,000 board feet.

In fiscal year 1971 the Forest Service began to have serious difficulties with its sale program. Appropriations were increased by $3.8 million to $52.3 million. The planned sale program of 12.6 billion board feet was set at slightly less than allowable cut capacity of 12.9 billion board feet. Accomplishment was only 84 percent or 10.6 billion board feet. The ratio of sell volume to timber sale appropriations rose to $4.88 per 1,000 board feet.

In fiscal year 1972, the increased difficulties and costs of maintaining the national forest timber sale program had become clearly evident. Appropriations were increased by $11.2 million to $63.5 million. Even with this large increase, the Forest Service reduced its planned sell program for sawtimber and other products to 12.2 billion board feet, but still could only attain an 84 percent accomplishment or 10.3 billion board feet. The ratio of volume sold to timber sale appropriations went up to $6.17 per 1,000 board feet.

In the current fiscal year, 1973, appropriations for timber sales are $68.1 million, an increase of $3.1 million plus a pay act adjustment of $1.3 million. The Forest Service prepared statement for the House Appropriations Subcommittee indicated that sales would be 11.8 billion board feet. This estimate is revised downward to 10.9 billion feet in the Forest Service statement on the 1974 budget to this subcommittee. It remains to be seen whether this revised estimate will be attained. Based on past performance, the NFPA staff estimates sales in fiscal year 1973 will total 9.8 billion board feet. If the Forest Service should attain its revised sale estimate the ratio of sale volume to timber sale appropriations would be $6.25 per 1,000 board feet; if there should be an underage of 1.1 billion feet as expected by NFPA, this ratio would be $7.05.

Discussion of volume of timber business and unit costs in terms of timber sold is a deliberate and useful simplification. The Forest Service maintains statistics on volume of timber sold and volume of timber cut and makes separate cost estimates for sale preparation and sale administration. Timber cut is the

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definitive measure of contribution of the National Forest System to national supply, but the volume of timber sold is the action which is subject to Forest Service control. The volume of timber cut depends on the timber volume under contract and the decisions of timber purchasers on their rate of cutting.

In fiscal year 1971 the sawtimber cut was 300 million board feet or 3 percent less than the volume sold. In fiscal year 1972, the timber cut was 1.4 billion board feet or 15 percent more than the volume sold. In fiscal year 1973 the volume expected to be cut will be from 1.1 to 1.9 billion board feet or from 15 to 22 percent more than the volume expected to be sold. Under the present budget for fiscal year 1974, there is virtually no prospect that the gap between sell and cut volume will narrow. In normal years the fluctuation between cut and sell volume is only a few percentage points and typically shifts from year to year between a sell and a cut surplus. The low rate of sales beginning in fiscal year 1971 restricted the volume cut in fiscal year 1972 is now despressing the rate of cut in the current fiscal year, and will further depress the cut in fiscal year 1974.

In the light of the Forest Service performance in the last 3 years, the prospects for sale of the allowable cut of sawtimber in fiscal year 1974 under the budget are nonexistent. The Forest Service is planning for sale of 10.8 billion board feet or 2 billion board feet less than cutting capacity. It also appears only realistic to anticipate that full attainment of the planned sale program will not be accomplished.

The fiscal year 1974 budget for national forest timber sales provides for a $1.4 million increase to a total of $69.5 million, or 2 percent. While in this tight budgetary year, any activity with an increase rather than a decrease can be considered fortunate; the subcommittee should understand that this provision is at best going to perpetuate the present exasperating status quo and quite possibly will lead to an even lower sale volume.

It is difficult to conceive how anyone concerned over responsible and responsive management of the National Forest System, with the housing program or the cost of living, or with the net position of the Treasury can be content with a situation under which the rate of national forest timber sales is restricted by lack of funds to do the work to the now prevailing environmental standards. This account of what has happened beginning in fiscal year 1971 has been given to show that it will recur in fiscal year 1974 unless corrective action is taken promptly. The purpose of this statement is to urge this subcommittee to start this corrective action.

Basically, there appears to have been a failure in communication between the Forest Service and OMB to establish what it takes to sell the allowable cut of the National Forest System under progressively higher standards of environmental protection. It is understandable that OMB in giving recognition to the situation would press the agency to minimize added costs, and it is understandable that the agency would want to be responsive to the OMB viewpoint. Somewhere over the last 3 years, basic objectives have been lost track of at the expense of the Treasury and the wood consuming public. OMB should obtain a hard and firm estimate of the cost of selling the allowable cut of the national forests. It should then institute checks on performance which would justify budgetary provision of this amount.

We urge this subcommittee to take a basic position that provision should be made so that the Forest Service will sell the allowable cut of the National Forest System in compliance with standards for environmental protection and due consideration of other national forest resource values. To accomplish this objective, the subcommittee might increase the appropriation for timber sales by an amount of around $10 million above the budget recommendation with a provision that would invite impoundment of any amount found by OMB to be in excess of needs to attain the subcommittee's objective.

In advocating full financing for the sale of the allowable cut of the National Forest System, NFPA does not necessarily endorse all of the procedures and expenditures the Forest Service has now introduced into its sale preparation and sale administration. The need for and productiveness of multidisciplinary review committees, the world's largest corps of landscape architects, and other comparable refinements should be thoroughly scrutinized. There are undoubtedly opportunities for significant economies once work routines have been developed for the new standards for environmental protection. What NFPA does advocate is that attainment of sale of the allowable cut should be the first objective, which should not be delayed by squabbles over operating details.

BALANCED PROGRAMS

In the present budgetary environment, the concept of a balanced program of national forest development unfortunately is not workable. The Forest Service, spokesmen for the forest products industry, and some conservation groups have laid considerable stress on the need for a balanced program for the 1970's. The balanced program concept requires an estimate of funds needed for fully adequate activity and development of each class of national forest use or resource. Available financing would be spread in the same proportion to each use or development category. This concept is excellent from the standpoint of an administrator of lands subject to multiple use management. It would provide for expenditures in accordance with his estimate of total funding needs. It is not a device to measure current priorities for protection and utility of the property and it completely disregards the national priorities for the use of Federal funds.

The financing of timber sales up to allowable cut limitations which result in close to four-fold more receipts in the Treasury than expenditures and which contributes to the alleviation of shortages of lumber and plywood, understandably has a current higher priority for Federal funding than provision for forest amenities such as expansion of public campgrounds. It is reasonable and desirable, however, to include in timber financing provision for countermeasures to hold timber activity impacts on amenity uses to an acceptable level.

TIMBER CULTURE

The budget reduction of $8.5 million for national forest reforestation and stand improvement is regrettable. It sets back the effective efforts of this subcommittee to build up support for reforestation and timberstand improvement to a level which, over the next two to three decades would liquidate the backlog of timber cultural work essential to put the national forest system on an acceptable level of timber productivity. Delays in attaining this goal reduce opportunities to increase the volume of timber which the national forest system can supply in the immediate future and for the balance of this century. It is not possible to make a good case for urgency of restoration of the fiscal year 1972 and 1973 appropriation level of $32 million for national forest reforestation on the basis of such increased timber supply when sale of the allowable cut now in effect is not being provided for. NFPA strongly supports increased appropriations rather than cuts in national forest reforestation. The first step toward this objective is to get sales of national forest timber up to established allowable cut levels.

ROADS

The reduction of roughly one-third in the forest road program for fiscal year 1974 will pose many serious problems to the Forest Service in meeting transportation needs for the various users of the national forests. Since timber is the one resource with sufficient value to finance its transportation needs, the impacts of this major adjustment on timber use differ from those of other uses. At the program levels of fiscal year 1972 and 1973, the Forest Service was crowding timber purchase road construction into marginal multi-purpose roads which more porperly should have been financed with appropriated funds. Loss of more than $40 million in construction funds in fiscal year 1974 is certain to aggravate this situation further.

There is no true saving to the Government in further shifting multipurpose road construction into timber purchaser construction. Construction costs become a reduction in timber sale receipts rather than a direct Federal expenditure. Because of the inherent limitations to the type and location of road properly obtainable through purchaser construction, such a road seldom can serve satisfactorily as a multipurpose road. In due course, such a road will require realignmnet or reconstruction with total costs considerably higher than would have been required for initial construction as a multipurpose road. Thus, there is little near term potential saving in this forest road fund reduction and a good prospect of ultimate higher costs for the equivalent road service. Because of the relatively high total amounts involved in developing and maintaining the forest road system, this activity does offer opportunities for quick and substanital financial adjustments for which the administration evidently considers there is an immediate overriding need. As soon as possible, attention should be redirected to the long-range needs and economies of a forest road construction program based on appropriated funds at or above the levels authorized in fiscal year 1973.

EXPORTS

The recent surge in buying of logs and lumber by the Japanese in western Washington and Oregon to meet the demands of their new housing program has raised the stakes riding on the issue of export controls for lumber and logs. The export problem is of crisis proportion in the domestic manufacturing and consuming economy and is fast developing into a four-cornered labyrinth in which there is little prospect for early reconciliation of the conflicting viewpoints of exporters, domestic consumers, international trade policy exports, and preservationists.

The dollar devaluation and the current high level trade negotations with the Japanese have greatly complicated the question of what to do about expanded purchases of logs and lumber by the Japanese. The facts on our trade relationships with Japan are not yet sufficiently available to know how they might be incorporated in policy decisions for log and lumber trade.

In respect to export policy for Federal timber, the National Forest Products Association has supported the Morse amendment which limits to 350 million board feet annually the volume of Federal timber west of the 100th meridian that may be sold subject to export. The recent upsurge in log buying in the Northwest by the Japanese has required that our federated associations reexamine their positions. It may be necessary to seek reduction or elimination of Federal log exports. In view of high domestic demand and the failure of the Forest Service to sell the full allowable cut, we recommend that the Appropriations Committee closely monitor the Forest Service and the Bureau of Land Management use of funds for timber sales. We recommend that your subcommittee adopt a proviso in the fiscal year 1974 appropriations bill to require both the Bureau of Land Management and the Forest Service to use Federal timber sale funds for making domestic timber sales only until the full allowable cut level is attained.

We also recommend that your subcommittee immediately take action to influence Federal agencies to eliminate logs for export from their timber sales to be made between now and the end of fiscal 1973.

STATEMENT BY DR. ROBERT F. WAMBACH

My name is Robert F. Wambach and I am dean of the School of Forestry at the University of Montana. Before going into education I was employed by the U.S. Forest Service for 12 years. I have been at the University of Montana for the past 6 years and during that period I have remained a close observer, and sometimes a critic, of the U.S. Forest Service and other Federal forestry agencies. Among other things, I was a member of the select committee that studied the Bitteroot National Forest for Senator Metcalf and the Senate Committee on Interior and Insular Affairs.

My statement today will be brief but heartfelt. I hope to make just two points: (1) the Forest Service (and other forestry agencies) have made tremendous progress in the last 2 years in correcting many of the weaknesses that we identified in our "Bitterroot Report" (S. Doc. No. 91–115), but (2) much remains to be done. The Forest Service deserves commendation for the efforts that they have made to improve the quality of their management, but they must not be allowed to rest on their laurels. Tremendous further improvements must be made or the efforts to date will have been meaningless. And, Congress must accept responsibility for providing the guidance and funding to assure that the necessary improvements will be forthcoming.

Let me simply list some of my earlier criticisms of the Forest Service and cite some of the improvements that I have personally observed on the ground.

1. The organization had become overly bureaucratized and topheavy, with tremendous staffs at the Washington and regional office levels.

Decisionmaking was being centralized and the men on the ground (rangers and forest supervisors) were becoming frustrated, demoralized, and ineffective. In the last 2 years the trend has shifted dramatically. Regional office staffs are being reduced in size; national forests and ranger districts are being reorganized and in some cases consolidated; technical specialists are being assigned to field units; and both responsibility and authority are being delegated to lower levels in the hierarchy. Results are really promising. I observe higher morale, more innovation, more dedication, a greater commitment to quality, a better rapport with the public, better technical performance, and a restored pride in the agency.

2. Centralization of decisionmaking, preoccupation with commodity production, and misguided professionalism had led to what we have called "prescription

management." Clearcutting was prescribed as the proper harvesting method, and was applied on a wholesale basis; roads were designed by engineering formulas and were constructed to the same standards everywhere; "allowable cuts" were generated by computers in regional offices and distributed to field units as harvest quotas. The missing ingredient in these generalized prescriptions was local variation. We advocated "situational management" as an alternative; where each hillside, each drainage, and each stand of timber would be regarded as unique and management practices would be tailored for each situation. In the past 2 years we have observed a rapid shift toward this "situational management." Cutting practices are regularly modified to protect winter game range or sensitive soils or some other local value; the amount of clearcutting has been reduced substantially; allowable cuts have been reduced when marginal or unsuitable timber has been identified. Management has become more sensitive, and many of the mistakes made in the 1960's are no longer being made.

3. "Multiple use" had become a facade which hid a dominant interest in timber. Multiple use "coordination" meant that after timber cutting plans were completed, they were passed around for the concurrence of other staff specialists (if any existed). In the past 2 years, however, a genuine effort has been made to upgrade and emphasize multiple use planning. Qualified nontimber specialists have been put in responsible positions, interdisciplinary teams have been formed, assistance has been solicited from researchers and other qualified advisors, and new methodologies are being evolved and tested. Multiple use is in fact becoming a guiding principle rather than just a facade. The proof of this lies in the fact that many management decisions are being deferred pending the completion of new multiple use plans.

4. Federal agencies had failed to recognize the awakening of public interest and concern about the management of public lands. They had failed to involve the public in policy formulation or goal setting. A credibility gap developed, and the public was going to any extreme to have its voice heard. In the last 2 years the situation has changed dramatically. Public involvement has become a pervasive feature of all planning and decisionmaking. Hearings, listening sessions, advisory boards, etc. have become standard procedures. The methodology for soliciting public input and evaluating it once it is received will have to be improved, but the agency's attitude toward public involvement has already taken a substantial turn for the better. Public participation is not only welcome, it is actively sought.

What I have tried to convey, up to this point, is my belief that a great deal of improvement has been made in the past couple of years. Our forest lands are being managed better than they were, and our forestry agencies are performing rather well under very adverse conditions. But, of course, we still have a long way to go. Forestry research is still inadequate and often unresponsive to high-priority problems. There is still a great need for more economists, social scientists, and other kinds of new blood in forestry agencies. There is still a lack of aggressive and innovative leadership in the agencies; they still have a tendency to react or respond rather than initiate or take bold action. There is still a failure to recognize that timber growing investments should be concentrated on the productive sites, and that many marginal sites should be dedicated to nontimber uses. And there are a multitude of other problems and controversial issues that remain unsettled. The public must continue to demand, the Congress must continue to encourage, and the agencies must continue to strive for better and more effective management of our forested lands.

The need for more intensive management of forested lands should be obvious to everyone. Demands for the products and services from these lands are mushrooming. Our society needs more commodities (wood, minerals, fuel, forage, et cetera) but it also wants more of the amenity values that these lands can provide (wildlife, recreation opportunities, scenery, et cetera). Good management can provide more of each. Furthermore, most of the resources or values derived from the forest are renewable; that is, they can be produced on a continuous basis in perpetuity. The importance of this feature cannot be overemphasized.

The public must (and will) insist that these resources be managed efficiently and effectively. Congress must provide the leadership and the wherewithal to assure that the long-term public welfare is provided for. The management agencies must continue to modernize their objectives, their operations, and their methods.

In my estimation the President's 1974 budget for the Forest Service and similar agencies is close to being catastrophic. It is not just the dollar reductions that disturb me, but the philosophy that seems to underlie these reductions. Budgets for timber sales, mineral leases, and recreation facilities are increased; but capital investment, research, and resource protection programs are decreased. The executive branch seems to be taking a shortrun view at a time when a long-run view is desperately needed. One can only hope that an enlightened Congress will take vigorous action to correct the situation.

In my opinion Congress must set different priorities that recognize the unique value and the future need for renewable natural resources. It must find a way to increase the level of support for long-term capital investments such as reforestation, roads, research, and other resource development programs. Congress may wish to provide guidance or impose restrictions on the use of this money to assure that it is used efficiently and effectively; but in some form or another it must provide for these kinds of investments.

Congress must also encourage innovation and efforts to find better ways of managing our natural resources. One way to do this is to support such programs as FALCON, SEAM, and project STRETCH. FALCON (*F*orestry, *A*dvanced *L*ogging, and *Con*servation) is a program designed to develop better timber harvesting techniques for environmentally sensitive areas. It shows great promise for contributing to the solution of the modern dilemma: how can we produce more resources while at the same time protecting or enhancing the natural environment?

SEAM (*S*urface *E*nvironment *a*nd *M*ining) is a program designed to find better ways to provide needed minerals without unduly impairing the natural environment and other resource values. It would seem to be a rational approach to the coal and energy crisis which dominates the natural resource scene in the Rocky Mountains and elsewhere. STRETCH is a project designed to foster more efficient use of forest products, as a means of providing for expanding resource needs without exploiting the land or depleting the resource base. By utilizing waste materials and residues, by technological and design innovations, and by other devices it may be possible to double the amount of wood available to our economy without increasing the level of cut. These and similar programs would seem to offer great potential. Among other things they provide for a new blend of talents—researchers and managers, government and industry, producers and consumers—all working jointly on a common set of problems. The payoffs could be tremendous, compared to the relatively small investments required.

Again, I repeat my hope that Congress can find a way to improve upon the President's budget request for agencies dealing with natural resources. Failure to increase the level of capital investment and to undertake major programs in research and development would be at least improvident and perhaps even irresponsible.

PURPOSE OF THE PANEL

Mrs. HANSEN. Multiple use and sustained yield have at their roots the harmonization of conflicting demands. Resource programs are people programs—they are run by people for people, not only this generation but oncoming generations. The purpose of assembling you here is not to stimulate a debate but rather to bring you together where we can all exchange views on how this Nation's resources can best serve all of our people. At the outset I want to stress this goal. Each of you have hopes, desires, and needs. The extent to which you can see each other's will determine how effectively you can help us reach the judgments that we must make.

This committee has before it a budget for one year. The actions we take have implications that are immediately felt in that year, but they have implications that may extend far beyond the single year of funding. Some of them are not apparent in the particular year in which you are funding.

We do have a number of areas which we would like to discuss with you and the committee will ask the questions in any way they see fit to obtain the answers.

FOREST SERVICE BUDGET

The budget this year for the United States Forest Service, including forest roads and trails, is $456,972,300, a reduction of $105,256,600 from fiscal year 1973.

In addition to the fact that the budget is down, there are numerous transfers and shifts in emphasis which can result in various problems which eventually will affect the funding of a great many areas, not only in the national forests but in the municipalities and the counties.

Last year, the committee heard testimony from various groups, including the American Forestry Association, the Sierra Club, environmental groups, conservation groups, industry, and universities. They came in support of an accelerated budget in several areas.

One was reforestation. One was to develop practices which would enable greater conservation in the removal of timber.

The committee, in spite of budget restraints and looking at the entire picture of all the agencies which we fund, which number 24, did take heed of the public's desire to implement these programs and did increase funds in fields of forest research, wildlife research, habitat management, and reforestation. All of these funds have been impounded. That is, they have been directed not to be spent. So this makes a further fiscal impact on the forests and forest management.

Yet the criticism continues to rise that Congress does not meet the challenge of the forest problems.

Well, Congress meets it, not in the way it probably should be done but within the fiscal limitations.

So this brings us to an impasse on what do we do about this year's funding, where do we go, et cetera.

Many of you are critical sometimes of areas of management within the bureaucracy.

This is your morning to supply us with information where you think priorities are not recognized, where you think there is duplication. Always bear in mind this is an appropriations committee and not an authorizing committee.

This committee has the direct responsibility of funding. So if you want to change the philosophy and the directive of a law, we are not the people to talk to, because ours is a fiscal responsibility.

MAJOR FOREST NEEDS

The Federal forest resources are only a small part of the Nation's total forest land base, but a large part of our standing timber inventory. Given the multiple use of forest lands, outline the major needs that ought to be supplied of both tangible and intangle resources from both the Federal and non-Federal forests?

We will begin with Dean Bethel from the University of Washington.

Dr. BETHEL. Madam Chairman, I took your letter at face value. I do not have a prepared statement.

Mrs. HANSEN. Excellent.

Dr. BETHEL. I would like to comment really on just one aspect, primarily the Forest Service operations, recognizing the budget exercise that you are engaged in involves a great many things.

It seems to me one of the very important changes of direction that has to be taken in the management of Federal forest lands is a great deal more attention just to the simple business of growing trees. There are lots of other things that are important on Federal lands, operating under multiple use concepts, but essentially on most of those lands the Federal Government is in the business, as the State is on its land, as private is, in growing trees. This is a long-term enterprise. It takes the investment of money early to gain the results a good many years in the future.

I think there has been far too little attention given to this aspect of management of Federal forest lands. There has been more effort put into the harvesting, a great deal of effort on other uses of the land. It seems to me not only is it important for the Forest Service to engage in a serious program of tree production, at least in those areas that are most productive, but it is important for them to give leadership in this area so that State and private forest organizations can do the same thing.

I think you addressed yourself to this problem when you mentioned the fact that there is concern about regeneration, concern about fertilization and so on; this whole complex of things.

How can we use the land more effectively, to increase production? If we are going to set aside wilderness areas and more parks, we are going to have to use those acres that are left much more efficiently.

I would like to suggest this be given a great deal of attention, how to grow trees effectively and faster.

Mrs. HANSEN. That involves the problems of stepped-up research, genetics, fertilization and it includes the funding of reforestation, itself.

Dr. BETHEL. The management itself, funding on the range districts.

Mrs. HANSEN. I would like to introduce Congressman Veysey from southern California. Would any member of the committee like to ask Dr. Bethel a question at this point?

POLICIES OF FOREST MANAGEMENT

Mr. LONG. Mr. Bethel, do you feel we are following sound policies in our National Government, insofar as land management is concerned, policies which will maintain or increase our timber resources in relation to the requirements that we are going to face in the years to come for housing and other purposes?

We want to know whether you feel that we are giving enough attention to this, spending enough money? If not, whom do you feel is responsible for our National Government not doing this?

Dr. BETHEL. I do not think we are investing enough money in maximizing the productivity of the land. I think that Chief Cliff indicated a year or two ago that with reasonable kinds of forest cultural operations our national forests could increase the supply of timber products in the long run by, I think the figure was 60 percent. I think this was a reasonable position to take. Growing trees is like growing wheat, growing apples, you have to invest. Knowing something about the land you deal with, you have to invest in the job of planting, culturing the things, getting them on down the line. I do not think we are doing that.

I think we have understock stands, I do not think we know enough about the productivity of our lands. In general we know a great deal more about our inventory than we do about the quality of the site, the quality of the soil, which is the basic resource that one has to work with.

I think the Federal forest enterprises are perhaps not as far advanced as private industry in such things as tree improvement; for example, investments in better qualities of planting stock. This whole area of improving the growing stock is, I think, deficient.

This is not a criticism. I think there is far too little investment in it, I think there are too few people working on it in the Forest Service. If we are going to want a large increase in timber supply 10, 15, 20, 30 years from now, the time to start is now.

As a matter of fact, it was last year or the year before.

Mr. LONG. Is it knowledge or money that we are lacking?

Dr. BETHEL. Both.

Mr. LONG. Well, that is not very helpful.

Dr. BETHEL. Well, it is money in the first place to invest.

Mr. LONG. If you put in more money, would you get more knowledge?

Dr. BETHEL. Right.

Mr. LONG. This is an appropriation committee and that is where we have to start.

TIMBER LOSSES FROM INSECT AND DISEASE

Mrs. HANSEN. In answer to Dr. Long, the Forest Service gave us a figure yesterday on the loss of timber from insects and disease alone.

Mr. WYATT. Ten billion board feet.

Mrs. HANSEN. Ten billion board feet we are losing each year.

Mr. LONG. Per year?

Mrs. HANSEN. Yes. This is in the research category.

Mr. YATES. How much do we have to put in?

Dr. Bethel, how much money do you think we have to put in to get the 60-percent increase that you envision?

Dr. BETHEL. I would rather let the Forest Service suggest that. I do not know a number.

Mr. YATES. I wondered about the reference you made to a chief somebody.

Dr. BETHEL. Chief Cliff.

Mrs. HANSEN. The former chief.

Mr. YATES. To a study that he had made. Did he indicate there what the relationship was between the investment cost and the additional amount of production?

Dr. BETHEL. I do not remember that figure. I think he probably did.

Mr. LONG. It is all a matter of economics, you know. Anybody can come along and say you can double or triple something. What it costs is the key. When you get up to the margin of cost versus yield, that is where you have to make the decision either at private or government level as to whether it is worthwhile doing this.

When you say there could be an increase of 60 percent or you could get an increase of 10 million board feet, is this an economically feasible increase? Or is it theoretical—out of a textbook?

Mrs. HANSEN. This was not theoretical out of a textbook.

At the present time we lose, due to disease, insects, et cetera, 10 billion board feet that obviously are not going into any market. They are just lost. You develop answers to these problems by providing adequate funds for laboratory and research programs. Is this not correct, Dr. Wombach?

Dr. WOMBACH. Yes.

UNIVERSITY RESEARCH PROGRAMS

Mr. MCKAY. Dr. Bethel, you have some research going on, I assume, at the University of Washington?

Dr. BETHEL. Yes.

Mr. MCKAY. Are you making and have you over the years at your university made some headway on diagnostic studies of diseases and their eradiction?

Dr. BETHEL. Yes. At the moment in our disease program we are concerned primarily with the diseases that are related to culture of trees as contrasted with the diseases that are more typical of natural stands. We are concerned with fomes anrosas and various root rots, the kinds of diseases that are going to become more important as you intensify management on Western forests. These are diseases that were not terribly important 10, 15, 20 years ago, but are important now and are going to be more important in the future, some of the same kinds of diseases that are important in the South.

Mr. MCKAY. Are the majority of the answers that you have found at this point being used in the forest management?

Dr. BETHEL. I think the ones that have developed early enough are. This is a fairly recent enterprise. Some of the early work that we have done on fomes anrosas is now represented in management in young Douglas fir stands, yes.

Mr. MCKAY. You feel you need an increase in research moneys to reach what needs to be done to keep us up to time?

Dr. BETHEL Well, in my business we always feel we need an increase in research money.

I really did not come here, intending to plead for research moneys for the college or colleges generally.

Yes; we do need it. I do not think that is the problem. I think the problem is one of having people, professional people, on hand in the agencies that understand diseases, that are in a position to use the research in order to manage timber stands more effectively.

Mr. MCKAY. You think the Federal Government does not have those kinds of people?

Dr. BETHEL. I do not think it has them in the numbers that are required in order to do the job on the ground.

Mr. YATES. Do you have them in the colleges?

Dr. BETHEL. We are producing them in the colleges, you bet.

Mr. YATES. Is your college doing research in this field?

Dr. BETHEL. Yes.

UNIVERSITY RESEARCH ACHIEVEMENTS

Mr. YATES. What achievements has your research made?

Dr. BETHEL. I mentioned in response to an earlier question that we have a disease program. We have headquartered at our college

the regional forest fertilization program, which is participated in by the Forest Service, BLM, by the States of Washington, Oregon, by quite a large number of industries, which is focusing on the use of fertilizer. This is a relatively new forestry activity, new because it has only been recently useful to economically use fertilizer.

There are similar programs elsewhere in the South and in Florida. This is new technology. This program is probably only 4 years old. The early results are extremely promising.

The industry in our area is already engaged in very extensive fertilization work. The State is beginning to engage in it. I must say that the Forest Service has not been able to do very much of this up to this point in time. I think it probably would like to participate in the research. They know about it. This is the sort of thing that, it seems to me, makes some sense.

Mr. WYATT. Madam Chairman?

Mrs. HANSEN. Mr. Wyatt.

NEED FOR REFORESTATION

Mr. WYATT. Dr. Bethel, I am very delighted to hear your testimony about the need for much more attention to the Federal forest lands. I personally have felt for some time that it borders on a national disgrace that we have in the national forests, for example, nearly 5 million acres of commercial type timberland which are capable of reforestation and yet remain unreforested. That is one of the things our committee has been attempting in a small way within our limitations, to do something about. But I think we need a national commitment a great deal stronger than that.

NUTRIENTS IN THE SOIL

In connection with your comments about growing trees as a crop, I have heard doubts expressed that the soil can maintain for very many rotations the growth of trees as a crop. In other words, after one, two, three times around, the nutrients will be gone, the soil will be exhausted.

Do you share that apprehension? If so, are there things that can be done to offset the departure of nutrients from the soil?

Dr. BETHEL. No, I do not share the apprehension.

There are certainly ways to mismanage forest soil so that you can lose nutrients. But that is not inherent in the business of managing forests for successive crops. I think if nothing else, the empirical evidence of hundreds of years of this kind of management in Europe suggests that this does not happen. There is evidence of long history in Europe and in other parts of the world where forest management has been practiced for a much longer period of time then we practiced it, that indicates this does not happen. Just as in the case of agriculture, if one harvests the nutrients more rapidly then they become available, you can supplement them with fertilizer.

That is not really the reason that fertilization is being done now. It is being done now by industry primarily to add to, not to replace them. I think we can practice forestry on good forest lands for hundreds of years and not result in a reduction in the site, but we can improve the site.

Mr. VEYSEY. Dr. Bethel, I found most interesting your comment that we might achieve a 60 percent increase in our timber resources, but I think you qualified that by saying "in the long run."

You referred to improvements of the type of better understanding of soils, how trees grow, and the bringing forth of improved varieties. This makes it sound to me like it is indeed in the long run because those things would result in benefits somewhat down the line in time span from the time that you put the money into research projects.

LONGRUN PROGRAMS

We recognize we have a national budgetary problem in which we are operating at a deficit. So that makes the question really: How much should you put into that sort of development if the consequences is a larger deficit, more inflation, higher taxes, or something else?

Can you clear up this question of "long run" in terms of timber management research for me?

What do you mean by "the long run"?

Dr. BETHEL. It takes, depending on the species and the place, 50 to 60 years to grow a crop of trees. In some areas it may be as short as 25 or 30, pulpwood, but it is a long time.

There are some shortrun payoffs involved in this. If we can begin to increase the productivity of our forests by more intensive cultural operations, we can justify in some areas increasing the annual cut now, next year, the following years.

Mr. VEYSEY. Could, conceivably, some additional dollars spent in that way actually improve our shortrun cash flow situation?

Dr. BETHEL. Yes; if you can gain more income from early timber sales. I am not a forest economist.

Mr. VEYSEY. Maybe I am projecting you into a field that is not your home territory. I was really trying to clarify this.

It is one thing in terms of making an investment over 25 or 50 years to produce a 60-percent increase further down the line, but we also have to consider the immediate cash flow aspects. I have been groping yesterday and again today for some way to try to balance out; if we put an additional $1 million or $10 million or whatever into some project, when is it coming home?

When do we get the benefits?

Mrs. HANSEN. Will the gentleman yield?

Mr. VEYSEY. Certainly.

NATURAL RESOURCES MANAGEMENT

Mrs. HANSEN. This is one of the basic problems inherent in the congressional management of a major or any area of resource.

The committee discovered about 6 years ago that the Geological Survey was underfunded in two particular fields. One was in the knowledge of the lands that were going to be leased by the U.S. Government for exploration of oil.

How could the Government issue the best kind of a lease if the U.S. Government, who did the leasing, did not have as much knowledge as the people who were leasing? This is fundamental.

The other area was the management of the leases after they were issued.

The Geological Survey was not employing enough inspectors; they did not have the kind of management to oversee this highly technical field. So therefore, certain things were occurring in this field which eventually cost us more money than it would have if the investment was made in inspectors and adequate knowledge.

I have served on this committe for 10 years and I have never known when we did not have a budget crisis in one area or another.

When we are managing natural resources, it seems to me we cannot take the narrow budget look. We have to be responsible enough to manage the resources for the future, as Dean Bethel has said. You do not grow a tree overnight. The trees that we expect to have for housing should have been in the ground many years ago.

But I remember when I first came on the committee, the first fashionable item to cut was the BLM, the Forest Service, the natural resources budget. It did not have an immediate payoff.

You would not run your private business this way. We were taking the narrow look.

In some way or other there has to be a broadening of the picture so that we are not always within the narrow confines of the immediate monetary rewards. The tendency has been to cut the Forest Service budget to help balance the total Federal budget, and that is not going to make a good forest picture.

So you have to review the total natural resource picture. Congress is the custodians physically of what the life is going to be in the next 300 years. Thoughtful decisions have to be made now.

I am going to turn to Mr. Evans. He comes from the same State as Dr. Bethel.

Mr. Evans, do you want to make a comment?

Mr. BROCK EVANS. That is extremely well put. I have never heard it put on such a broad philosophical base. That is the way I see it.

This Congress sitting this year is not just to do things this year; we are the nave of the nation and the forest resources. If we are going to make investments in long-term productivity, it certainly has to be here, as a leader.

I think it is terribly important. You put it very well.

Mrs. HANSEN. Your group is terribly interested in conservation. They also recognize the need for housing, et cetera. If you don't provide adequate funding in both areas, you are going to come out short on both. This is one of the tragedies of the budget situation.

COST PER ACRE ON PRIVATE FOREST LANDS

We have 754 million acres of U.S. Government land. Based upon the current budget and the budgets of the past 5, 6, 7 years, we are averaging about $1.09 per acre per year in total management.

How does that compare with the costs in your organization, Mr. Hodges?

What do they spend on total management per acre per year?

Mr. HODGES. Well, the comparison in this area is not as meaningful as it might be if we had our definitions at little better laid out, where you could see the difference in the objectives of management.

Mrs. HANSEN. Yours are purely on production?

Mr. HODGES. Not purely, but primarily.

Mrs. HANSEN. Primarily?

Mr. HODGES. The management objectives are to make money in the long term, and in the short term, and make as much as possible, without any deterioration in the capital asset, which is primarily the land. This is not the objective of the Federal timber agencies.

Mr. YATES. But there is a comparison that is possible, is there not? You have timberland, sir, do you not, and do you not go about preserving your timberlands so that they will continue to provide the trees to keep you in business?

Mr. HODGES. Far beyond preserving, we try to constantly increase the productivity.

Mr. YATES. That is what the Chairman was trying to find out, what you do per acre of your land or how do you manage your land by comparison with how the Government manages the land, in terms of costs.

What are your costs? We know what the Government costs are.

Mr. HODGES. What we should be comparing is the same cost for the same kind of land for the same area.

Mr. YATES. That is correct; take the State of Washington.

Mr. HODGES. I cannot give you the figures off the top of my head.

Mr. YATES. I do not think we want a comparison, I think we want information as to what you do. We will make the comparisons ourselves, because we have the Government figures already in the record.

Mr. WYATT. If you will yield, we do not have the Government figures for the thing you are mentioning Mr. Hodges. The Government figures are the investment per acre for all purposes for which we manage the national forest, not just for timber production.

I think that is clear.

Mrs. HANSEN. I was not only using national forests land but BLM lands. The costs vary in different agencies Mr. Wyatt; but the final average is about $1.09, $1.10 per acre. This is the protection of the land, fire fighting, et cetera.

Mr. YATES. Wendell, are you saying we cannot make a comparison between management of the land—comparison of the land owned by private enterprise and the Government to see what the costs of management are?

Mr. WYATT. I think we can make comparisons, but I think we have to be very careful that we have the same ground rules.

In other words, your $1.09 figure is not going to be very meaningful compared to a figure that the private corporation invests in intensive management of a forest for the production and growth of wood and fiber, because the $1.09 is an average and perhaps in that figure is an awful lot of desert land in Mr. Veysey's country that perhaps nothing is invested in.

Mrs. HANSEN. This is the interesting thing, I am not just talking about forests. When you invest in desert land you are investing in mineral protection.

Mr. WYATT. What I am really saying, Mr. Yates, is that we know what the overall average is for the Federal lands, but in looking at that figure we must know that includes investments for all kinds of purposes other than just commercial timber growing.

But I think the average investment per acre in a given area for timber-growing would be a good figure for us to have in mind compared to this $1.09 overall figure.

Mr. YATES. What you are saying then is that there is no such thing as a comparison, because the purposes are different?

Mr. WYATT. It is difficult.

Mrs. HANSEN. We can take our land that is used for timber harvest and consider what the investment per acre is in this area.

Mr. VEYSEY. I make the further point that we may not be comparing like things at all, in addition to the different purposes found here.

I would assume that those areas that are used for commercial timber production would be among the most productive available anywhere for this particular purpose, whereas we have lots of forest lands that are not very productive. Some in my area, for example, are very dry. You could spend $100 an acre on them and not grow any timber.

Mr. YATES. But do you not agree that just as private enterprise is interested in preserving its forests, so, too, are we.

Mr. VEYSEY. We should be interested in that.

Mrs. HANSEN. Give me average figures for the record on one of your high yield forests and one of your low yield forests. We will ask the Forest Service to put in the record the same thing for their high yield and their low yield forests.

Mr. HODGES. Could we not take some intermingled tracts where the lands are checkerboarded, for instance, some are private, some are federal?

Mrs. HANSEN. Exactly.

Mr. HODGES. I would work with the BLM and the Forest Service and try to get some comparisons and get them together and give them to you.

Mrs. HANSEN. We should have that information for the record.

Mr. HODGES. We could show you how the private investor looks at it from the standpoint of making his enterprise more profitable, compared to how the Forest Service looks at it.

(The information follows:)

A survey of 65 percent of total forest industry lands for 1971 showed an investment of $128.42 for each acre planted. This figure included investment as follows: site preparation, planting, seeding, forest management, fire control and research, road construction, and property tax.

In terms of total acreage owned, forest expenditures in these categories amounted to $4.30 per acre in 1971.

The total National Forest management budget for 1973 was about $481 million, including all management programs and all road construction. A substantial portion of this amount was for nontimber activities. Using the total National Forest acreage of 187 million acres, the annual investments and costs would approximate $2.57.

PRIVATE INDUSTRY RESEARCH PROGRAMS

Mr. YATES. May I ask you a question?

There is a disposition by this administration to return to the local communities and to the business community many of the costs that the Government has assumed. What is private industry doing in the field of the kind of research that Dr. Bethel is advocating?

Mr. HODGES. There is considerable, but not near enough.

One of the things I would add to what Dr. Bethel said is, we have an awful lot of research proven out, that is on the shelf. I think the Federal agencies are among the last in their land management programs to use that research.

Mrs. HANSEN. Yes.

Mr. HODGES. Because of this problem you are getting at, in terms of their ability to be managed and financed for good business management. I just want to add, now that I have the floor——

Mr. EVANS. Could you put those in different words?

Mr. LONG. Yes; I do not get that either.

Mr. HODGES. My point is, first, I applaud the experiment here and it is a first step in getting at the point I was trying to make of getting a better business management basis for all of the outputs of the forests, and I hope that this step can be carried on and made to work. It is going to be difficult in these few hours to give this kind of thing the attention necessary.

Mr. EVANS. Give us an example of what you have in mind.

Mr. HODGES. Yes. You are involved in an anomaly in government in a way here, in that you are trying to manage a vast productive property, worth billions of dollars. It is not like the normal appropriations the Government makes. So you do need, through your appropriations process also, a better business management method.

I think that is what you are trying to explore here. I hope it works.

Mr. LONG. Why are we not getting it?

LONG-TERM INVESTMENT NEEDS

Mr. HODGES. Because you cannot look at it the way the company board of directors does, as a long-term business. You cannot make long-term investment. You cannot commit the Government to growing trees, for the long term, as Dr. Bethel points out, under the present system.

Mr. LONG. I would think it would be the other way around. We have always been told that the Government can look to the distant future, whereas private industry has to run for some sort of a shortrun profit.

Mrs. HANSEN. The only way we look at the long-term future is apparently in foreign aid. When we get to domestic budgets, they seem to always be cut. The research budget this year is down $3.865 million.

Mr. EVANS. Could the witness suggest something specific?

Mr. LONG. I am not sure I have gotten an answer to my question, why is it that government has a much shorter horizon than private industry?

I cannot say that I accept this notion, because the idea of the administration cutbacks is fairly new.

Mrs. HANSEN. No. The budget has yet to recognize over the years that this is a long-term resource. By resource I do not mean merely the harvest of trees. I mean the long-term use of all our natural resources.

Mr. LONG. But you see—if I could continue on this—you are going to have your boards of directors of every corporation who are going to look at it in much the same way.

Mr. HODGES. Not so, I disagree.

Mr. LONG. Wait a minute. I never heard of a corporation yet which would not have to wrestle with the problem, would you put your money into something that is going to give a relatively immediate return, or should you put your money into something that is going to give a very distant return.

If the corporation is not thinking in those terms, then it is a very different corporation from any I have ever heard of. They have to think in those terms. Are you telling me they are not?

Mr. HODGES. You do not make your investments on the basis of a return on the investment. You do not look at how to increase the dollar return on timber in your appropriations process from the standpoint of increasing the return on the investment.

Mr. LONG. We do not do it explicitly, but in a way they could be an advantage, you see.

Mr. WYATT. Would the gentleman yield?

Mr. LONG. In just a moment.

We have always been told that government ought to do more because government does not have to go out and get its money back right away; it can wait a long while; that is why it is in so many things, because they can look to the long-term future.

Are you telling me government has to be more shortsighted in this area than private industry?

Mr. HODGES. I am telling you the opposite, that government has to be more long-term sighted in terms of getting a high return on the investment.

Mr. LONG. Are you telling me then that government is being much more shortsighted than private industry?

Mr. HODGES. No; you do not make your appropriations each year on the basis of the long-term investment.

Mr. LONG. I understand that.

Mr. WYATT. Will the gentleman yield?

Mr. LONG. I do not know what we make our appropriations on the basis of.

IMPOUNDMENT OF NATURAL RESOURCES FUNDS

Mrs. HANSEN. The point he is trying to make is really to amplify the point I made. Let's take the classic example of the 5 million unreforested acres, which is a small percent but which are needed in the total.

Yet we have budgetary impoundments in natural resources, all natural resources, that have not enabled the committee to do the kind of job it should do.

The public is very disturbed with Congress as is the press, but the funds have been impounded by OMB.

Our national forests are not, nor is BLM land, BIA land, a short-term investment. It is not for today, it is forever.

Mr. WYATT. Would you yield?

Mrs. HANSEN. Yes.

Mr. WYATT. I think maybe to articulate the point just a little bit better, we should point out what the major problem is with the OMB and to an extent with the Congress, but it originates with the OMB, which ties our hands largely; that is, that the appropriations, the budget requests for managing our national forests are based upon

every other kind of budget request. In other words, we are dealing here with a natural renewable resource, one that is a good business investment if it is handled properly, yet OMB looks on it as if it were foreign aid or as if it were welfare or any other kind of an expenditure.

When we come to a financial crunch like we are in almost every year, they cut this area back just like they cut every other area back, instead of making the long-term investment that they should. That is where our hands are tied.

Mr. LONG. I understand there is widespread dissatisfaction with the way the government is doing it, with the way the OMB is doing it.

On the other hand, you cannot put unlimited sums into this. There has to be some weighing of some distant return with relation to the interest rate and all kinds of things that any good economist or any good businessman would work out.

Do we have a forest economist here who is thinking in terms of how much more money should the Federal Government be putting into this reforestation program? (1) To bring us up to the best business practice? (2) If the best business practice is not good enough, to what should be desirable policy to increase the yield of lumber in the long run, so that we will not be starved for lumber and running into inflationary situations in the long run?

Do we have a forest economist here who can talk to that type of thing?

Mrs. HANSEN. Mr. McCracken.

Mr. LONG. Before Dr. McCracken begins, they gave us good estimates yesterday.

Mrs. HANSEN. Very good.

Mr. LONG. Fine.

REFORESTATION AND TIMBER STAND IMPROVEMENT

Mr. MCCRACKEN. To maybe tie two or three things together, I have to go back to a question Mr. Yates asked.

One of the shocking things about the budget that the OMB has presented to you, most shocking is a reduction of $8.5 million in reforestation and timber stand improvement.

The question Mr. Yates asked about how much the Government is investing in intensive management, how much is private industry and so forth—you could make a fairly meaningful analysis. That is a very good part of what private industry will do on the good sites of Washington and Oregon in regard to reforestation and timber stand improvement.

We are going into reforestation and other things that the Government seems to be very fearful about getting into yet. You can find a meaningful difference. Mr. Hodges will supply you with how much per acre is being spent on those kinds of things. I think you will find a rather shocking disparity there.

Now in past budgets that have been presented to your committee, I do not have the numbers up here, but every year for several years there has been a statement in the budget justification, if you give us so many million dollars for reforestation, we can increase the allowable cut right now by so many board feet.

If you give us so many dollars for timber stand improvement, which is the biggest benefit you get in terms of return on your investment, we can increase the allowable cuts so much right now.

Despite these things, we have OMB presenting a budget that is not only reducing $8.5 million, it is going to reduce the allowable cut. Maybe I have confused you further.

Mr. YATES. No.

RECREATION FACILITIES ON FOREST LANDS

Mrs. HANSEN. I want to point out another problem. The Forest Service shows an increase this year in recreation visits. Yet there is a shocking decrease in the number of facilities that are to be constructed.

These facilities are of extreme importance. Where you have designated campsites, there is less danger of forest fire, forest destruction, litter, arson, et cetera. What the public sector wants to know: Are we putting the proper amount in that area?

While it is not a harvest, not a revenue, it yields a revenue to the United States in being able to provide a place for people.

Mr. YATES. I think that is the thing that I wanted to say to Mr. McCracken. You have said it much better than I.

I think the goals are different between the Federal Government and the private industry in some respects. What we are interested in is the preservation of our forests for the generations.

Insofar as the forests can be used for cuttings and for bringing in revenues to the Federal Government, I think that as a natural resource the goal of this committee is to try to find the ways in which to keep the forests alive for generations.

Mrs. HANSEN. We are faced with a two-way street.

Mr. McCracken knows, because he is from Oregon. The economy in certain areas is based on production of timber. But on the other side and just as high in the priorities of this committee is the people's use of the forests, the streams, watersheds, recreation, and the management of all these programs.

The two together present a difficult problem for the committee. That is why we asked you to come in and say why, and where, and how, through the appropriations process; can we do a better job.

Mr. YATES. Did you want to say something, Mr. Evans?

Mrs. HANSEN. Would you like to comment on the nontimber aspects of management?

NONTIMBER MANAGEMENT

Mr. BROCK EVANS. In a sense they tie both together.

As you are saying, we are not just managing a timber resource, though it is important; we are managing a land resource. It is not a business appropriation for a dollar return, but part of our cultural return, the "people resource" if you will.

The forest still operates under the Multiple Use Act, the latest statutory directive, which requires the balancing of all uses and no one is more equal than the other.

They are all in a sense equal. If we take a look at the budget requests, roads for example, this is something, of course, of concern to us. I just want to touch on the problem of reforestation, which we support and think is fundamental.

Mrs. HANSEN. Please.

Mr. BROCK EVANS. It may be the only way where we could ultimately sometime in the future increase the cut.

I think it is important to know that many people think the present cut is far too high. You are probably familiar with the Forest Service's own report which indicated 22 percent of all the lands now classified as commercial forest lands are not commercial forest lands. Yet this is included in computing the cut.

In other words, if we replant, let us say, a million acres of trees tomorrow, it's not quite accurate to say then we can increase the cut in another million acres of old growth timber lands that have been there for 100 years. It cannot be done until we know what the growth is going to be. We all know we have to have many replantings, many times. We have to wait maybe 10 years before we really know that growth will take.

Number two is to cut down in fact good timber-growing land. This is one thing I wanted to emphasize in addition to the recreation aspect.

NEED FOR SOIL SURVEYS

In my experience in 6 years in the Northwest, one of the things that is weakest in the national forest is what they call soil surveys. Only three national forests in the State of Washington had soil surveys when I left. They were Gifford-Pinchot, Mount Baker and Mount Olympic. Three or five others that do nothing have soil surveys. To me, this is one of the most critical things. How are we going to know whether we can cut timber on these lands? How can we make a good informed management decision if we don't even know what the soils are like?

I can cite chapter and verse and many names, places and dates of roads which are built in terrible places which have damaged the lands where cutting is not coming back, too, because of this lack of information. Here again I emphasize we are talking about a land resource as opposed to a timber resource or a wilderness resource. The whole total base we must know more about. It's not just research. It's getting men out there on the ground to do these things.

COMPUTATION OF ALLOWABLE CUT

Mrs. HANSEN. We understand. This again has been another limiting factor in the budgets.

Mr. Evans, is it your position that the allowable cuts that have been granted every year, let's say in the last 5 years, have been too big, too small, just right or what?

Mr. BROCK EVANS. Our foresters have documented that the present cut is too high in many places. They think it ought to be placed on a much lower computation of what, in fact, is commercial forest land. For example. I understand now that the Forest Service considers land as commercial forest if it can produce 20 cubic feet per acre per year. We think it should be 25 cubic feet per acre or 30 cubic feet per acre be-

fore you can consider it to be good forest-producing land. That is the problem. If the allowable cut is computed on the basis of, say, 20 cubic feet per acre, then it's probably much too high, in my judgment. Its price should be lower. Certainly we should have this information before we consider increasing it beyond what it already is.

Mrs. HANSEN. I noticed Mr. Pomeroy wanted to say something a minute ago. Do you have a comment? You have been before the committee many years.

PRIVATE FOREST LAND INVESTMENT

Mr. POMEROY. I would like to backtrack about 20 minutes to a question that Representative Long brought up regarding the comparability of the private lands and the public lands. I think we have overlooked one basic thing. Many private owners pay more than $1.09 an acre in taxes each year. The Federal Government is projecting its investments on the basis of the long-term public interest. The objectives are entirely different. To that extent, it's going to be very difficult to compare these things.

If I might continue for a moment in just a little different vein. One of the areas that this committee has been most helpful in is the area of cooperative forestry. This is a program that dates clear back to 1911. Over the years, the investments made by the Federal Government usually have resulted in matching funds for five or six times more than the seed money that the Federal Government has put in.

As all of you know, we have come to the rather critical spot in the last 2 months in the withholding of the cooperative forest fire protection funds. The total sum is not large in terms of the whole Federal budget or in terms of the State budget.

It has raised some questions of, shall we say, fiscal responsibility on the part of the Federal Government. There are going to be 50 different State budget officers questioning to what extent they should cooperate with the Federal Government in the future. I think we have come into a real bind in this last couple of months.

ALLOWABLE CUT

Mr. EVANS. Could I ask the witness one question? The statement has been made by Mr. Brock Evans that in his judgment the allowable cuts have been too much, that we overestimate the amount we have and because of that we come up with excess cuts. Do you have an opinion? If so, what is your opinion?

Mr. POMEROY. I hate to take refuge and say it's a complicated thing. But to grow 20 cubic feet of something, is it of willow or walnut or aspen? What is the value of the 20 cubic feet you are going to grow? In some areas it might be completely useless because there is no market for it.

Mr. EVANS. Do you believe the means by which we can determine an allowable cut is sound?

Mr. POMEROY. It's technically sound. But it has to take in existing markets and projections for future markets.

You will forgive me, I hope, but just to say categorically 20 cubic feet doesn't mean a thing to me. I have to know 20 feet of what, whether it's cotton, willow or black cherry, or what.

Mr. EVANS. Do we have different standards for different types of trees? Or is it just a general 20 cubic feet figure for all stands, regardless of type?

Mr. POMEROY. I don't think I can give you a yes or no on this type of thing. The Forest Service periodically resurveys all of the forest resources, private as well as public.

Mr. EVANS. Is a different rule used for cottonwood than is used for spruce?

Mr. POMEROY. Yes; they have different standards for different timber types in different regions of the country. You have to do it because they are marketed for different products and in different ways.

REFORESTATION

Mr. LONG. Madam Chairman, we have the administration's $3 million decrease in funds for reforestation. I gather that even in the past we have not been spending enough to reforest. What should we be spending? What is the gap that faces us right now between what should be spent in a reasonable way to improve our forests and maintain our timber yield for the future and what is being requested here for appropriation?

Mr. POMEROY. Are you speaking to the publicly owned lands, the national forest lands?

Mr. LONG. The national forests. That is what we have to deal with.

Mrs. HANSEN. We are also dealing with the entire national forest, BIA, and BLM lands, because you can't consider these forests separately. Although we discuss the budgets separately, they are all interrelated. BIA and BLM forests have similar problems.

Mr. LONG. I am looking for the total gap between what should be and what the administration is proposing.

Mr. POMEROY. When the Congress considered the reforestation bill last year, which Congressman Kyl introduced, it was brought out then that the backlog of area in need of planting on the national forests had not changed materially in the last 30 years. It was about 5 million acres, and no catchup had been made in all that time.

It was the recommendation of the conservation people and the industry people and the State foresters and everybody that this backlog should be caught up and that these lands should be made productive.

Mr. LONG. What should we be spending this year to make up that backlog compared to what we are being asked for?

Mr. POMEROY. The Congress finally authorized an appropriation of $65 million a year for 10 years to take care of that.

Mr. LONG. That means then that $68 million is a gap—an increase of $65 million instead of a $3 million cut.

Mrs. HANSEN. Yes; exactly. That is the problem.

Mr. YATES. You mean it should be $62 million more than we are being asked to appropriate?

Mr. POMEROY. $65 million was what the final act authorized.

Mr. LONG. It would be an increase. Instead we are having a $3 million cut, so the gap would be $68 million.

Mrs. HANSEN. The cut is worse than you think because usually an increase in 1 year is reflected in the base for the next year. So the base is smaller this year and the base is going to continue at a lower level. This is one of the problems.

Mr. LONG. If I can make a comment, Madam Chairman, this is not a very large sum of money when you consider the way we throw money around in this Federal Government. I would say this is peanuts, except I wager the peanut crop is 10 or 15 times as great as the $68 million that you are asking for.

WASTE IN TIMBER PRODUCTION

Mr. HODGES. You are taking in $350 million from the National Forests for what you are selling and you are selling half of what you ought to be selling. You are letting more than half of that wood die every year and go to waste. It is absolutely in contradiction of what Brock Evans said. You are letting more than half of it die every year at a time when worldwide demand and domestic demand for wood is at an all time high. It's going to get worse. However you want to look at it, the demand is going to increase year after year. If you don't use wood you are going to use something else.

Mr. MCKAY. Is that loss from disease or age or both?

Mr. HODGES. Most of it is loss from the fact it grows up and dies or something kills it. It's old age or a disease or bugs, or lightning or fire or something else.

Mrs. HANSEN. Mr. Alderson, do you have a comment on reforestation?

HARVESTING METHODS

Mr. ALDERSON. Madam Chairman, I wanted to support something that Dean Bethel commented on and pursue this research question a little bit farther. One of the areas on which there has been a great deal of criticism of the forest practices now in one of the most recent articles was by Dr. Kraft in the Journal of Forestry in the last couple of months, suggesting his views on a reform of the harvesting practice and outlining cases where clearcutting should not be the practice. There is one of the real needs, research into new harvesting methods. Clearcutting is presenting problems. Even the Forest Service has agreed to do some research on the soils questions, the question of whether we are depleting the soils through these harvesting methods of clearcutting.

Mrs. HANSEN. And what replacements are made to the soil, isn't that correct?

Mr. ALDERSON. That is one possibility. The other possibility is what other cutting methods can be used, because the Bureau of Land Management, I understand, has now been practicing some new types of selective cutting in southern Oregon, which I hope to look into when I go out there in April.

That is one of the avenues that I think we have to pursue, primarily because of the need to maintain the long terms, the sustained yield capacity of these forests. That is what I basically am concerned about in this research direction.

We also know from the Forest Service's report released in January on the timber supply outlook that they have now reduced the commercial timberland acreage. This is one of the things they have to pursue further to identify other areas that may be similarly marginal from the timber-growing standpoint.

In compensation for that—this is what they emphasized in their report in January—we have to strengthen efforts to assist the State and private forestry as a source to pick up some of the deficit in the timber supply that won't be able to come from the national forests.

Mrs. HANSEN. Mr. Wombach comes from one of the areas in the United States where they have as many difficulties and problems as there are in the United States. Dr. Wombach from the school of forestry of the University of Montana. Do you have a comment?

INVESTMENT AND MANAGEMENT STRATEGY

Dr. WOMBACH. This question of investment strategy is an interesting one to me. Interpreting the budget as it was presented by OMB leads me to believe that, first of all, they are taking a shortcut in contrast to what we expect from the Government. They are cutting back on capital investment, reforestation, roads, and so on, and increasing the expenditures for timber harvest and mining, and so on. It seems to me that this is an unfortunate turn of events. I will make a couple of more comments on that.

The other thing I see is that they seem to be concerned with operating at the extensive margin. By that I mean if you need more logs you climb up the next mountain or go up another drainage and cut more trees. It seems to me that this is also unfortunate, that we ought to be operating at the intensive margin, where we invest our money on a given acre of land and get more production.

On this short term view, it seems to me that this is not in the best interests of society now and in the future. We all know that renewable resources are the ultimate hope for our society, for our economy. By definition this means we can produce these things in perpetuity. It seems to me that in good conscience we have to invest in the renewable resources in order to assure that we will have a continuing supply.

This means capital investments. How much? I don't know how to address that. I have never worked at the aggregate level. I am an economist, incidentally.

But I do know on specific acres of land in specific areas you can increase the investment manyfold and get a positive marginal return, an attractive marginal return. That is true even in my part of the country, in the Rocky Mountains, which is not noted for its productivity. There are forests, drainages, and areas of land where we can double and triple our investment and get back a very handsome return.

It seems to me that in good conscience, as I say, the Congress and the public represented by those of us on the panel, must fight for greater capital investment. We must protect and enhance the production of our renewable resources. As the Forest Service I am sure has told you, these renewable resources not only can be produced in perpetuity but they are low-energy consumers and they are low polluters, and so on. There is a tremendous advantage.

Mrs. HANSEN. Isn't it true, Dr. Wombach—the Forest Service brought this out yesterday—that the only renewable resource at the current time is wood?

Dr. WOMBACH. That is right. I suppose you should include forage and some of the other plants being utilized.

Mrs. HANSEN. That is right.

STRIP MINE RECLAMATION

Mr. YATES. Dr. Wombach, one of the problems presented to this committee, and perhaps it's tangential to the primary purpose of the meeting but I still think it's important, is the question of strip mining. Montana, of course, is one of the areas where you are going to have to face that problem of strip mining.

Dr. WOMBACH. That is right.

Mr. YATES. We are told that the problem of reclamation after the strip mining is almost impossible in some of your lands. If this is true, could you have strip mining if you can't have reclamation? Has your school done any research into this question? Can you have reclamation after strip mining in your State?

Dr. WOMBACH. We have done a very small amount of research. We have some new projects getting underway. I would say the question is not can you rehabilitate the land. It's can you afford to.

Mr. YATES. Can you afford not to, you mean?

Dr. WOMBACH. What I mean is if it's going to cost you $5,000 an acre to rehabilitate after you have mined, is that a reasonable investment, a reasonable cost? Or is it extravagant to the point where you don't want to even start the mining to begin with?

Mrs. HANSEN. This brings me to a question which is related to all our resources. The committee considered the request last year of increased coal research which predicated the future supply of energy on a wider use of coal. The committee was very blunt in its report on this subject. We said that we would not consider this a good investment of public dollars until we had a better answer on a coal policy as far as reclamation was concerned, realizing that the American people are not going to stand for the destruction of the land.

Dr. Wombach, before we provide public expenditures for research and predicate a century or two centuries worth of coal use, don't we have several things to do?

Don't we have to have the knowledge to adequately protect the health and safety of those involved and provide for adequate reclamation, before we embark on something that can be used as an excuse to do something destructive?

Dr. WOMBACH. I am sympathetic to that point of view, except I am reluctant to advocate a moratorium.

Mrs. HANSEN. The committee didn't advocate a moratorium. We asked for a coal policy, which would include increased research on reclamation. The direct response to it was a cut in the reclamation research funds.

INVESTMENT POLICY ON FOREST LANDS

Dr. WOMBACH. If I can make a few more comments and get back to that point, what I was going to say about this investment policy is that operating at the intensive margin, putting more money in both research and for capital investment can involve many of our other problems.

I will give you an example. One of the results of this cut in reforestation is going to be that we will have to go higher on the mountain to get the timber that we are going to cut. This gets us in trouble with reclamation and with wildlife and everything else.

Mr. EVANS. Why is that? I don't understand.

Dr. WOMBACH. The pressure for timber harvest is very strong, very great—for legitimate reasons. The allowable cut is calculated on the basis of the total inventory. If we don't increase the production on our highly productive lands, the alternative is to move out to the poorly productive lands. That is the only other alternative to get the wood.

We have two alternatives. We can take a bloc of bottom land and grow twice as much wood or we can add three or four more acres at the other end of the forest and cut that.

There is a third alternative—cut less wood. But that is not a very palliative one because the economy needs it.

My point is there is another aspect of this investment policy. That is you have to take measures to insure that the money you have is properly invested. As some of you may know, I have on occasion been a critic of the Forest Service.

Mrs. HANSEN. That is why you are here. We want your comments.

Dr. WOMBACH. I have seen them take reforestation money and try to plant bogs in Minnesota and sand dunes in New Jersey and rocks in Montana. There is an obligation to put that money where the payoff is going to be the greatest.

In the past there hasn't always been adequate consideration of the payoff to those investments.

Mrs. HANSEN. To what do you attribute that policy?

Dr. WOMBACH. It gets back to what Mr. Hodges was talking about earlier. The goals that public managers perceive are different. They perceive the management goals as being different than those of industry. I don't really think they are as different as is often made out.

It seems to me that the public foresters have an obligation to invest their money, the public money, just as private investors.

Mrs. HANSEN. Do you feel that the Forest Service should determine its productive land and concentrate there rather than moving into land that is properly recreation, wilderness, or the people's kind of land?

RESEARCH PRIORITIES

Dr. WOMBACH. I would go even further than what you are implying. I think the Forest Service should not only concentrate on productive land, I think they should be directed to do so. I think that is part of Congress' responsibility. The same thing applies on research. My background is in research. I have seen a lot of research dollars spent on low-priority programs.

Mrs. HANSEN. Such as?

Dr. WOMBACH. I am reluctant to go into too much detail on that.

Mr. MCDADE. Any in this budget?

Dr. WOMBACH. To the extent that I still see a lot of research going on low-priority problems.

Mrs. HANSEN. Such as?

Mr. MCKAY. What is low priority?

Dr. WOMBACH. I can talk about a few local programs in my part of the country.

Mrs. HANSEN. Please do.

Dr. WOMBACH. One of the real problems we have in the Rocky Mountains is that we don't know how trees grow. We don't know the

physical response to treatment. If we thin a stand of timber, we don't know how fast it grows after that. In general, we don't know what happens when we do something to the forest. At the Intermountain Forest Range Experiment Station there is only one man dealing with growth responses.

Mrs. HANSEN. Why?

Dr. WOMBACH. This is in Nevada, Utah, Wyoming, Montana, and Idaho.

Mrs. HANSEN. Why?

Dr. WOMBACH. Apparently it has been considered of low priority by the people who direct the research program.

Mr. WYATT. What do you consider to be lower than that, Doctor?

Dr. WOMBACH. Many of the things they are doing.

Mr. WYATT. Name some of them for us.

Dr. WOMBACH. One of the projects that received a supplemental funding this last year was the development of a pipeline for transmitting chips. This project not only is unjustified on the face of it but it has been tested by the Canadian Pulp Paper Institute and tested by the Russians and by industry in our country and found to be either unfeasible or unnecessary. Yet we are spending a great deal of money to develop a pipeline to transmit chips.

In the second place, the research could have been done for one-tenth of the cost if it were simulated on a computer. In the case of silvaculture, I don't know the exact numbers but we have about a dozen researchers in the northern Rocky Mountains dealing with silvaculture of our primary species. Two-thirds of them are working on one problem. It's a classification system, a habitat classification system which I consider primitive and essentially worthless. When they get done classifying they still won't know how trees grow or how they should manage the land. The same silvaculturalists could be dealing with the more critical problems of finding better ways to generate the trees and treat the stands when growing.

Mrs. HANSEN. So you would reverse that funding and handle it as a priority item?

Dr. WOMBACH. Yes. You must understand I have a bias and I am just voicing one man's view. I see some great and disturbing problems. In the case of the project on this pipeline in research, in the first place, if that research is done I think it should be done by industry and not by the Government. It's a pilot study.

That same project, which is an engineering research project located at Bozeman, Mont., could be addressing itself to critical needs of engineering systems in the Rocky Mountains.

Most of our problems with logging in the Rocky Mountains deal with the debris that is left, the terrible road systems that are required, and so on. These are in large part engineering problems and they are not being addressed by researchers.

I didn't intend to just criticize research. My point was that it seems to me that——

Mrs. HANSEN. There should be a better determination of the research priorities.

Dr. WOMBACH. Right. I think again Congress has some responsibility here.

Mrs. HANSEN. You better talk to your two Senators, also.

Dr. WOMBACH. I know.

Mr. MCKAY. Along this line, we have had land grant colleges with colleges of forestry now for how many years—since about 1880 sometime. What have they developed about how trees grow, and so on? Haven't they been doing some of that? Or have they just been teaching guys how to be recreation specialists?

Dr. WOMBACH. We have good growth and yield information in many parts of the country.

Mrs. HANSEN. Is that used by the Forest Service whenever possible?

Dr. WOMBACH. It is in some parts of the country.

Mrs. HANSEN. Dean Bethel, do you have a comment?

Dr. BETHEL. I mentioned earlier, I just don't think we know enough about productivity of the forests. We know enough about the soil productivity. I agree with Dean Wombach. I don't think we know enough about psysiological properties of the trees we are dealing with.

One of the things that is making a substantial contribution to this is the IBP program that is being funded through the National Science Foundation by the Congress. At a great many of our universities—the University of Montana and the same thing here in the East—basic productivity studies in the long run are going to tell us some things that we very badly need to do.

CONTRIBUTIONS OF LAND-GRANT COLLEGES AND UNIVERSITIES

Mr. MCKAY. What kind of studies have the universities been doing up to now in a hundred years?

Dr. BETHEL. Let's back up. The oldest forestry school in the country is Yale, which started in 1900. So it's 70 years old. Ours was started in 1907. We are one of the older ones.

You mentioned land-grant institutions. It just happens the two forestry schools represented at this table are two of the eight in the country that aren't land-grant forestry schools. I have been on the faculty of three and I have said a little bit about them.

Mr. MCKAY. Say it.

Dr. BETHEL. In general, the land-grant system has invested in forestry only within about the last 6 or 8 years. It was the McIntyre-Stennis act that first really put land-grant-type money into forestry. This act was passed 6 or 7 years ago.

There is a fairly short history of the support of forestry research in the universities by the Federal Government compared to the hundred years of agricultural investment by the Federal Government.

Mrs. HANSEN. Dr. Wombach, is it the policy of the Forest Service before they proceed in an area of research to consult with all the forest management people, within an area, to get a consensus of the priorities so that they are established jointly?

Dr. WOMBACH. They are doing a much better job of that now than they have in the past.

If I could respond to your question again, I reinforce what Dean Bethel said. Forestry schools have just recently gotten into research. That is true in my own school. But even the program we have, until just the last 2 years, has been academically oriented, which I think you might expect in a university. We were doing basic work in life

cycles of insects and basic work in tree physiology and things of this sort, which is the kind of research that has been typically done in universities.

We have only become problem oriented in the last 2 years, where we are now directing our research investments toward solutions of problems that we can identify on the ground. This is quite a revolution in universities, at least in agricultural and similar programs, where we are switching our emphasis from basic to applied research.

I would like to make one more comment because I don't want to leave as a critic.

Mrs. HANSEN. That is the purpose of this hearing.

FALCON AND SEAM PROGRAMS

Dr. WOMBACH. What I was leading up to was support for such programs as FALCON, SEAM, and STRETCH, and programs which are funded especially with moneys directed toward the solution of specific problems. I think both Congress and the Forest Service and the universities should champion these kinds of research. FALCON is designed, as you know, to develop new logging systems that will allow us to cut our trees.

Mrs. HANSEN. I have news for you, that item was cut.

Dr. WOMBACH. I know, but that is why I am making a plug for it.

Project SEAM gets me back to your earlier comment about coal. SEAM is another one of these projects which is to deal with mining and the environment, trying to find better ways to extract minerals from coal without having an unfortunate impact on the environment. These projects, I think, deserve a great deal of support, first of all, because they solve that problem of research priorities. They allow the Congress and other interested groups to have a direct input into the establishment of research priorities. Second, they are dealing with very current and very critical problems. They have another feature which is very attractive to me. That is, they combine researchers, managers, the public, and industry jointly in the effort to solve problems. I think this is the way solutions are going to come from this point on, combining these.

CONDITION OF FOREST LAND

Mr. LONG. I must say I share Mr. McKay's sense of shock. We all know that Theodore Roosevelt nearly 70 years ago launched a great crusade over the destruction of our forests. I thought that he did something about it.

Nearly 35 years ago I made a study of the pulp and paper industry and I was told then how bad the situation was. I saw cutover areas up in Montmorency River area of Quebec that hadn't been replanted in 40 years. After 40 years, they had little Christmas trees on them. Then I was told that we had made a great recovery from that.

I read occasionally that we have learned all these lessons. Then I come here today and I find out we don't seem to know much of anything. Of course, I don't know of an area of intellectual research where you won't get an expert who says, "We don't know. We wish we knew a lot more. We need a lot more for research."

What I want to find out is whether it's more true of forestry management than it is of any other area that you want to pick.

I want to point out, too, that I don't know of any research in any field that isn't wasteful, simply because you cannot find out, at the time research is instituted, what the results are going to be. So you don't really know whether research into a particular area is going to be a good idea or a bad idea until you get the results.

A lot of research that has been done, that seemed kind of crazy to begin with, may have turned out to be a great enterprise, looking back. A lot of research is done simply because somebody gets an idea; it becomes his particular hobby and he is entitled to waste his life if he wants to. Now and then some genius comes up with something great.

FAVORABLE RETURN ON INVESTMENT

I would like your comment on some of these things, as well as the point that was made by Dr. Wombach that there are areas in Montana where you can double or triple the investment and get your money back. Would that be soon or a long time from now?

Dr. WOMBACH. Let me comment on the last point you made. When I said that you could double or triple your investment and get a favorable return, I was thinking in terms of the long-term benefits.

Mr. LONG. Are you allowing for the interest on the money and all that?

Dr. WOMBACH. Yes. When I say "favorable," I am thinking in terms of a 5-percent-dollar return. Of course, many of the returns may be nonmonetary. Some of these investments, of course, would be wildlife habitat and stream protection, and so on, where there is no monetary return. But the long-term value can be demonstrated very easily.

There might also be an immediate return. I think, as Mr. McCracken has said, these kinds of investments may be reflected immediately in allowable cuts in there done properly, and so on. So there could be an immediate benefit.

PERFORMANCE OF FORESTRY RESEARCH

Mr. LONG. What about ignorance on research, which all of you seem to agree on? Do we have ignorance here above and beyond the call of duty, above and beyond any other industry in the area of forestry?

Dr. WOMBACH. I would say that we should know a lot more than we do know. Given the investments we have made over time, we should have a lot more answers than we do. Whether our performance is better or worse than people in other disciplines, I wouldn't be competent to say.

I would like to respond to your comment that all research is inefficient. There is some truth in that.

Mr. LONG. I thought there was an awful lot of truth in it.

Dr. WOMBACH. That doesn't justify investments when you know the payoff is very unlikely, nor is it as pertinent to the field of forestry research, which is by definition an applied field, as it would be in basic research, in electronics or nuclear physics or something where you are working at the frontiers of knowledge.

In forestry and in natural resources we are not typically working at the frontiers of knowledge. We are trying to apply knowledge that other people have already generated. In an applied field I think you can, or should, expect more efficiency.

Mrs. HANSEN. Mr. Wyatt?

BUDGET INCREASES FOR TIMBER SALES

Mr. WYATT. Dean Wombach, I understand from your comments on the budget that you share our concern about reduction in research and certainly in reforestation moneys in this budget. If I understand you correctly, you said at the same time the budget contained increased moneys for timber sales or timber harvests. You and I must be looking at different figures. What are you talking about here?

Dr. WOMBACH. The budget sheet I got shows sale administration and management up by $1,393,00.

Mr. WYATT. Have you seen the breakdown of that? $882,000 of it is for timber inventories and $313,000 of that is for silviculture examinations? I want to be sure that we are talking about the same thing and you don't leave an impression that maybe you don't intend to leave. The sales preparations figures are very consistent for 1972, 1973, and 1974. They are almost on exactly the the same level. Yet during this period of time, of course, we have had a constant increase in the cost, particularly in personnel. In fact, in sales effort and in sales dollars spent, the amount has been going down.

Dr. WOMBACH. I don't have the breakdown. Of course, the other things you mentioned—the silvicultural examinations, and so on—are part of the timber sales program. You have to do that in order to conduct the sales. I don't want to be misunderstood. I am not saying that the budget for timber sales and related activities is too large. That is not my impression at all.

Mr. WYATT. You said that there were increased fundings for the harvest. That is what I gathered. Our numbers here just don't indicate that.

Dr. WOMBACH. The only figure I have is this total for sales administration and management. It showed an increase of $1.4 million.

Mr. WYATT. Only $200,000 of that is for timber sales preparation. Of course, that is a relatively small amount compared to the total.

INCREASE IN FOREST SERVICE OPERATING COSTS

Mrs. HANSEN. May I point out to you Dr. Wombach one ingredient which doesn't appear as a line item in the Forest Service budget is $28 million for preparation of environmental impact statements. That is part of the preparation for timber sales.

This is what disturbed us about the total budget, inasmuch as it is lower anyway. When these costs increase approximately $15 million in a year or two in one category, it siphons off funds for other programs. In addition costs are escalating due to inflation in all fields of activity.

When you look only at figures you are not getting a clear picture of what is occurring in a particular program.

Mr. Connaughton has not spoken. Do you have a comment at this point?

INTENSIVE MANAGEMENT

Mr. CONNAUGHTON. Thank you, Madam Chairman. I want to say at the outset, in spite of some lack of information, obviously, that is needed in the ultimate in forestry, we do know far more now than we are practicing. With an adequately financed program, we can certainly put it to good use. All of the public administrators can. There is no question about that.

The real situation that causes this to develop essentially is that in terms of the public lands we have a resource that is managed at far less than its potential. The possibilities for intensive use and its contribution—socially, economically—is far less than they should and could contribute. This is particularly significant, of course, in terms of forestry because it basically relates to rural America and rural needs directly and of course to America as a whole indirectly.

Until these lands are brought up to more near their full potential, they in effect are a burden on the rest of the country. The remainder of the industry and the other lands which are more or less operating at full capacity are pulling the weight of the public lands, which are only administered and functioning to a part of their full potential. This applies to all resources, whether it's wilderness or timber or recreation or grazing—any one of them.

The real approach, obviously, is to classify these lands as the administrators do in the course of their administration, and subject them to their full and maximum use with the necessary funds that might be needed to do the job. This has been recognized, obviously, by the committee through the years.

Perhaps for just a moment I will go back. This wasn't too much of a problem not too many years ago because we had more land in effect than we had people. But this is reversing itself now with a static land base and an increasing population. We are getting these increasing demands. The committee has been recognizing this through the years, as the increase over the budget shows.

Obviously, the problem you are facing now is that the budget doesn't recognize it and the committee is faced with that responsibility. This applies to all of these activities that are listed in the budget. In many respects the fact that there are separate items in the budget in which one tends to be in competition with the other is a rather unfortunate set of circumstances because they tend to compete, and they shouldn't. The land itself should really call for the appropriation and action which you have recognized on many occasions in the past.

I would like to see and hope, and I think perhaps it will be, the hallmark of this committee's review of this budget to interplay one on the other.

Even take such things, for example, as to where money should be concentrated in terms of productivity. This is a good principle in terms of a dollar-and-cents position. Yet in the community where I was raised I am afraid we wouldn't have had one and I wouldn't have been there had it been based on economics. Much of our mountain and mountain forestry and mountain districts today would be wiped out if it was based on economics. The public lands are not organized on an

economic basis. They are on some other basis, social or otherwise, whatever terms you want to use. This can be ignored, granted. But also the social values must loom large, as you have indicated.

Mrs. HANSEN. A very direct response to you, Mr. Connaughton, is that several years ago in BIA forest lands, after logging operations, debris was left all along the banks of the stream. This in turn limited the production of the salmon runs. It has had a direct impact on salmon for many years.

Along came the Government, in an accelerated public works program, and started stream clearance. Do you know how long that lasted? Until the total economy of the country temporarily improved. One stream got cleared.

Instead of recognizing that it was a problem not of a budgetary matter but a problem of land management, they terminated the program. The problem is still there but the work has terminated. That is what I mean by integration of the management responsibility with economics. You are so right.

FOREST MANAGEMENT PRIORITIES

Mr. B. EVANS. Briefly, if we are ultimately required to look within the budget itself or pass appropriations and have to do some chipping around there, I would like to suggest what in our view would be of a higher priority and what would be a lower priority.

The higher priority would be along the lines Dean Bethel suggested, the preproduction idea. Second, growth management is very important. There was a forester working full-time in my office in Seattle who was very strong on that and went around to some of the national forests and the private lands even more so and near Monroe where he lives, in the State of Washington. There are lots of places where we are getting thickets of Douglas fir. This sort of thing is very productive. I was in the Siuslaw National Forest in November and I saw at least 100,000 acres, I was told by the Forest Service people, of fine productive land growing up into thickets of Douglas fir.

Here again most of these areas are noncontroversial as far as environmentalists are concerned. I submit this could be a very high priority order of the reforestation program, keeping in mind we can deal with the allowable cut later. I don't think they should be tied together.

The lower priority, if we are talking about chipping within the existing budget, I would submit would be in your forest roads and trails allocations here. Keep in mind that is 95 percent roads and only a very small percent trails. It really should not be named roads and trails, if it's for roads primarily, in my opinion, for timber production. I think the critical factor here, and we can demonstrate this, is most of those appropriations now are going for roads into areas that are less productive than before and much more controversial. The Dean Ridge Road is a specific one which went into a key elk range and was heavily opposed by Montana Fish and Game and by all environmentalists.

Nevertheless, this is an example of this kind of thing in recent years. We already have a vast road system in existence in the national forests which I think go to most of the purely productive lands and less controversial lands right now. I think it speaks for itself.

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SHIFT IN ROAD CONSTRUCTION RESPONSIBILITY

Mrs. HANSEN. We will get into this matter this afternoon because the Forest Service is proposing to shift some road construction to the contractors. The committee would like to point out some of the problems inherent in this transfer. This is going to be a highly controversial item.

Mr. B. EVANS. That is right. I think we can say most of our road system is in most of the productive lands. I am sure not all. I am sure some of the roads wouldn't be contested or controversial either. We can take another hard look at this budget in the national forests of the North Cascades in the State of Washington which is supposed to be a part of the wilderness. There are 5,000 miles of roads already. The water roads already are in productive places.

Mrs. HANSEN. Weren't many of those roads built prior to the inclusion of that area in the wilderness system?

Mr. B. EVANS. I am just talking about within the national forest boundaries themselves, not just the national parks and wilderness areas.

Mr. MCDADE. You realize you are making two different comparisons there. You are talking about our overall budgetary problems and new obligation authority. When you are talking about forest roads and trails you are talking about an appropriation to liquidate contract authority. It doesn't give us any relief if you say cutback on roads and trails if you have to beef up research or reforestation, because they are different types of appropriations.

Mr. B. EVANS. I am trying to suggest that this committee consider this as the time comes up for new appropriation and new contracts.

Mrs. HANSEN. Mr. Pomeroy, I think you had a comment.

PRIVATE FORESTRY

Mr. POMEROY. Just a brief comment. I hope that you and the members of the committee won't think it facetious, but it pertains to the business of getting research into practice.

A long time ago it was part of my job to try to teach gum farmers in the Deep South how to manage their woodlands so they would get a better crop of turpentine. I went through my whole spiel one afternoon and the old gentleman looked me right in the eye and said, "The pocket does not jingle with sufficient intensity."

This is the real reason that many of our small private forests are only partially productive. We need a lot more emphasis on utilization, on marketing, on how to help that man make a buck. If he can make a dollar, he will do it.

Mrs. HANSEN. Or if he had the dollar to invest in the better management of his land, he would do it. Isn't this correct?

Mr. POMEROY. Yes, ma'am.

Mrs. HANSEN. The committee will adjourn until 1 p.m.

Mr. EVANS. Madam Chairman, I would like to compliment you for having this idea for a panel discussion. I would like to thank all of you for coming. It has been very helpful for me.

Mrs. HANSEN. I would like to express my appreciation.

AFTERNOON SESSION

Mrs. HANSEN. The subcommittee will come to order.

SOFTWOOD AND HARDWOOD NEEDS

What are the critical areas of softwood and hardwood timber supplies currently?

Mr. HODGES. Both softwood and hardwood in the United States are in short supply.

Mrs. HANSEN. Is this all over the United States?

Mr. HODGES. All over the United States. And it does not matter what product.

For example, the furniture people need about 30 percent more hardwood than they are going to be able to get this year.

Mrs. HANSEN. How much hardwood do we import?

Mr. HODGES. Well, now. We import 55 percent of our hardwood plywood, for instance. We are going to have to import a lot more hardwood. Both hardwood and softwood are both in some ways in short supply worldwide. Softwood is in short supply for pulp and it is in shorter supply than it has ever been; softwood is short in supplies for poles, piling, lumber, you name it. It is the same anywhere in the United States; nationwide, all wood is in short supply.

Demand is, as you know, related to housing; the furniture demand follows housing by 12 to 18 months. We build the houses so we have to put furniture in them. Construction unrelated to housing is also going up.

Mrs. HANSEN. Are we exporting at the present time any of the hardwoods?

Mr. HODGES. Yes. We are exporting some hardwood, we are importing some.

The imports are more than the exports.

Mrs. HANSEN. What hardwoods are we exporting?

Mr. HODGES. For instance, we had a big flurry of maple export. The Japanese got into a bowling alley boom, so our maple was flown to Japan in airplanes. Our own maple people, just could not buy it in the United States. The price to the Japanese was the same as in softwood, double and triple our domestic prices.

Mrs. HANSEN. Where is the principal maple supply?

Mr. HODGES. Northeast.

Mrs. HANSEN. Are we doing very much in the area of planting and growing?

Mr. HODGES. We would not be in short supply in either hardwood or softwood if we could manage the situation properly.

In my way of looking at it, these shortages are to some extent artificial. I would love to continue on with that just a bit.

Mrs. HANSEN. We will discuss this again when we get to that tender subject, log exports.

FOREST ROADS AND TRAILS

In regard to the discussion we had this morning on forest roads. I will quote from the Forest Service budget. The Appropriation Act of 1972 totaled $148,740,000 for forest roads and trails; the 1973 act was $158,840,000 and the budget estimate for 1974 is $87,700,000, a decrease of $71,140,000.

The Forest Service plans to assign a portion of road construction to the purchasers of the timber. Now this raises several problems.

First, this is going to result in a decrease in revenue for the U.S. Forest Service. A sizable decrease in revenue.

Second the shift of the burden to the timber purchaser, will anticipate lowered sale prices, because the cost of the road is built into timber removal. At the same time, 25 percent of the forest revenue is distributed to the counties for schools, roads, or a division between roads and schools, according to the jurisdiction of the county involved.

This forest revenue is an in-lieu tax, literally, for the land that is used.

So there will be an automatic reduction of revenue to the counties for their schools or roads. There are two problems involved. Most timber goes out over a county road, and the maintenance and construction costs are high. These same roads have to haul schoolchildren, usually. So when you have poor maintenance you raise the risk of school bus accidents.

Also the schools, due to recisions anad other budgetary determinations, are going to find themselves with increasing difficulties in meeting school demands.

Another problem, which does not have to do with revenue, that could result, is that only the big owners with a sufficient amount of capital for purchase of the timber will be able to bid?

So that you really, in effect, limit your small operators' ability to bid. There is going to be some hue and cry from these owners. Also the credit ability of the smaller bidder is limited in many instances.

Mr. McCracken is very familiar with this situation. Mr. Hodges, do you have any association with these operators who are so very near the credit limitation?

Mr. HODGES. Oh, yes.

Mrs. HANSEN. This in turn raises other types of problems.

If the operator is called on to build the road, is he going to build the roads to a standard that will meet multi-use needs?

This will be true with some purchasers, but I have heard too many people say, "If I were building that road, I would just put rip-rap on and make do, and get out. We do not need a high quality road."

Many of the roads which are constructed eventually become recreation roads, because hunters, fishermen, picnickers, campers, all kinds of people use them.

My question is, what do you see as the impact of this proposal?

IMPACT OF SHIFT IN ROAD CONSTRUCTION

Mr. CONNAUGHTON. Madam Chairman, you raise very pertinent questions in relation to it, and they are all very real.

In the first place, it will impact county returns, simply because receipts are lowered, because the stumpage, itself, will carry the cost of the appropriated funds.

Mrs. HANSEN. Is it not true, as you are well aware, that some of these counties are in very bad fiscal circumstances anyway?

Mr. CONNAUGHTON. In the rural areas, there are difficulties in many, many places, maintaining their tax base for a variety for reasons, as you well know.

Mrs. HANSEN. That is correct.

Mr. CONNAUGHTON. A variety of reasons.

So the answer to your first question is, certainly it will impact it in just the way that you have outlined.

The second question, as to the large and the small operator situation, you put your finger on a problem, to be sure.

The small operator can contract with larger companies to do the job. So the door is not closed to him. He merely has to go through some problems of negotiation and arrangements that will, perhaps, pose a different set of problems than a larger operator, with a full complement of engineering services on his own staff.

So here again there are problems associated with the size of ownership, there is not any question that this exists.

It will need to be recognized in relation to the bidding. I do not know that there will be any bidders that would be excluded as a result of this, but there will be a number of bids, as you know, are borderline cases, as to whether they participate or whether they do not, as the bidding rises.

This could be sufficient to drop them out, as the borderline is reached, as to whether they can stay in or stay out of the bidding. So I think it is significant that you have put your finger on this point.

What was the third one?

STANDARDS FOR FOREST ROADS

Mrs. HANSEN. The question was, would the standards——

Mr. CONNAUGHTON. Oh, yes. I do not believe that is too severe a problem.

The question arises, however, in operator-built roads there will be just as strong a need for contracting supervision as there would be if the contract was let by the government through force accounting. And if the Forest Service is so limited in personnel and funds that it cannot provide adequate supervision, there is not any question corners will be cut; there is not any question, this is just human nature.

Mrs. HANSEN. That is what we pointed out yesterday.

Mr. CONNAUGHTON. That has to happen.

On the other hand, if there is adequate supervision, there is no reason why an adequate standard road cannot be built by a timber operator. That would be my answer to all three questions.

Mrs. HANSEN. But this again is all reflected in the sale price?

Mr. CONNAUGHTON. It is all reflected in that.

Mrs. HANSEN. Mr. Alderson?

Mr. ALDERSON. Thank you, Madam Chairman. I have not had a chance to discuss all these points with our people in the Northwest where we have the greatest experience with this. But our experience does bear out what Mr. Connaughton just said about the standards.

We agree with that, that we strongly support the application of the standards the Forest Service has. But it has been mainly a matter of the Forest Service having adequate supervision there to make sure that they stick to it.

Mrs. HANSEN. Also, the schools probably are not yet aware of what is proposed. They do not have the vaguest idea what is in this budget, as far as their school funds are concerned.

Mr. ALDERSON. We all have to get down to the details on the impact and that is what we are going to try to do.

Mrs. HANSEN. Mr. Hodges?

IMPACT OF PURCHASER-BUILT ROADS

Mr. HODGES. Regarding the purchaser-built road, the reduction of the Federal funds for road construction in regard to timber is going to mean of course, as you say, that more road has to be built by the timber purchasers. This does reduce the stumpage price, as you say. It reduces the 25 percent funds to the counties. It means those county funds have to be made up by other landowners, generally. So it means more taxes on the other timber.

When you say——

Mrs. HANSEN. Not necessarily other timber, because, as you know, in the State of Washington there is approximately 10 mills for county road building. So the tax does not go to timber owners.

Mr. HODGES. It will go on the homeowners too.

Mrs. HANSEN. Homeowners and farmers.

Mr. HODGES. Right. But it means that more sales will be deficit sales. That is, there will not be the normal allowance for a margin of profit for the operator, because he is going to have to build more roads and there is much timber that is fairly marginal.

Mrs. HANSEN. Is this going to increase the cost of timber?

Mr. HODGES. Yes; and it is going to come out of his profit margin.

When you talk about the small operator, he is more limited in his ability to withstand that sort of thing. So it means if he is going to stay in business, he is going to operate at a lower rate of return or the sale is not going to be made. There will be less timber available to put on the market under that system, which is the worst thing that can happen in these times with high demand.

COST-BENEFIT OF FEDERAL FOREST ROADS

Mrs. HANSEN. Mr. Hodges, there is one other thing I want to ask you about.

For a timber operator to build a road there has to be a fairly large amount of timber in an area. The comment was made by the Forest Service I think yesterday that they were going to hold back some lands, where there was a limited ability to cut timber. These would be the lands in which the government would construct the roads.

Could this lead to a tendency of cutting timber that maybe should not be removed at this time?

Mr. HODGES. I am sure that to some extent that would be the case. What it does do is, it eliminates many of the alternatives you have available to you to administer the forest in the most efficient manner. It means you have to make a much larger sale to build the length of road it takes to get there, whereas if that road was built by Federal funds you could make smaller sales and spread them out over time.

So it eliminates the alternatives that you would have for wise management. When we appeared before the Senate Public Works Committee 2 weeks ago, a number of these same questions were asked about roads, particularly in terms of the return to the Federal Government. They asked us to supply them with an analysis of the costs and returns and the cost-benefit ratio.

[The analysis follows:]

Supplementary Statement of Forest Industry Spokesmen
Before the
Subcommittee on Roads
Senate Public Works Committee
on
S. 502, Federal-Aid Highway Act of 1973
February 16, 1973

The following analysis of National Forest development roads is in answer to Senator Lloyd Bentsen's request at the February 16 hearing that the forest products industry supply the Committee with additional data on expected return on investment of forest development road construction. This analysis is made to support the contention that monetary benefits realized by providing road access for timber salvage and regular timber harvest will far exceed incurred costs for forest development road construction. The intent of this analysis is to substantiate the need to increase the proposed $75 million authorization for forest development roads and trails to a $170 million per year level for fiscal years 1974 and 1975.

In fiscal year 1972, approximately 797 million board feet of timber salvage and thinning sales were harvested as part of the planned timber sales program. Only 514 million board feet of this type of timber was sold in the western National Forests. 1/ Annual mortality of softwood and hardwood timber growing stock on commercial forest lands in the western National Forests is estimated at 6.2 billion board feet. 2/ Therefore, the sales program to salvage annual timber mortality is currently less than 10 percent of the potential loss.

SUMMARY OF ANALYSIS

The analysis has been developed specifically for the westside National Forests of western Oregon and Washington--a part of the Pacific Northwest timber supply region as outlined in the forest statistics report of 1970. Because of the great variability of timber types, volume per acre, and stand density and often the large differences of mortality rates, occurences, and causes throughout the western National Forests, a specific region has been selected to make the analysis more manageable and meaningful.

In the analysis, the construction cost of timber access roads is calculated to average $30,100 per mile based on the latest Forest Service estimates of Region 6 road construction mileage needs and expected road costs to serve commercial forest lands. The net commercial forest land area within the westside National Forests is approximately 6.766 million acres after subtracting 385 thousand commercial forest land acres that were tentatively set aside as part of the new wilderness study areas designated by the Chief of the Forest Service in January 1973. Annual sawtimber mortality is computed at

1/ Forest Service Region 1-6
2/ "Forest Statistics for the United States, By State and Region, 1970"

238 board feet per acre per year based on 1970 forest survey data.

In the analysis example, the benefits of three timber management activities--initial salvage of past mortality, periodic salvage of future mortality, and regular timber harvest--are compared to the construction cost of one mile of timber access road. The sawtimber stumpage value averages $40 per thousand board feet based on 1972 third quarter statistics. Average sawtimber volume per acre is 37,400 board feet. A rate of 6 percent is used to discount future benefits to the present to enable direct comparison of present costs and benefits.

The present worth of road costs is $30,100, while the present worth of salvage and regular timber harvest volumes is $78,865 resulting in a net present worth of $48,765 for each mile of constructed road. The benefit/cost ratio is 2.62 or for each $1.00 spent $2.62 would be received.

POSSIBLE ADDITIONAL BENEFITS

The assumptions used in the example are based on regional averages of current conditions. Estimates of anticipated benefits are conservative, because the following changes in assumptions would result in additional benefits.

1. It is reasonable to expect that the current stumpage values used in the analysis may be significantly higher within the next 20 years. Consequently, higher stumpage values for future salvage or regular timber harvest volumes would increase the present worth of benefits.

2. Only sawtimber volumes for both salvage and regular harvest are considered in this analysis. Additional volume of small merchantable material could be harvested. At the same time, sawtimber volumes from thinning operations could also be realized. Together, this increased timber volume would substantially increase benefits.

3. The expected economic life of a forest development road is assumed to be 20 years. However, from past experience, a road's economic life may be extended, if needed road maintenance and proper road management practices are provided. Extended road life will result in increased benefits, recognizing that increased road maintenance costs will offset some of the additional benefits gained from a longer planning period. However, the net benefits of an extended period would still be greater than that of a 20-year planning period.

4. Salvage opportunities in this analysis are computed only for expected annual mortality, which mainly represent endemic insect and disease conditions and scattered windthrow occurences. In those areas where insect epidemics, wildfires, and concentrated windthrow damage are present, large timber volumes could be salvaged if road access is available. This activity could mean

a substantial increase in net benefits .

5. Besides timber harvesting opportunities, reforestation of non-productive commercial forest lands is made possible through road access. Although a monetary benefit is not immediate, failure to grow and subsequently harvest timber in such areas is a foregone opportunity and in effect a cost item.

6. Even though the timber access roads are primarily used for timber management activities, other National Forest resources benefit from such road access in these areas. Recreation, hunting, fishing, and other land use traffic will utilize these roads. Another aspect to be considered is the opportunity for better fire protection of the resources, which could reduce catastrophic losses of timber and severe degradation of soil and water values as a result of uncontrolled wildfires.

ANALYSIS SECTION

Pacific Northwest - Westside National Forests (Oregon and Washington)

1. Commercial Forest Lands

Western Oregon	4,830,000	acres
Western Washington	2,321,000	
Subtotal	7,151,000	
New Wilderness Study Areas	- 385,000	
Net CFL Area	6,766,000	acres

2. Timber Access Road

It is estimated that 1 mile of timber access road on the average serves 320 acres of commercial forest lands for regular timber harvesting and 160 acres 1/ of commercial forest lands for both the initial salvage of past mortality and the periodic salvage for future mortality. Based on recent Forest Service estimates of timber access road construction needs for Forest Service Region 6, about 31,580 miles of roads at a cost of $951.6 million should be constructed to provide access to all commercial forest lands. The average cost per mile is about $30,100. Expected economic life of a forest development road is 20 years.

3. Annual Mortality

Sawtimber (only) 1,611,000,000 board feet (bd. ft.) per year

Average mortality $\frac{1,611,000,000 \text{ bd. ft.}}{6,766,000 \text{ acres}} = 238 \text{ bd. ft. /acre/year}$

4. Initial Salvage of Past Mortality

Past 5 year's mortality at 238 bd. ft. /acre/year = 1,190 bd. ft. /acre (assuming that only one half of mortality in past ten years is salvageable).

For 160 acres, about 190,400 bd. ft. total sawtimber volume is available for salvage.

5. Regular Timber Harvest

Using a 100-year sawtimber rotation and a 10-year harvesting cycle, about 64 acres of the 320 acres served by the 1 mile of timber access road will be harvested during the 20-year period as part of the regular timber harvest program. It is expected that 32 acres for each 10-year period will be harvested.

1/ Only one half of area served by this road can be economically salvaged without additional road construction.

The average sawtimber yield is estimated at 37,400 bd. ft. per acre based on the 1970 Forest Survey statistics of average sawtimber volume for National Forests of western Oregon and Washington.

Estimated harvest for 32 acres at 37,400 bd. ft. /acre equals 1,196,800 bd. ft. total sawtimber volume for 10-year period.

6. Periodic Salvage of Future Mortality

1st 5-year period	190,400 bd. ft. total sawtimber volume
2nd	190,400
3rd	190,400
4th	190,400
Total	761,600 bd. ft.

7. Average Stumpage Value

An average stumpage value of $40.00 per thousand bd. ft. (MBF) is used based on recent National Forest average stumpage values reported for Forest Service Region 6 during 3rd quarter of 1972. The same stumpage value is used throughout the 20-year calculation period.

8. Initial Salvage

190,400 bd. ft. at $40/MBF is $7,616 - Discount rate of 6 percent.

Year 0 discounted value = $7,616

9. Periodic Salvage

190,400 bd. ft. at $40/MBF is $7,616 - Discount rate of 6 percent

5-year period	Value	Year		Discounted Value
1st	$7,616	5		$5,691
2nd	7,616	10		4,253
3rd	7,616	15		3,178
4th	7,616	20		2,375
			Total	$15,497

10. Regular Harvest

1,196,800 bd. ft. at $40/MBF is $47,872 - Discount rate of 6 percent.

10-year period	Value	Year		Discounted Value
1st	$47,872	5		$35,775
2nd	47,872	15		19,977
			Total	$55,752

11. Benefit/Cost Ratio

. . . Benefits

Initial salvage	$ 7,616
Periodic salvage	15,497
Regular harvest	55,752
	$78,865

. . . Costs

Road construction $30,100

. . . Present net worth is $78,865-$30,100 = $48,765

. . . Benefit/Cost ratio = 2.62

Mr. HODGES. So we did that for the region where most timber is sold, region 6. I want to give it to you. Using 6 percent interest, being very conservative, looking at it over 20 years, and taking the average road cost and looking at the returns, just from timber and not adding anything in from the standpoint of recreation, fire protection, or all of the other things, just the returns from stumpage, you come out with a road cost of $30,100, a return from timber sales of $78,000, resulting a net present worth of $48,000 for each mile of constructed road. The cost-benefit ratio would be $2.62, discounted, using a 6 percent rate of return for every dollar that you spend on the main line road. These are the roads that we think the Federal Government should build.

Now there are a number of things that could be done in our view to make roads cost less. That is another subject. We are not arguing that point here at this time. But I think we are moving closer and closer together with the Forest Service on the minimum impact road.

The minimum impact road does not always cost less, it just makes the minimum impact on the ground. Sometimes it may cost more.

I think that covers what I want to say on your three points.

Mrs. HANSEN. Mr. McCracken?

TIMBER SALES PROGRAM

Mr. MCCRACKEN. There is no question, Mrs. Hansen, what it will do to the counties, that is fairly obvious.

I would support what Mr. Hodges has said and add a couple of other comments.

While the U.S. demand for softwood, and indeed worldwide demand for softwood is extremely strong, I suspect we will find a time or two yet in the future when we go down the roller coaster again. You know we have been up and down this thing forever.

Mrs. HANSEN. That is the understatement of the year.

Mr. MCCRACKEN. I suspect we may find it once or twice more.

If the Government puts its entire timber sale program in Western States subject to purchaser construction, then the timber sale program on the downturn will be fairly largely eliminated in some respects, because we will have deficit sales, will be unable to make any timber sales at all. This will force the Forest Service to go back into areas that have already been cut, where they are acutely sensitive and aptly so, the options for quality management are diminished. This is ridiculous.

Now you mentioned this morning seveal times, Madam Chairman, about the Forest Service's testimony yesterday to the effect that there was about 10 billion feet a year of salvage in mortality from insects, disease, things like this.

The only way that is going to be recaptured each year is through the development on the commercial forestlands of a road network. If you have a strong Federal access road construction program in addition to timber purchaser construction, where it is appropriate, you will get that job done much quicker than if you just eliminate the Federal construction.

I assume that is a good part of Mr. Hodges' analysis here on return on investment.

So if we eliminate the road program from the appropriated funds, it will take a lot longer to get to the point where we can recapture the salvage that occurs.

Mrs. HANSEN. Mr. Evans.

ENVIRONMENTAL IMPACT OF ROAD SHIFT

Mr. B. EVANS. I think it is important to always consider this question as with all the others about the national forests in an environmental context, keeping in mind we are talking about more than timber, a whole variety of uses again. So roads of course are a big part of the whole problem.

One impact of this shift in budget emphasis you are outlining, the decrease that you outlined, may mean first we are much more careful about where we build roads than we have been in the past; second, that we may not build some roads any more. That may not be such a bad thing as we see it. It may bring the day of less emphasis on liquidating old growth and more emphasis of development on private lands, a good deal closer. If the timber is old, perhaps it should not be logged at all. Here again we can point out examples where roads are built in controversial areas and in retrospect they probably should not have been built.

I was reminded of an article I read in a professional forestry journal a while back entitled "Who Says Accelerated Road-building Is Wise?" It was an analysis. I will try to find it for you.

I think there may be a question whether this is a good thing or not from an economic standpoint.

On the question of salvage and mortality, I have been hearing a lot about this 10 billion board feet, so far. I am certainly not going to say that none of this should be captured and put to economic use, no doubt some of it should be.

It is also important to point out in my experience most of the controversial timber sales in the Northwest which aroused a great deal of citizen concern have been called by the Forest Service salvage sales. In any forest you can always find bugs and disease, and you can justify this cutting, but we have to be very careful about where we build the roads and what we justify them for.

We are talking more than just economic considerations.

DUAL FUNCTIONS OF ROADS

Mrs. HANSEN. Specifically, in the case of a blowdown, the road has two purposes.

Mr. B. EVANS. This was the 1962 blow down?

Mrs. HANSEN. Yes. The roads were necessary to get out for fear of fire and insect infestation. Then the roads were used over again for the planting, the rehabilitation purpose. So they served a dual purpose in an instance like that.

I think this is one of the kinds of areas where it has been considered a necessary kind of salvage. Would you agree with that?

Mr. B. EVANS. Here again I would take it on a place-by-place and case-by-case basis. That was a special case, that blowdown. It was one of the most remarkable ones.

Mrs. HANSEN. But do you not feel most forests have to be evaluated to determine what each portion of forest land is for? Whether it is to keep those areas for harvesting and development or to protect the wilderness areas?

Mr. B EVANS. Right. I think I am saying the same thing. But implicit I think in a lot of what else has been said is that we have to build the roads everywhere to do this.

HARVEST MANAGEMENT

Mrs. HANSEN. Yesterday, the Forest Service said they were going to save some of the areas. The Forest Service would be building roads. These would probably be in the areas where it would be more difficult to construct roads in close proximity to the timber. So that, in order to give an opportunity for these kinds of sales, the small business might, of necessity, be forced to go into areas that perhaps should not be harvested at this time.

Mr. B. EVANS. From a public-policy standpoint, I think we always need to ask, should we go into marginal areas like this, from a long term standpoint or not?

Maybe we should look for other methods of helping small business people or schools or counties. On that subject I am relatively new, and you have probably considered this, but a number of our people in the west have been concerned about the 25-percent allocation to county schools. It has a direct impact in an environmental sense, in that it almost requires the local governments to promote more timber cutting even though it is not sound. It requires always a certain amount of pressure on the forest supervisors to cut more timber.

Mrs. HANSEN. No; it should not be viewed as that.

Mr. B. EVANS. But it does that, it has that effect.

Mrs. HANSEN. There is a compensatory factor. I am going to give you the concrete example of one school district along a canal. On the west side of this canal there is a national forest and on the east side are retired individuals, who would not vote for a school tax if they were given 40 opportunities. A great many of them belong to your club.

Mr. B. EVANS. We do not have many members over there.

Mrs. HANSEN. Their absenteeism at election caused the defeat of a special levy by default. But you still have youngsters attending school. And there is not an adequate tax base at the present time in that area for the operating functions of the school. Construction is practically nonexistent. So here is a problem.

I served in the legislature 22 years and I never found that the counties or the States moved toward a correction of the tax structure that would enable them to take care of their problems. I am sure you know how many times the voters have turned down special levies.

Mr. YATES. Should privately owned forests do the same thing?

Mrs. HANSEN. They pay their taxes.

Mr. YATES. I mean should they pay 25 percent as the Goverment does?

Mrs. HANSEN. Some might pay more than 25 percent right now.

Mr. YATES. Really?

Mr. B. EVANS. I would be surprised if it was that high.

Mr. MCCRACKEN. That only comes once every 100 years. The landowner is paying taxes on his land every year.

Mr. YATES. The amount you pay for taxes, is that equivalent to 25 percent of your cuttings as is the case in the Government land?

Mr. MCCRACKEN. The private owner pays taxes on all of his timber every year.

Mr. B. EVANS. But it is a very special rate, though. There is open-rate justifications now. I think we would find taxes are quite low, especially with the open-rate tax.

SCHOOL REVENUE

Mrs. HANSEN. I think you will find those taxes are increasing. I found a 300-percent increase in one particular area. But the question is, what about the crunch on the schools?

Mr. B. EVANS. I would like to lead to that. I would like to turn to the other side of the coin, the example you gave, and cite the examples of the North Cascade, Glacier Peak, Lincoln back country, and every other issue I can think of in recent years has been heavily opposed by all local governments on precisely this basis, it will reduce the funds for schools and roads. You will never find a local government in this area for the environmental protection of any area on this basis.

I am going to suggest a method of perhaps dealing with this, but I would like to think about it some more; that is, why not, instead of tying revenues to schools and counties on the amount of timber cut, let's tie it on the basis of six per acre, per acre of land; let's have an appropriation like that every year.

Mrs. HANSEN. May I say we had hoped that the Public Land Law Review Commission report would develop some answers to this whole controversy. But apparently no answers have been developed at the present time.

You understand that some counties lose their tax base forever. This has been a very sad experience. But at present these problems haven't been solved.

No legislation has been enacted to correct this whole situation of public lands paying their participatory part of local government costs.

FOREST SERVICE ROAD PROGRAM

Mr. B. EVANS. I will suggest first, I hope it is as long range as we can try to grapple with this problem, more because it is certainly a real one. In the context of this year, it might be appropriate to take a very careful look at which roads are more controversial and do more damage than others.

I named an example. We might be able to shift within this framework. I tried 2 weeks ago to get information from the Forest Service exactly where these roads are included in the $97 million figure. I was told I have to go to regions to find out. I am willing to do that.

I would submit maybe the committee could get the Forest Service to show us maps, where are they planned, maybe we could go over them together.

Mrs. HANSEN. I do not know if they could provide us with the new road proposal until their sales are made.

Mr. B. EVANS. Maybe I do not understand the budget process. I would assume if we have a dollar figure in front of us, it must have been based on something. That something is probably certain miles of roads in certain places. So there must be some maps around somewhere.

Mrs. HANSEN. My guess is this would be based on the sales?

Mr. WYATT. A lot of it.

Mrs. HANSEN. This is why I am asking your attention at this point in time, to their shift in road construction. Before this time I think they could have given you the road network in any one region that was proposed to be built. They would direct their sales for the use of certain roads. But now you are going to have to direct yourself in a different way, to the kind of timber areas that will be able to sustain the roadbuilding.

Is this not correct, Mr. Hodges?

Mr. HODGES. Right.

Mrs. HANSEN. They have gone exactly in the opposite direction. So this is why the question poses a lot more intricacies than the committee has had to encounter for the last 10 years.

Mr. B. EVANS. I can see your point. Yet again, perhaps from a public policy standpoint this is a better place to put a road, where the timber will sustain itself, rather than into more marginal places, from a long-range or a short-range standpoint.

Mrs. HANSEN. We just want the whole picture aired.

Mr. WYATT. Would you yield?

Of course, Mr. Evans, with the shifting of the road building costs to the purchaser, there are many marginal commercial timber areas where values probably will not sustain that cost. So, in a sense, this will be accomplishing part of the purpose that you are talking about.

ALLOCATION OF REVENUES TO STATES AND COUNTIES

Mr. B. EVANS. Yes, I guess so. I think that is what I thought I was saying.

I have another question. Are we really having a net loss to government agencies when we speak of 25 percent for roads and schools?

On the one hand, we are, it seems to me, appropriating the money from one set of taxes to the Federal Government, which in turn increases the revenues to roads and schools. If that is not done, roads and schools get revenues from somewhere else.

I admit the difficulties and see them here, but that will be coming from another set of taxes another place.

Are we increasing revenues to anybody or just shifting the tax burden around from one place to another? In other words, taxes from New York, Chicago, in effect, pay the cost for building roads in Sedro Wooley, or something like that?

Mr. WYATT. I do not think the chairman would object to that procedure.

Mrs. HANSEN. It depends. We are probably going to be confronted with a Supreme Court decision someday on school financing, which is going to change the whole picture.

Also there should be some kind of uniformity on the kind of taxation of all public lands, national park lands, wildlife refuges, and

so on because, when you take X number of acres off the tax rolls, somebody has to pay for the loss of the tax base.

When you take X numbers of acres out of ownership in the municipalities and counties for access roads, for freeway construction, cloverleafs, and so on, you are diminishing the taxing base of a local government. At the same time we have this "new federalism," returning to the local government a lot more responsibility.

So you see, this is a very complex thing to be developed. The chaos in the environmental world in part came about because of lack of planning, would you not agree?

Mr. B. EVANS. In large part.

Mrs. HANSEN. Lack of thought, lack of planning.

Mr. Connaughton?

ROAD PROGRAM VS. TIMBER SALES PROGRAM

Mr. CONNAUGHTON. May I comment? I am sure in relation to roads there is no question that no road should be built if its environmental impact is in the total negative, we all agree on this.

At the same time, one of the real sad features of the current situation is that the road program may, in effect, become a timber sale program. This is tragic in terms of the public lands. A road program should be a lands program, not a timber program.

Some of the strongest need for access has no relation to timber. Such things as public use, whether for skiing, berry-picking, any one of a number of uses, fire protection in southern California; it has no relation to timber.

Now, when the program gets geared to a revenue-producing item, it takes on a significance that it should not have, unfortunately. That is what is developing.

It also takes on a significance in terms of environmental impact that it should not have. The justification, obviously, for a road program is the needs of the land in terms of intensive management rather than any one of the various resources all put together.

Mrs. HANSEN. Rather than profit?

Mr. CONNAUGHTON. Rather than profit. It has no relation to that in effect, really. Your committee gets put in an exceedingly difficult position when you have to evaluate it in these terms because you are not evaluating it in terms of public need.

Mrs. HANSEN. That is correct.

Mr. B. EVANS. I respectfully disagree with Mr. Connaughton.

It may be different in southern California, but in my experience in the Northwest, roads built with Federal funds were built for timber planning and timber sales, primarily, and it would be interesting to see examples of all the roads built in the last 10 years where this was not the case.

I think we will find very little support outside of the timber interests and their purposes. So they may be considered to serve other needs, but timber planning and timber sales is the first consideration.

MULTIPLE USE OF FOREST ROADS

Mrs. HANSEN. Let's go back several years to the road that connected Colville and points west, which eventually took a middle course. Formerly you had to go into Canada, if you wanted to go from Republic to Colville. The Forest Service built a road, and part of its use was for Indian timber harvest. But they also built it to specifications that would allow the general overall use for recreation, for public transportation, and particularly for school bus routes that were very essential.

This is just one typical road in that segment of Washington. When it was completed, the State of Washington took it over as a State secondary road. However, it had its beginnings as a forest products road. And it was important in those years for forest products, but it has been far more important as the years have gone by for other purposes. It has been far more important as a school bus route, and as a general transportation route. It has opened a very beautiful segment of the country to recreation use.

Mr. B. EVANS. I am talking about the last 5 or 10 years. Our roading situation is largely in the national forest in terms of timberlands, in terms of opening it up. The sentiment now is not to have so many more roads.

I accept your example and I know the road, myself. But that is not the case so much any more.

Mrs. HANSEN. Mr. McCracken?

PERCENT OF FOREST ROAD COMPLETION

Mr. MCCRACKEN. Let me say right off the bat, Madam Chairman, that I disagree with Mr. Evans here, that the Forest Service, all the forests that I know in the West indicate that the amount of roading in the commercial forest land is only somewhere in some cases 5 percent complete, in no case do I know of over 50 percent. Am I right?

So the roading of the national forest, in terms of commercial forest land, is still a long distance to go. This is why we are not getting the 10 billion feet of salvage out of the woods, the roads are not there to take the trees as they die.

USE OF TIMBER ROADS

Second, I will give you two illustrations where the funds that were appropriated by this committee not too many years ago, the last time we had a supply crunch in 1969 and 1970, there was an expansion in the access road budget to get more timber out. One of the historic roads in region 6 in the State of Oregon, built out of money for this, was built in the White River Canyon, in the Mount Hood National Forest, where the recreation benefits on this paved highway will far outweigh the timber values coming out of that road. There was a great deal of recreation benefit.

In Montana, out of the same appropriation for increased timber production on a forest I know very well, the Beaver Head, the forest is just developing, it is a stagnant, large pole forest that has great potential. But it has been a marginal species. They are going to have to develop a 40-mile highway, so they could even open up this area for a new sawmill. Out of your appropriation they put under contract a 24-foot paved road for 16 miles. It was under great pressure to get it under contruction because of the timber supply crunch. On 6 miles to the next highway is a one-lane cow trail, the other 17 miles the other way is totally impassable. That road has been completed, a 16-mile, two-lane, 24-foot paved highway.

Under this program it will sit there and there will never be a tree put over it. I cannot see a timber purchaser ever permitting a timber contract to finish up that road. So you have an ongoing program here, that this will cut off right in the middle of the stream. This road in the Beaver Head Forest has tremendous recreation potential.

Mr. B. EVANS. You mean you have a road 16 miles long and at either end there is——

Mr. MCCRACKEN. Cow trail.

Mr. B. EVANS. A cow trail.

Mr. MCCRACKEN. That is right.

Mr. B. EVANS. I am familiar with that area. What road is it that you refer to?

Mr. MCCRACKEN. From the Wise River to Polaris.

Mr. B. EVANS. That is not a cow trail. I was over that road recently and it is passable all the way through.

Mr. MCCRACKEN. That is not true.

Mr. B. EVANS. I think we should have an analysis, road by road, place by place.

The Dean Ridge I mentioned this morning and the Gifford Pinchot are examples of environmental-problem roads that are not——

Mrs. HANSEN. The Lewis River goes out of that area.

Mr. B. EVANS. That was in your former district. You know the country down there. There is the Beaver Head National Forest, just to name another example, was part of my territory when I was there, is an example of a place many foresters that I know say should never be cut at all.

Mrs. HANSEN. Is that not predominantly used by fishermen?

Mr. B. EVANS. Along the river itself. The reason it was controversial is, there was a large roadless area in it, before it was built.

Mrs. HANSEN. The fishermen were unhappy.

Mr. B. EVANS. The fishermen go along the trail, along the river. It is a beautiful trail. The Forest Service wants to build a road over there and the people are organizing to say "please preserve it." That is another issue of another kind.

Mrs. HANSEN. Mr. McKay?

Mr. MCKAY. All forest roads were built for timber access, you say? I can show you a good many of them in the State of Utah that you could not get enough timber out of there to even talk about, they are billed as forest construction roads.

You go to the Cache, Weber, and Manti area, and there are other areas, there is no timber attached there to speak of, it is strictly recrea-

tion and access roads for livestock, forest management; hunting, fishing, this type of thing.

Mrs. HANSEN. Mr. Pomeroy?

EFFECT ON SCHOOLS AND COUNTIES

Mr. POMEROY. We get right down to the basic question, the counties and the schools are being asked to subsidize nontimber uses by the general public. This is what you really come to.

All of these gentlemen have spoken to recreation, fishing, camping, and so forth, but it comes right back to the schools and counties when you do this.

Mr. B. EVANS. But the land does not belong to the schools and the counties; they are public lands.

Mrs. HANSEN. They are public lands.

Mr. MCKAY. Who is public?

Mrs. HANSEN. They belong to all the taxpayers.

Mr. MCKAY. But not in those counties and cities, is that it?

Mr. B. EVANS. They use them, too.

Mr. MCKAY. They are part of the public, are they not?

Mr. B. EVANS. True, one part.

Mrs. HANSEN. Dean Bethel?

Dr. BETHEL. I think most of the things I would say have probably been mentioned. I would like to give emphasis to a couple of things.

First of all, it seems to me you need to separate out the issue what roads ought to be built, what roads ought not to be built, how many miles, and the question of how you are going to pay for those you build, because I do not think they necessarily fit into the same category.

INEFFICIENT ROAD BUILDING SYSTEM

The thing that seems to me to be bad about the advice of using timber sales as a way of paying for the roads is that it induces some biases into the whole enterprise. Some of them get to be fairly subtle. The State Department of Natural Resources in Washington essentially built the roads this way. Some of the problem roads that you know about over on the west side of the peninsula are built like that. In Clearwater, and so on, this is a checkerboard of timber sales, designed them.

That means that somehow we are making timber sales. They are not primarily for the purpose of managing the forests to supply wood, but managing the forests to build a road through the debris of making timber sales and incidentally supplying wood.

It seems to me there is a great deal of inefficiency built into this kind of a system. First of all, there is going to be a bias with respect to the use. The road is very likely to be built in order to maximize the timber use of the forest where we discussed here today the fact that multiple use is an important element in the Forest Service enterprise.

Also, it's going to be biased with respect to the quality of the road because the tendency is going to be to build a road that is good enough to do the job that is being paid for rather than to think about all the other jobs that that road ought to be doing.

Finally, I have one more item. This whole question of environmental quality control as it relates to roadbuilding gets to be much more difficult if you pay for it through the timber sale route. I think if the Forest Service is going to get on with the job of doing a better roadbuilding enterprise in an environmental sense it is going to have to organize to apply its standards, to inspect, to make the whole thing work better.

If you force him to go to a contract that is primarily in the logging business to get his roads built and you end up with quite a mix of contractors, none of whom are there primarily because they are roadbuilders, but are there because they are good competitive loggers, that is a very inefficient way to undertake environmental quality control on the road business. It's a good way to take care of it in the harvesting business but not in the roadbuilding business.

Mrs. HANSEN. Thank you very much.

Dr. Wombach.

UNFORTUNATE RESULTS OF ROAD PROGRAM

Dr. WOMBACH. I am in a position of repeating, too, but I see clearly some unfortunate results of this which I will just reinforce. Other people have said it.

One is I am sure in my part of the country we will end up by repeating some bad practices, we will end up with larger timber sales, cutting larger portions of drainages, and so on, which we have just gotten out of the habit of. We have been doing that and we changed our ways. I think we will fall back into that habit, which is very unfortunate.

As Dr. Bethel says, I am sure we will end up with roads laid out and designed primarily for timber, which is unfortunate in our part of the country. Many of our timber sales will prove infeasible. By that I mean if timber in our country has to carry the road construction costs, it cannot afford to cut.

Brock Evans says that this is good. It may be. I don't know. Unfortunately, I cannot agree with Mr. Evans in this respect. I don't think the way to correct the road building problem is by cutting appropriations. It seems to me that we can plan better and if the road doesn't belong there we shouldn't build it. To avoid that happenstance we shouldn't just cut appropriations, because there are other areas where roads are needed very badly.

NEED FOR MANAGEMENT FUNDS

Mrs. HANSEN. Would you say, that the problem lies in providing the Forest Service with enough management funds so that they can do a better job of evaluation and planning for the high harvest areas and road placement?

Mr. EVANS. Madam Chairman, would you yield on that point? The question is related to the same subject matter. When you turn to these same people who have been managing under the laws, if you just admonish them with a finger shaking saying to them, "Under these circumstances go back and do a better job," it may not be enough. Maybe there has to be something else cranked into it that they are required to do in their management practices, in their determinations

of where they are going to building roads and where they won't build roads. Maybe the Congress is going to have to change things.

Mrs. HANSEN. We have been waiting for the authorizing committees to give us some direction. The thing that we have been trying to do, and that is the reason we are here today, is through our appropriation process to shift the emphasis into the areas that need the emphasis. It might be better to put that x number of dollars into a road evaluation system rather than in another area. This is why this hearing is being held today, and representing this wide range of viewpoints.

There seems to develop one common consensus, that someplace along the line the Forest Service needs to have the funds in the category of major planning that reflects the public good in both instances, of high timber yield on that land and the best interests of the public.

This is the kind of summation that we are delighted to have today.

Dr. Wombach, would you like to conclude your statement?

TECHNOLOGY OF SMALL OPERATORS

Dr. WOMBACH. I had one more point. In our part of the country, one of the problems we are facing is that our logging industry is not very modern. We still have a lot of small operators who are poorly financed. One of the tasks we face is to get these people to innovate and use new technology. What I am talking about is getting them to use cable logging systems and perhaps helicopters and balloons and other types of things that treat the land a little more gently.

The biggest problem we have is encouraging these people to make the heavy investments required. It seems to me by forcing them back into the road building business we are compromising this effort very substantially.

Mrs. HANSEN. You are going to force them to become road builders.

Dr. WOMBACH. That is right. What we are trying to do is get them to do something else. It seems to me this would be a step in the wrong direction.

Mrs. HANSEN. Mr. Alderson?

PLANNING OF ROADS

Mr. ALDERSON. Madam Chairman, I wanted to pick up on your point about the planning on the roads. I think this might be an excellent way not only to get at some of these priorities and things but also to eliminate some of the conflicts before you get right up to the construction stage and the final planning. There are a lot of these roads for which the public would definitely want to make some suggestions to the Forest Service to have some public involvement in this. I know here in the Appalachians in the national forest in the East this is especially a concern which I have been more familiar with more recently than when I was in the West, in which these things are going on. People hear about these road extensions when they read about a timber sale that has just been announced in the newspaper. They are just responding to these things by reading the news in the newspaper rather than by any kind of advance planning. I think that would be a great service.

NEW TECHNICAL DEVELOPMENTS

Mrs. HANSEN. When they realize the full impact of this shift in the Forest Service is when they are really going to be concerned. This is what I see coming.

Dr. Wombach brought up a point that I would like to have discussed by the panel. What are some of the new technological opportunities which you see that might provide both better harvesting and also reduce the environmental damage? Dean Bethel?

Dr. BETHEL. Some of the things that have come out of the Forest Service research in the harvesting area and the PNW station, we already talked about things like improved cable systems, helicopter logging, and balloon logging.

I think the FALCON program was designed to advance that whole business of improving harvesting methods so that the environmental impact was less. It's unfortunate that it isn't proceeding. I think it's the kind of thing that Dr. Wombach talked about just now in trying to get improvement in the Rocky Mountain area.

FEDERAL AND PRIVATE SECTORS RESPONSIBILITIES FOR RESEARCH

Mrs. HANSEN. The second part of the question, what do you see as the Federal and the private sector responsibilities in investigating and analyzing these opportunities?

Dr. BETHEL. The Federal sector, at least in the West, has a much more difficult job because it's the custodian of some of the most tender land, so that they have a much rougher row to hoe in this respect. I think they are going to have to do their job.

The private sector is going to take care of its needs. It's going to improve its harvesting just as a matter of good business. I think its job in general is a much easier one than the Forest Service's job which is sitting on top of a fragile area.

Mrs. HANSEN. Mr. Connaughton?

Mr. CONNAUGHTON. I would like to make one general comment, Madam Chairman. In recognizing this very great opportunity for innovative equipment methods, really at the moment at least, the new methodology, the new techniques, the new equipment is no substitute for roads basically.

Where we still need roads we are still going to need roads pretty much. There are some borderline cases where they will overlap, but basically what we are looking at in this innovative equipment is the management of areas in which roads have not been recognized as desirable in terms of the soil or the cost. There are a variety of reasons.

There is no need of recounting the various individual techniques like helicopters, balloons, special cable equipment and all that. I would like to mention one thing particularly that the committee might like to consider. We are winding down the Vietnam activity. Much of the war was geared in the use of helicopters. Our real operational activity in a large sense was related to helicopters. Somehow or other, this may point toward some domestic applications in relation to land use measures, including logging, administration and a variety of other things.

I don't mean by this that we take military equipment and techniques and discipline and apply it to land use. But there are a lot of things in

common. I know that because we have adapted, say, military discoveries and developments in aircraft to firefighters.

Mrs. HANSEN. I was about to say we are already using the firefighting equipment.

Mr. CONNAUGHTON. I have a strong feeling that this winddown in relation to helicopters in Vietnam could have some connotations in a timely project right now to land use measures. I would commend it to the committee for consideration. I don't know just how this can be done.

Mrs. HANSEN. Mr. Alderson?

PROJECT FALCON

Mr. ALDERSON. I touched on some of our concerns in this area this morning, particularly with reference to the need for alternative methods of harvesting, such as selective cutting, that will suit the modern requirements. We support the FALCON program, which has gotten off to a promising start.

Mr. HANSEN. That is all that has occurred.

Mr. ALDERSON. Our top priority in this area would be an alternative harvesting system such as the selective cutting that they are beginning to use out there.

The second part of your question, about who should be responsible for the development of these techniques, I think in cases like this it's mainly going to have to be the Federal Government because so much of the rationale for this is something that so far has been seen mainly by the forester in the Federal Government. I think some of these things the private operators will have to be convinced of when they see how they work on the Federal lands.

Mrs. HANSEN. Also isn't it true, Mr. Alderson, that if you were to limit the development of FALCON to industry, then you would be saying "You put the money in and you get the timber," literally. Isn't that just about it?

Mr. ALDERSON. I don't know how they would do that.

Mrs. HANSEN. Commonsense tells you that if, for instance, one of the big three or four companies goes ahead and participates and develops FALCON, then FALCON belongs to them.

Mr. ALDERSON. It certainly should be a proprietary measure.

Mrs. HANSEN. I know. That is why the Federal Government felt impelled to make techniques available for everyone and not let it become monopolistic.

Mr. ALDERSON. The other factor is that some of these techniques may not be ones that will yield a higher profit. They may yield somewhat less of a profit. The money will be in circulation just the same because they are paying the guys who run the helicopters and things like that. But it goes through differently. In that case, private industry might be less favorable to it than the present practices.

RESEARCH ON FOREST UTILIZATION

Mrs. HANSEN. Mr. Hodges?

Mr. HODGES. The only thing I think of that hasn't been touched on is there is much that we can do to increase the utilization of wood from the forest in terms of utilizing thinnings, salvaging mortality, get-

ting more of the residue from logging, and so forth—in other words, stretching out our timber supply by utilizing it more efficiently. Some of the equipment development that Falcon would cover and related things would have that as an objective.

We have seen what has happened here in the past—the development of a new technique can sometimes allow us to get just 10 percent or 20 percent more wood out of our existing supply.

Mrs. HANSEN. Mr. Wombach?

Dr. WOMBACH. I am in a position of repeating a little bit again. But the kinds of equipment we need in the Rocky Mountains are, first of all, logging systems that allow us to utilize a higher percentage of the material cut. It's not uncommon in our part of the country that 50 percent of the wood is left on the ground. Much of that would be merchantable or useful in other parts of the country. But we don't have economical systems to get out the wood.

RESEARCH ON SILVACULTURE

We need another system, as Mr. Alderson has said, that will allow us to use other silvaculture systems besides clearcutting. The jammer systems, and so on, that we use now are really only appropriate for clearcutting. Some of our experiences lend themselves to other silvacultural systems but we need a way of plucking the trees out.

I disagree a little with Mr. Connaughton. We need systems that don't require so many roads. We obviously are going to have main haul roads under any system. The real bind in our part of the country comes when you end up with roads every 300 feet striping the whole hillside.

Mrs. HANSEN. This is where your stream damage occurs.

Dr. WOMBACH. That is right, and the visual or esthetic damage. The thing that gets the local people upset is when they see those dozens of roads. If there were just one on the bottom and one on the top it wouldn't be so disruptive. These new systems offer a great promise for this.

As a matter of fact, much of the technology is available. So we need some help in getting it applied. We need demonstrations. We need feasibility studies, pilot studies, to help convince people that these things can be used. We know already that we can do some of these things. We just haven't sold it yet.

RESEARCH ON BURNING PROBLEMS

Mrs. HANSEN. Last year at the request of many of the Southern forest people the committee was urged to program funds to find out the answers on burning. They have the immediate problem in burning. They have the problem of creating air pollution and at the same time realizing that burning is sometimes part of reforestation. For example, in the Mount Adams area they have learned that a lack of burning has slowed down the growth of the huckleberry. They asked for this money so they could come up with some answers. This money was impounded.

Do you feel that we need to develop technology on this subject?

Dr. WOMBACH. I certainly do. I can't speak for the other States, but I know that Montana is very close to outlawing burning of slash.

Mrs. HANSEN. You can't burn leaves in Washington, D.C.

Dr. WOMBACH. To build up anew in some areas in Montana it's frightening. The amount of research or effort going into research in this area is minimal.

Mrs. HANSEN. We had an interesting figure brought to the attention of the committee yesterday. Every Sunday edition of the Washington Post requires 625 tons of paper. We have the problem of refuse to be burned. If you pulp it afterwards, you have the problem of the burning or the disposition of that amount of paper. This burning problem remains a very critical issue in many areas.

NEW TECHNOLOGIES IN LOGGING

Mr. MCCRACKEN. On the question about new technologies in logging, I would say I am sure the industry hasn't gone to the end of the road in developing technologies of the type we are talking about. But because of the economics, to wit, the dramatic increase in the value of timber, we are off and running. I don't want to sound negative about the need of the FALCON program, but we are all doing it right now.

For example, this year, in 1973 fiscal year, the Forest Service is selling 350 million feet of timber out there for helicopter logging. They tell us that the next fiscal and the one after that they are talking about 300 million feet a year.

It started out and we are making improvements on how efficiently it will be done. But it has gotten so interesting that there has developed a very major controversy between the four helicopter companies, the Forest Service, and the industry. The Forest Service has come out with a program in Portland, in the West, that says the only people who can bid on one of these helicopter sales is somebody who has a guaranteed helicopter. In due course it didn't take very long for the four helicopter companies to decide they weren't going to allow any timber men to have any certificates to a helicopter, so they were the only ones who could bid on the timber. This naturally has caused some controversy.

There is at the present level of economics out there a substantial interest. I don't think you have to talk about innovative measures. There will be more innovation, I know. It's there and you don't have to worry about the Forest Service developing it. Let the private enterprise have it. Private enterprise is anxiously trying to get into it.

REPLANNING OF MAJOR FOREST PROJECTS

One of the things I would like to say in support of Mr. Connaughton's statements, the Forest Service, and Mr. Evans and others have mentioned today, are going through a very major project of replanning the national forests, determining what areas are marginal, reserve, and standard for timber production. As a part of this process, all the plans we are seeking list substantial acreages of commercial forest land as marginal.

What that basically means is they feel because of soil conditions or steepness of slope or esthetic reasons or whatever, that the historical type of logging, as Mr. Wombach has expressed concern about—and I share his concern—will no longer suffice. You have to find something

else. Obviously, while we have to have mainline and topline roads, helicopters, long-line cable systems are perfectly suited to this type of thing.

USE OF HELICOPTERS FOR LOGGING

In terms of the Nation's timber needs, they will be desperately needed. Helicopters seem to have a particular appeal. I would support Mr. Connaughton's statement, if there is any way that the Congress could use its influence to get the helicopters, or some of them, back from Vietnam, it would be very great. We have now 14 helicopter ships in the West. I have heard some dialog to the effect they were very hopeful they wouldn't have to find any competition from the helicopters in Vietnam coming back. We didn't get much equipment back from a lot of those lands after World War II.

Mrs. HANSEN. They are still on the beach out in the Trust Territories.

Mr. MCCRACKEN. I think instead of being 300-million feet a year on helicopters, we should be getting up to the maximum which would be much higher and we will need more ships. The more ships and the more helicopter firms the quicker we will get over the immediate controversies that do have some threat to impeding the program.

Mrs. HANSEN. As Mr. Wyatt is well aware, some of these proposals in the fire category were made by the high-fire risk areas, like the Angeles National Forest, in which he visited for the committee in February.

I don't know why they can't experiment using them in all types of forestry instead of just on a standby basis. This is one of the places where Congress can make inquiries of the Forest Service.

Mr. EVANS. While on this question, may I ask the two business representatives a question relating to these new techniques. Do you and your associates see these new techniques as sound and economically feasible? I have heard of two things, one relating to helicopters and another relating to a cable system, which I must confess are new to me. I am not familiar with them. There was also reference to ballooning.

As you see it in terms of practical business sense, are these efficient ways of harvesting timber?

Mr. MCCRACKEN. The answer is "Yes," if that is the only way they will allow you to harvest it.

TECHNOLOGICAL IMPACT ON COST OF HARVESTING

Mr. EVANS. My question to you then is if you are required to harvest in that fashion, where are you in terms of estimating what this is going to do to the cost of harvesting?

Mr. MCCRACKEN. On the west coast today, Douglas fir and hemlock stumpage is being appraised and will be appraised this spring to close to 100,000 board feet. If the Government says the only way they are going to log these trees is through helicopters, there is value there and the industry can afford, well afford, to harvest them. The stumpage the Government gets will be small in the county revenues because the helicopter balloon logging is very expensive, much more expensive than conventional ways of doing it. But if that is the only way you do it and those timber values remain there, we can afford to do it.

Mrs. HANSEN. Mr. Evans?

Mr. B. EVANS. I would divide the new technology maybe into two different categories. The first would be the category of liquidating old growth. Assuming where we all agree this should be done, you have FALCON and a host of programs there and the selective logging methods. There is a caution. We supported the FALCON program, but there is a caution that is being expressed to me through some of our people. Balloon and cable methods and helicopters certainly we are all talking about. These are certainly much better than a road in many cases. But even these do require roads, too. That is an important thing to keep in mind.

I was told by the Forest Service a year ago that you cannot have helicopter logging more than a mile from any road because of the turnaround time. It's so expensive to fly in and fly out you have to do it in just a certain amount of time. Maybe there is more on that now. Balloon logging requires roads quite close, and the cable system, too. Basically we want to encourage something like this with these cautions.

STRETCH PROGRAM

The other category was what I would call in the category of better utilization of what we are already cutting, and have cut. The Forest Service is really doing some good work with its Project Stretch. The best open-faced method is one I recall they pioneered. I read an article about some new saws. If you just substitute a new saw, this article said, you can have the equivalent of 11 billion board feet more saved each year. That is almost as much as a whole cut of a national forest. I don't know how accurate it is, but I suspect this is what they are doing in other countries. They are using, I read somewhere, something like 4 billion board feet equivalent which is now residue on the mill floors and not used. These are things we would like to encourage along with the method of liquidating old growth.

OLDER METHODS OF HARVESTING

One thing I would like to suggest—I know it's true we have a timber economy that is built around the use of bulldozers and bigger and bigger ones and bigger and bigger trucks, in a machine economy and a mechanized timber economy, as I see it—we ought to consider some of the older methods going back to horses and oxen in certain places. A lot more could be done with this than has been thought of in the past. In some places where the soils will be too steep, it may not be able to be done. In other places we can do a lot more with this. I would like to see a lot more experimentation with the Federal Government leading the way and I think we will have to answer to some of our employment problems, too.

Mr. MCCRACKEN. Have you talked to the Humane Society lately?

Mrs. HANSEN. We were having an old-time celebration a couple of years ago in Cathlamet. Mine is a logging town. So they had the horses, and so on. One of the leading ladies of our town said, "Aren't they going to come along and clean up the street?" Somebody said, "I don't think they planned on it." She said, "Certainly in the old days they did." I said, "My dear lady, did you ever live in a western town or in a western area about 1913 or 1914?" She said, "No," and she

couldn't imagine what it was like. But she said, "I don't want any part of it now."

You have some problems now with the different kinds of societies. Most of you who grew up in that kind of an area know.

The interesting thing in the forest economy, I want to point out, is that their employment is down tremendously, although the efficiency and the amount of timber has been able to accelerate.

Mr. B. EVANS. I understand there were a couple of horse loggers still in region 1, in north Idaho and in Montana. Here again I am assuming this is not going to be in the towns. It's going to be out in the woods. I think you have a different kind of circumstance there. It's something that ought to be explored.

Mr. ALDERSON. The Forest Service recently in West Virginia has forced a mining concern to use horses to transport their drilling equipment for some core drilling they were doing. They had to transport it in by horse, the whole shebang of this heavy equipment, with a litter between two horses up the trail and take it back out the same way. It's something that is being used in the field.

TIMBER EMPLOYMENT

Mrs. HANSEN. The committee does not oppose it. We are just pointing out some of the problems.

I am referring to output per man-hour. The productivity increased annually by 3.2 percent while actual employment dropped 14 percent in the period 1947 to 1967. As I understand, they have had difficulty attracting people in the wood product industry in the West. Is this correct, Mr. Hodges?

Mr. HODGES. Throughout the country there are increasing problems of labor shortage in woods and mills.

Mrs. HANSEN. Mr. Pomeroy?

Mr. POMEROY. Madam Chairman, the State foresters are primarily concerned with some 4 million small private, nonindustrial owners, most of whom are east of the Great Plains. Most of the road system is already in in that general area. The average size of these small ownerships is about 70 acres. So these gentlemen are not much concerned with innovations and harvesting techniques.

The real problem is getting the forest owner to use good management practices to cut the right tree and to save the ones that should be saved.

Mrs. HANSEN. We have two more subjects. Both of them are very controversial. They lend themselves to discussion.

WILDERNESS AREAS

One is on the wilderness area. There is a substantial amount of difference of opinion about the use of wilderness areas. Some believe that they should be conserved exactly in their pristine condition. Others believe there should be some development in these areas. Some believe that no fire protection should be provided. Others believe they should have the traditional fire protection. Some believe there should be some means of access for a limited kind of vehicular use. Others believe there should be totally no vehicular use.

What is your opinion and how should you go about through the appropriation process of establishing some kind of guidelines so that the right thing is done by the country itself to protect as much of our land as we can? Dean Bethel?

Dr. BETHEL. I think with the level of usage that takes place, development in the wilderness areas is a direct function of how much there is going to be in the long run. I think the classical historical wilderness concept, really, is to do nothing in a wilderness area, essentially nothing, and try to keep the pristine wilderness as viable up to a point where the competition for land gets so great that you are going to have pressures from people who want to do other things for the use of that land.

I don't know what the magic number is, but if the wilderness acreage grows and grows and grows, then the pressure is going to be, OK, if you are going to have that much in wilderness, let us do some other things in there and use that land for a variety of uses.

The basic intent of the Wilderness Act is to have wilderness unique areas. I think one has to look at the fact that outdoor recreation is the fastest growing land use in the country today. We are running up against high density uses of forest lands for recreation purposes and low density uses. At some point you have to allocate sufficient land to the high density use people who want to ski and hunt and do other things.

There are other things that are going to come up. As wilderness areas increase in size you are going to have the same problems we have in the national parks with respect in some cases to unrestricted development of game populations that impinge on outside neighboring areas, and so on. I don't know the answer, but the problem is going to get tougher as it gets along. It is a function of how large these areas are and how many there are.

MANAGEMENT OF WILDERNESS AREAS

Mr. MCKAY. Do you see that there will be a need to manage the wilderness areas?

Dr. BETHEL. Absolutely.

Mr. MCKAY. You mentioned the game population. There was a period of time in our State in which it wasn't the cattle grazers or it wasn't the sheepmen, but it was an overpopulated deer herd that just stripped the forests and diseased the animals, so that there needs to be some management there. Is that what you are saying?

Dr. BETHEL. I would even go further than that. I think you have to manage an overpopulated area. They are typically very fragile areas and more and more folks are going into them in larger numbers and larger groups. They are going to have to be managed with respect to that and with respect to the game population, the sort of thing you are talking about.

Mrs. HANSEN. Snowmobiles are used for instance, or some other mechanized vehicle. This is where the problem lies. Mr. Towell?

Mr. TOWELL. Madam Chairman, Dean Bethel has put his finger upon the key to the criteria for management of wilderness, that is how much and where it is. Once that is determined, then I think we can

pretty well prescribe for the wilderness that we have the criteria of management.

In my own opinion, as a professional land manager, I think any land for any purpose should be subject to some management.

In the case of wilderness, it should be an absolute minimum. But I certainly would reserve the right to control fire, for example, and to control the number and impact of people or horses or whatever it will be using the wilderness. This is management.

The other good example that has been discussed is wildlife. Wildlife can become a detrimental force in itself. It can destroy wilderness values, and particularly if you have intermingled open lands that can be utilized to manage the wildlife population or even through hunting. Then you can accomplish things that you can't do with total abstinence or total projection.

The wilderness question is a very difficult one. We are right now trying to resolve what form it will take in the east.

I would like to make it very clear that we strongly support the idea of wilderness, both in the east and in the west, whatever it might be called. When we get into the east and get into a modified wilderness concept, it might be well for us to reserve for ourselves the flexibility of management. I would even like to see eastern wilderness given more protection. Rule out mining, rule out grazing, give us power of condemnation, but at the same time, let us give ourselves the flexibility of management for disease, fire, impacts of people, and those things which will preserve the areas that we set aside.

Mr. McKay. Isn't fire a management tool?

Mr. Towell. Yes, indeed. Fire is a tool for good and a tool for harm. It has to be used in some cases to accomplish some desired objectives, and should be used. On the other hand, it should be excluded in some situations to achieve overall objectives.

Mrs. Hansen. Mr. Alderson?

CRITERIA OF WILDERNESS ACT

Mr. Alderson. Thank you.

The basic guidelines that we constantly go back to in our own work on wilderness management are the criteria of the Wilderness Act. Some of these topics that have come up in this context are specifically mentioned. For example, fire and insect and disease control are specifically cited in the Wilderness Act. It allows the agency, under the terms of the act, to take measures that are necessary for the control of those factors.

Under wildlife management, for example, the management responsibility for wildlife is left as it was before the passage of the Wilderness Act, with the State fish and game departments. The jurisdiction is with the State in the case of wildlife and fish.

During the consideration of the Wilderness Act, I believe it was the Senate Interior Committee that, during one of the final rounds of hearings on it, obtained from the Forest Service a memorandum that outlined some of their management criteria, the kinds of facilities, for example, that they then used within wilderness areas. I believe this was mentioned by reference in the committee report there.

This has subsequently been reaffirmed over in the Interior Department in their wilderness criteria. The Forest Service has still been a little uneasy about some of these things that we regard as perfectly acceptable, such as small fire rings in your campsites in the wilderness, because this helps to keep people from lighting fires behind every rock and turning the place black.

Also the use of pit privies. This is essential where you have substantial numbers of people using the wilderness area. This is an accepted simple facility that we approve of. Yet in some cases the Forest Service has said the Wilderness Act doesn't let us put any pit privies in. These are the things that have been settled. In some of the areas we have snow gauges and things like that. These are facilities that we accept.

USE OF WILDERNESS AREAS

One of the things that we are getting into along with the Forest Service and with the Interior Department agencies that have wilderness responsibilities are these questions about what do you do about overuse by people? How do you manage this use? What other kinds of facilities can be put in?

The Forest Service recently had a wilderness management seminar that involved representatives of several of our groups along with their representatives. The Interior Department had three of these in different parts of the country, which we attended. This is where we are trying to work out this question of where we go.

One of the things that the Forest Service has begun to do, which is setting the lead for this, is the use of permits for people who are going to use the wilderness area. Although it isn't initially a limiting factor, they discovered that they have been able to help when people apply for a permit. They can tell them the campsite they wanted to go to already has a lot of people going to it but there is another one just over the hill. If they take the other fork they will go there and there won't be so much of a crowd.

Mrs. HANSEN. Also part of it involves safety factors. Many people who go into the wildernesss have no knowledge of who is there and what to do if a catastrophe occurs. They haven't any idea of where they are or what they are doing. You could have some real tragedies occur.

Mr. ALDERSON. That is right. These are some of the things that are going on. I think, by and large, these problems will resolve themselves through further discussion between the citizen groups and the Forest Service and the Interior Department.

Mrs. HANSEN. Mr. Hodges?

Mr. HODGES. I agree with a good bit of what Mr. Alderson has said. In many of the wilderness areas that are getting this increased use, there is going to have to be a system of both timing the use and spacing the use geographically. Perhaps then more people will be able to enjoy the kind of wilderness experience that is intended in the act. What we have going on now in many areas is not what the act intended.

I think that the Forest Service, for instance, has to be given considerable license to try to maintain the wilderness characteristics for which the land was set aside and the various things that we do that

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perhaps didn't happen under more primitive times. That is pretty well covered already, but they may require money in order to do that.

Mrs. HANSEN. The reason we are discussing this subject is because I think it's going to reflect itself in the budget.

Mr. HODGES. Both of these points that I see apply to other types of areas in addition to wilderness. In the national forests we have many limited use areas. As Mr. Towell said, they are going to require pretty careful management as they get more use in order to maintain the setting and to maintain the land close to the objective for which it was set aside by both Interior and the Forest Service.

Mrs. HANSEN. Also some of the Indian lands are going to lend themselves to this.

Mr. HODGES. The Indians may be the ones to set the example because of some of the things they are doing in recreational land management in the West. They may set the best example because they aren't limited quite the same way.

Mrs. HANSEN. They stopped the clutter on the Northwest beaches.

Mr. HODGES. They aren't limited perhaps by some of the limitations and statutes that the Forest Service and BLM might be limited by.

Mrs. HANSEN. Dr. Wombach, you have a lot of problems in Montana. At least we have heard a lot about them.

Dr. WOMBACH. We are part of some of them.

WILDERNESS AREAS AT END OF LAND USE SPECTRUM

I view land use alternatives as part of a spectrum. This isn't novel or new with me. From one end we have the very intensively used areas, like plantations or city parks, and at the other end is wilderness what was established or intended I think by the Wilderness Act.

It seems to me that if we are talking about just those wildernesses that are currently classified or may potentially be classified as wilderness under the Wilderness Act, these should be kept essentially pure in their natural condition. In other words, if this is the extreme end of the spectrum it seems to me that the intent of the act was to keep this as pure as we can.

First of all, I should qualify this another way. I don't see these wilderness areas as being primarily recreation areas. They serve many other purposes. I think this was explicit in the act, too. They serve civic purposes and cultural purposes and so on.

If this is the extreme end of the spectrum, I think we ought to maintain the natural system, if we can. This would employ allowing wilderness to the extent they don't endanger human safety or other values outside the wilderness. They shouldn't allow insect epidemics, and so on.

Having said this, that you are maintaining it in a new natural condition, this also implies we must manage them intensively. This sounds like a contradiction in terms. What I mean is, given the pressures in our society with the large population and tremendous demands on our forested resources, we are going to have to be very careful if we want to maintain these wilderness areas in their natural condition.

Trails is a good example. The trails in most of our wilderness areas now were put in in a previous era and were put in primarily for access to fire control or something. They were not put in as part of a management plan for that area.

It seems to me if we design a trail system to provide access to the wilderness per se we could absorb more people and could distribute the use more evenly, and so on.

Mrs. HANSEN. There are questions arising out of that very point. Shall there be trails or not?

Dr. WOMBACH. I suppose that is a good philosophical point. Trails were part of the natural scene, too. The aboriginals had trails and the buffaloes had trails. Trails don't bother me.

Mrs. HANSEN. This is a question that is often asked, particularly in public meetings. There are people who don't want any trails and there are other people who insist we should have a trail system.

Dr. WOMBACH. In most of the areas I am familiar with in the Northern Rockies, a visitor wouldn't have any problem getting off a trail. Very few of them do. In fact, you can spend many days wandering around off the trails trying to find your way back to the trail.

Management implies other things, too. To the extent that the trails do localize the use, you are clearly going to have to do something to harden the campsites or to rehabilitate sites when they are overused, and so on.

Even preceding this, you are going to have to do a tremendous amount of inventory work. You are going to have to survey the desires and intents of the visitors, what are they there for, et cetera.

It seems to me that we have neglected wilderness in this sense, that we have felt that you should keep your hands off as much as possible. It seems to me just the opposite should be true. We should be investing a great deal of money in managing these wildernesses if, in fact, we do want to protect them.

Mrs. HANSEN. Which is not being done at the present time.

Dr. WOMBACH. It is not being done at the present time; no, ma'am.

Mr. MCKAY. Anyone who has lived in the West knows that, in line with what you are saying, if you don't establish some trails the natural outlet of the population will establish trails by the mere usage of them to local sites which become known by going to creek so and so or such and such. There is a nice little meadow there. The next one goes and the next one and it only takes one summer and you have a trail. Whether you intend to build one or not, you have one. You go up there after a couple of months and you find you have a trail.

Dr. WOMBACH. It seems to me that some meditation might serve a little better. In other words, that trail may concentrate on sensitive meadows or through oversight it may avoid some beautiful outlooks or overlooks. In other words, I think you are absolutely right, the trails will end up there whether we want them or not. But it seems to me a good manager should be able to design a good trail system that would maximize the benefits.

Mrs. HANSEN. And minimize the impact.

Dr. WOMBACH. Yes.

Mrs. HANSEN. This is part of the National Park Service's problem. They didn't meet the problem of the trailers and other items before they appeared. This is why the committee is investigating this particular part of the budget. If we can provide the money to minimize the impact before it occurs, problems may not result.

VEHICULAR TRAFFIC

I was in your State two years ago. At Yellowstone you have many people using snowmobiles. The community that is dependent upon the snowmobile traffic wants them there. But the Park Service tells me that they can only stand a limited amount of them because of the damage that will occur, not in 1 year but in repeated years.

You have these conflicts between the people who want snowmobile traffic to supplement the summer tourists and the Park Service. My suspicion is you wouldn't use a particular road unless you were a summer tourist and wanted to view the landscape. In fact, they admit that some roads are very discouraging to tourists. But in the winter time there is enough snow that they don't see the disaster below them.

Would Yellowstone be wiser to put some of their facilities outside the park and then let them go into the park with a minimum amount of vehicular traffic?

Dr. WOMBACH. I have snowmobiled in Yellowstone. I would think a large proportion of the use of Yellowstone could be done outside. There are a lot of those snowmobilers who like to run around in circles. You can do that as well outside of a national park. I think it would be appropriate to use Yellowstone just for touring and just to go in and visit Old Faithful or things like that. I know the Park Service people are thinking along those lines.

Mrs. HANSEN. They have a real problem with impact.

Dr. WOMBACH. Yes. They could even regulate the kinds of machines. They got some of those big monsters in there that run down the road 80 miles an hour. It seems to me that there are other places we could do that.

Mr. MCKAY. Has the gentleman ever served on a city planning commission? You are just about to if you haven't.

Mrs. HANSEN. Mr. McCracken?

MANAGEMENT OF WILDERNESS AREAS

Mr. MCCRACKEN. With respect to your question, Madam Chairman, with the appropriation for management of wilderness, I would subscribe to what has been said before, with what Mr. Wombach had to say. I use the wilderness every year in Montana. The lack of management in some of the wilderness areas, the clutter and the degradation of some of the fine sites is appalling to me. I would subscribe to what these gentlemen say. I cannot quite get used to the idea of not controlling wild fire even in the wilderness area, but outside of that I would agree.

Mrs. HANSEN. It's all right as long as wilderness areas don't have private neighbors. Is that what you are saying?

Dr. WOMBACH. Yes; I wasn't talking about turning your back. I was talking about a planned program for allowing some forest to burn. You have to set some fires if it's too dangerous to let them occur naturally.

Mr. MCKAY. You want to let disease run a little bit, too. But isn't that a little problem, too? You get on the borders to the natives and that could spring over to where you have a little trouble, too.

Dr. WOMBACH. On insects and disease, my emphasis was on a natural system. If we have exotic insects or an abnormal buildup of insects that are man caused, then control is called for. Clearly you have to protect public safety and property values that adjoin the wilderness. That is taken for granted.

Mrs. HANSEN. Mr. Evans?

Mr. B. EVANS. Some of this is very interesting. I think some of it may get philosophical in the sense what are we trying to recreate when we have a wilderness area—the scene at the time the first white man saw it, as we are trying to do in Sequoia National Park now? Or just a natural evolution of whatever may happen according to nature's way, this is the philosophical point. I don't know what the final answer is.

Maybe there are two different categories here. The first would be the management wilderness category and the second had to do with the expansion of the wilderness system itself.

On the management subject, I was interested in the trail discussion because I have not heard anybody in my experience say no trails in any wilderness areas and get rid of the trails already there. I have heard people say we don't want any more trails or let's relocate the trails. But I haven't heard anybody say no trails at all.

Mrs. HANSEN. In some places they have.

Mr. B. EVANS. That is probably it. I understand in some wilderness areas in Glacier National Park people in our State have proposed trailless zones, for example, trails here and not there, and so on.

On the general subject of management, I think George Alderson made some good points. Certainly we can generally live with what the Wilderness Act now says and now requires by way of management. I think it's quite adequate. We think the Forest Service has been too rigid and purist in its implementation of the act. We think it permits far more management than they are willing to do. We would go along with that. For example, it permits minimal facilities where it's necessary to protect the wilderness resources, which certainly would include camp sites and heavily used areas if it had to be to avoid litter and sanitation problems.

It permits fire and insect control where necessary, to avoid damage to good timberland outside our private lands or whatever. We would support that, too. Some places such as the Selway Bitterroot Wilderness now, in Professor Wombach's State, they are practicing letting fires go such as at Eagle Cap drainage. It is probably a good thing to do.

We see this on a case-by-case basis, not a flat prohibition one way or other.

CASE-BY-CASE MANAGEMENT

Mrs. HANSEN. Is that not why you have to have adequate management money in the budget?

Mr. B. EVANS. Absolutely.

Mrs. HANSEN. So you can determine the particular management needs on a case-by-case basis?

Mr. B. EVANS. There was a time when many of us felt "It is now safe, you do not need to worry about it." But very quickly we realized these areas have to be managed just as much as any other. We are opposed to any vehicles inside such areas. I hope there is not much sentiment for that.

Mrs. HANSEN. I do not think there is much sentiment for it, but I think it is a fact the use is occurring nearer the wilderness areas.

The problem is, the people get in before you can stop them. I think there has to be developed a complete understanding that you do not relax these guidelines so that the first vehicle does not get in.

Mr. B. EVANS. That is right.

Mrs. HANSEN. In several areas a trail wasn't designed for a vehicle, it was not even contemplated that a vehicle would go in there. The first thing you know, you had a party of motor bikes. I ran into a bunch of them, by the way, on a trail.

I will tell you, neither man nor beast was safe on that trail.

We have arrived at that point in time that we cannot wait for some things to happen. We have to do something beforehand.

Mr. B. EVANS. Yes.

The second brief category would be the expansion of the system. Something like 7 or 8 percent now are in the wilderness system. We believe we should end up with 25 or 30 percent, as appropriate.

I think this will help the use problem. We are finding out that just the sheer name on a map designating a wilderness area will draw crowds to it. This will help. It will also help protect beautiful areas. I know you are talking mostly about management here.

That is all I have.

Mrs. HANSEN. We are talking about all aspects of it. We just felt today we wanted to hear all sides of these controversial questions, discussed in relation to the budget activities of the entire public lands area, particularly in forestry.

Mr. B. EVANS. On the subject of expansion, as you know, the Forest Service is required by the court settlement to study these areas and probably are here as a direct budget matter. I hope they will have the proper disciplines to do an adequate study. It will help if they do.

Mrs. HANSEN. The problem with all this is that they have done the easy sections first and now they are confronted with the hard sections. I suspect the progress is going to be much slower from the standpoint of accomplishment, as they proceed.

Mr. Pomeroy?

CATEGORIES OF WILDERNESS SYSTEM

Mr. POMEROY. It has been a most interesting discussion. I subscribe to most of what has been said. I would like to expand just a bit on Mr. Evans' last comment.

I think there ought to be several levels or categories of wilderness. I hate to think that 25 percent of all the national forests would be only so that young vigorous gentlemen like Brock could get in it. I cannot hike like that any more and I would like to see some of these scenic areas.

I think there ought to be several gradations of wilderness, so that all people can see them.

Mr. LONG. Will the gentleman yield on that?

I am just working out my frustrations. Thirty-five years ago my wife and I tried to go camping somewhere in New England. We lived in Middletown, Conn. We drove all the way up to the Connecticut border, over a period of 3 or 4 days, looking for a place where we could pitch a tent, build a fire, look at the water, and enjoy the wilderness. In all that trip, we had our choice between someplace where it was full of trailers, where people were playing baseball at night, or asking some farmer if we could pitch a tent in his backyard and we did not want to do either, and we wound up in some crummy roominghouse somewhere. That is the last time I ever tried to go camping.

I have often wondered whether there is not something in between here.

Mr. POMEROY. I sympathize with you.

Mrs. HANSEN. There is a lot of in-between type areas in my district.

Mr. POMEROY. Some time ago I had the opportunity to review the diary of a lady who took the first trail ride into the Bob Marshall Wilderness in Montana in 1973. She wrote in a big bold hand, underlining, oh, the joy of treading where no one has trod before.

The trail riders still use the same trail and they still look upon the area as wilderness and enjoy it. I think this speaks wonders for the Forest Service's ability and management to maintain the Bob Marshall over these 40 years so that people still get this feeling from it.

Mrs. HANSEN. I think the place to recognize where we have the in-between category is places like Kalaloch, places along the coast that lend themselves to this kind of experience.

I think that this is part of what your land planning should be all about.

Mr. B. EVANS. I hoped to avoid that subject, but since it was raised by Mr. Pomeroy, I would like to disabuse us of the notion that only vigorous hardy people can go into the wilderness areas. I can cite examples where I have encountered grandmothers, and babies, and I have run into them 10, 20 miles in the back country.

INTENSITY OF WILDERNESS USE

Mr. VEYSEY. What percentage of the outdoor users seek out wilderness areas or would seek them out?

Mrs. HANSEN. Can you give us a figure?

Mr. B. EVANS. It depends on what you mean by use. I divide them into two parts, one of them is physical walking into or riding into a place, the other is study, research——

Mr. VEYSEY. Go to the first category.

Mr. B. EVANS. The first category I made an estimate a year or two ago something like 12 million people, just to name a number.

Mr. VEYSEY. How did you get that number?

Mr. B. EVANS. The Forest Service figured out 4 or 5 million on national wilderness areas, but that is only a small part of wilderness areas, that is inclusive of de facto wilderness areas. Near my home it was Alpine Lake, which has far more use than any of the classified existing wilderness areas.

I just doubled that figure. Then you have the wilderness areas inside the national parks, Glacier Park, where I spent a lot of my time, lots and lots of people go there.

Yosemite is another, and so on.

I came up with what I thought was a conservative estimate of 12 million people.

Mr. WYATT. Per year?

Mr. B. EVANS. Per year.

Mrs. HANSEN. In the record last year there was a figure that the preponderance of wilderness visitors did not go deeper than 2 miles into the wilderness.

Mr. B. EVANS. You never can tell. Olympic had 100,000 people using the back country overnight 4 or 5 years ago. That is mostly for a 3 months' season.

Remember, they have heavy snows most of the time. Desolation Valley Wilderness had something like 155 visitors or visitor days. I know there is a difference, in California a couple of years ago.

Mr. VEYSEY. Can I ask if any of the rest of you either confirm or refute this order of magnitude?

Mr. HODGES. The Forest Service cites 5 million visitor days out of 180 million visitor days, now.

Mr. WYATT. On Forest Service property?

Mr. HODGES. Yes.

Mr. LONG. On any given day, somewhere around 3 percent of the people would be using it?

Mr. HODGES. These are visitor days.

Mr. LONG. That is the season when they could use it; right?

Mr. HODGES. Visitor days of use.

Mrs. HANSEN. That is the days of use. Of that number, 5 million would be wilderness use. But the interesting testimony was when they said that the average visitors only went in not deeper than 2 miles.

Mr. B. EVANS. It depends where you go. The Bob Marshall you go in much longer, the wilderness in Montana you go in just for the day; like you said, it varies.

Mrs. HANSEN. Many of them do not go in overnight for a wide variety of reasons.

You know there are people from the city who are afraid of the silence of the forest.

Mr. LONG. I am one of them.

VEHICLE USE IN WILDERNESS AREAS

Mr. ALDERSON. On the point you brought up, the question of the Hondas, I wanted to—there is a real need in connection with the Hondas, to keep them out of some of the areas that the Forest Service is now studying for potential wilderness. I have run across this in some of the eastern study areas, particularly, because we believe that in West Virginia, in a couple of the areas the Forest Service has actually been spreading the word about these areas to the people that want to use the snowmobiles and Hondas so they will go in there and oppose the wilderness proposals when they come up later.

It would be excellent if the committee could find some way to urge the Forest Service to discourage these things, so Congress can reserve the decision on whether it is going to be a wilderness or not.

Mrs. HANSEN. There are places where vehicles have no business. They are a detriment to the land, a detriment to the people en route, and they scare horses. In some areas they could induce a rockslide.

Mr. ALDERSON. The Forest Service has authority to ban them from these areas.

Mrs. HANSEN. That is why we are having this hearing. We hope this gets through. We hope they will read the record.

Mr. LONG. A Honda is relatively mild. Some of these people have motor vehicles that would fill this room.

Mrs. HANSEN. Long Beach still has the annual race there.

Mr. MCKAY. Regular order, Madam Chairman?

LOG EXPORTS AND IMPORTS

Mrs. HANSEN. We have two more subjects. The final discussion will be on agency duplication and overlap.

We also have a very controversial and yet a very realistic issue that has to be faced. This is on log exports and imports. We are a substantial importer of Canadian forest products.

The first question I have is, what are the economic factors which contribute to this situation?

Dr. BETHEL. I noted I am not an economist so I can speak freely. I feel quite strongly on the subject of exports.

I take the view on the forests of the world, we really have to be in a position in the long run, if we are going to satisfy the world need for wood supply and other forest uses, to be able to cross political boundaries.

We import very largely from Canada, we import very substantially from Asia in the hardwood area. I think this is good. We happen to be the custodian in this country of softwoods, which is the kind of wood that most people want. Very large segments in the world want it, they do not have softwood, cannot grow them, they need them.

It seems to me we begin to create serious barriers either to import or export to be in a position where we try to be self-sufficient with our own little brand of wood; it makes much more sense to be in a position to exchange wood across political boundaries and get better use of our wood, better use of other people's wood.

Imports are going to continue. If you have too much emphasis on export, we are going to create problems where we cannot handle the imports. I would like to comment later on the export question.

Mrs. HANSEN. Mr. Hodges?

CONSUMPTION OF TIMBER

Mr. HODGES. Our consumption in softwood is about 57 billion board feet in 1972. We imported from Canada 9 billion board feet of lumber.

Of our total consumption in 1972, 22 billion was housing, 33 billion for other uses.

Mrs. HANSEN. Such as?

Mr. HODGES. Anything other than housing, nonresidential construction, shipping containers, a wide variety of things. I am talking about softwood and solid wood products, not pulp. That is another whole story.

We have a vast import-export situation. I am just talking about softwood timber products, meaning lumber and plywood. I thought it would help to give the Canadian lumber import figure, 9 billion primarily lumber, a large segment of it for housing.

Mrs. HANSEN. Is it primarily an eastern market, midwestern or western market?

Mr. HODGES. Primarily the biggest is in the eastern half of the United States. The largest is between Boston and Washington, but throughout the United States and into Los Angeles too.

The big source in Canada is British Columbia, but the British Columbia portion of Canadian lumber can go to the Pacific rim, and to Europe. The central portion, which is vast and undeveloped and can expand production a great deal, goes best into our northeastern market. So we can look to the Canadian supply of lumber, to the United States, to continue to go up as long as demand stays the way it is, which will hold prices fairly high.

We have watched Canadian lumber go up every year. Very close to 1 billion feet a year.

Mrs. HANSEN. Is any part of the import of Canadian timber related to transportation?

Mr. HODGES. There is some freight advantage. Canadians can ship lumber from Vancouver, British Columbia to the Boston-New York-Washington market at about $15 per thousand board foot cheaper than it can be shipped from Seattle to the eastern ports because of the Jones Act.

There is some advantage in rail freight too, from the central parts of Canada into our eastern markets.

LUMBER PRICE CEILINGS

Mr. WYATT. Is there any complication by reason of the fact that Canadian lumber has no price ceiling on it, while our manufactured lumber does?

Mr. HODGES. Since August of 1971, this has been a very complicated factor with 25 percent of our softwood lumber consumption coming from Canada free of price controls. The consumer cannot tell the difference. When you go to Hechinger's here in town to buy a board, you do not know whether it is Canadian or United States lumber. The United States lumber is price-controlled, the Canadian is not. It has made price controls on lumber extremely complicated and difficult to maintain.

NET IMPORT OR EXPORT

Mr. MCKAY. Let me intercede if I may.

Of the timbers we import and export, No. 1, do we export the same type that we import?

And, two, do we have a net export or a net import?

Mr. HODGES. We have a net import, well over double what we export.

Mr. WYATT. You are talking about wood fiber; are you not?

Mr. HODGES. Yes, I assume he is keeping pulp out of it.

Mr. MCKAY. I am trying to find out what is in it. I gather he is talking about the types of woods as related to your statements, Dr. Bethel; hardwoods, we have to import them because we do not have them; softwoods, whatever you do with them, pulp, plywood, log or 2 by 4's.

Mr. HODGES. The United States is involved in world trade to a very high degree in all types of wood fiber, both for import and export. I think you are trying to confine it to saw logs and lumber and plywood. These things are each tight little islands, to confuse you more.

Mr. MCKAY. Go ahead and try.

Mr. HODGES. The export of chips from the West comes from residues from sawmills, plywood plants. Residue that would have to be burned or disposed of in some way, because we do not have the pulp capacity to use them. So we ship that to Japan. It is controversial. The more they will take, the more everybody wants it to happen, generally speaking.

Mrs. HANSEN. It is not controversial because they have a use for it; is that not correct?

Mr. HODGES. Right. Perhaps I expressed that a little bit stronger than I should. But nevertheless, that is a different subject than the export of logs. It is a different subject than the import of lumber from Canada.

Mr. MCKAY. You mean there are three different categories?

Mr. HODGES. Three different categories, with a whole different array of problems.

Mr. LONG. It is important to know, if the chairman will yield, what is our net situation with respect to import of lumber?

Mr. HODGES. Are you asking me dollars?

Mr. LONG. No; I am talking about board feet.

Are we net importers of all types of lumber or are we net exporter of all types of lumber?

Mr. HODGES. Are you classing logs as lumber?

Mr. LONG. Of course.

Mr. HODGES. Normally you would not, but I will.

Mr. LONG. I do, because it depends purely on the economics of sawing a log whether it is or is not included.

Mr. HODGES. Converting it all to lumber——

Mrs. HANSEN. You had better define for him what are considered cull logs in the sawmill industry in these States, because this has to be in the picture. Otherwise, you get lost. This is not a simplistic situation.

Mr. LONG. I am trying to get a general idea.

Mr. HODGES. It is very important that you do this, because otherwise there is utter confusion. Logs are scaled normally on a different basis than lumber, so I will give you the figures in lumber tally, just like Canadian lumber coming in.

In 1972 our log exports were 3.8 billion board feet lumber.

Mr. LONG. Billion board feet?

Mr. HODGES. Our lumber exports were 1.2 billion board feet, primarily from Alaska. Alaska does not allow the export of logs. It has to be cut into cants or squares, and that goes to Japan. You add the two together and you come up with 5 billion lumber tally; 3.8 billion plus 1.2 billion. That is exports in lumber tally.

Mr. LONG. We are exporting?

Mr. HODGES. 3.8 of logs lumber tally, and 1.2 of lumber, primarily from Alaska, which is a different problem from the log exports from the United States.

Mr. LONG. 5 billion board feet. How much are we importing?

Mr. HODGES. Of lumber we are importing about 9 billion board feet from Canada.

Mr. LONG. So we are net importers, very roughly speaking, of 4 billion board feet, right?

Mr. HODGES. On lumber tally basis of softwood material?

Mr. LONG. Hardwoods, everything.

Is that pure softwood?

Mr. HODGES. Just softwood, I am not talking about hardwoods, wood fiber, or chips or pulp and paper products.

Mr. LONG. I did not ask you to talk about pulp, but I ask you to talk about all kinds of lumber. I appreciate the breakdown of the softwood. We are net importers of 4 billion board feet of softwoods?

Mr. HODGES. Correct.

Mr. LONG. What would be the situation with respect to hardwoods, again leaving out pulp?

Mr. HODGES. I am sorry, I did not bring those tables with me. I have them.

Mr. LONG. Do you happen to know whether we are net importers or net exporters?

Mr. HODGES. We are net importers of hardwood.

Mr. LONG. So we are net importers of lumber?

Mr. HODGES. We are net importers of all kinds of wood fiber, including lumber.

Mr. LONG. Including pulp? Do we still get most of our pulp from Canada, even taking the southern?

Mr. HODGES. We get a considerable amount from Canada and from the Scandinavian countries.

Mr. LONG. Are we still net importers?

Mr. HODGES. Yes, sir. In the 10 years time we have gone from a ratio of importing 10 times what we export to importing about double our exports.

Mr. LONG. Fifty percent of all of our use we import?

Mr. HODGES. Yes, our export of pulp has been going up to the point now where I think—let me correct this for the record, but I will say what I think—that we are exporting half as much as we import.

Mr. LONG. So that we really depend very heavily for all kinds of our wood needs on other countries, when all things are taken into consideration?

Mr. HODGES. Yes.

[Additional information follows:]

	IMPORTS			EXPORTS		
	Softwood Lbr.	Hardwood Lbr.	Wood Pulp	Softwood Lbr.	Hardwood Lbr.	Wood Pulp
	(million board feet)		(tnd. tons)	(million board feet)		(tnd. tons)
1965	4,895	334	3,137	777	125	1,402
1966	4,776	421	3,358	860	148	1,547
1967	4,798	344	3,166	954	159	1,721
1968	5,808	346	3,532	1,025	107	1,916
1969	5,849	449	4,040	1,018	106	2,103
1970	5,769	339	3,513	1,152	116	3,095
1971	7,246	370	3,515	927	154	2,175
1972	8,977	449	3,733	1,196	228	2,237

TREND IN EXPORTS AND IMPORTS

Mr. LONG. The trend has been growing?

Mr. HODGES. It has been growing on our exports. Exports have been moving up.

Mr. LONG. Relative to our imports?

Mr. HODGES. In the percentage of the total of our imports.

Mr. HODGES. Yes.

Mr. LONG. The trend has been less and less dependent on net balance?

Mr. HODGES. Less and less we are a net importer.

Mr. LONG. If I could ask one more question.

Mrs. HANSEN. Yes.

PRICE OF TIMBER

Mr. LONG. To what extent does the price of wood govern in all this? We all know lumber has gone up fantastically in recent years. Is this true with respect to other building materials?

I would guess if it were not, then we would be shifting into other types of building materials, because other types would be relativtly cheaper. That is one question.

How is the price of lumber moving up relative to other types of building materials?

The other question is: Has the fact that we had a price ceiling on lumber here in the United States been encouraging overuse of lumber in the same respect that we have heard with respect to oil, due to price control?

I wonder whether these were analogous situations.

Mr. HODGES. Twenty-five percent of our lumber was never controlled because it came from Canada. Demand was extremely high because of the record levels of housing. In much less than 2 years, we went from 1.4 million levels of starts to 2.4 million starts in houses. This made a huge increase in demand in lumber. And prices went up. The real price went up and the relative price went up.

Mr. LONG. Have they been substituting other building materials as a result?

Mr. HODGES. The relative price of lumber and plywood in a 2-year time went up from something like 110 to 150. That is in relation to other materials in the wholesale price index.

Mr. LONG. So people have been building brick and stone houses and that kind of thing in response to this relative increase?

Mr. HODGES. They went up somewhat, but I don't think quite so much as lumber. Lumber went up more.

Mr. LONG. In price or in use?

Mr. HODGES. Price.

SHIFT IN BUILDING MATERIALS

Mr. LONG. I am talking about use. Has the fact that lumber prices have gone up relatively faster than the prices of other types of materials—if that is so—caused any significant change in the use of other types of building materials compared with lumber, by shifting out of lumber into other things—I suppose plastics and glass and all that kind of thing?

Mr. HODGES. Lumber went up faster so the consumer had the pressure on him to substitute. To the extent he could, he did.

But it's a very difficult thing to do. It isn't easy to substitute steel, cement, brick, or plastic for lumber.

Mr. LONG. In the short run or the long run?

Mr. HODGES. In the short run.

Mr. LONG. In the long run I suppose it would be a different story.

Mr. HODGES. Your labor force has to be changed. Your building methods have to be changed. People's styles and desires for a house have to be changed. They don't change that much.

Mrs. HANSEN. Let me explain something that happened as far as average homebuilding is concerned. Where you once didn't worry about the interior finish of a house because you were going to paper it, you no longer paper because you can't find a paperhanger. So where did you go? You went to some of the plywoods or some of the fancy woods. This is one of the style changes that has come about in the building industry. Isn't this correct?

Mr. HODGES. Right.

Mrs. HANSEN. But that increased the use of wood, which added to the total demand.

Mr. HODGES. The price is the indicator of what is going on in supply and demand. The price of lumber and plywood has risen more than other building materials and the price of standing timber has gone up even faster.

Mr. LONG. A statement was made the other day that we could look forward to a tremendous increase in housing costs by the 1980's because there would be this great shortage of lumber. I suppose there is a lot of truth to that. On the other hand, given that length of time, our experience in other industries has been when a product gets very much out of line on its prices that people substitute out of it. They have done that in steel, for example. They have found all kinds of substitutes for steel.

So that you can't make an absolute prediction. It has to be in relation to the price and in relation to other possibilities.

Given 10 or 15 years, I was just wondering whether some of those forecasts—about all the horrendous things that are going to happen to the housing industry, and we are all interested in this—takes that into account.

LUMBER PRICES RELATIVE TO HOME COSTS

Mr. HODGES. Blaming the increased prices for homes on lumber is not really as sound as it seems to be and as some of the things that you are hearing and reading seem to be. The cost of land, labor costs, taxes, and all kinds of other things are making houses go up faster than lumber.

Mr. LONG. What was the percentage of the price of a house so far as lumber is concerned? This statement was made the other day.

Mr. HODGES. It's made every day. You read it in the Washington Post every Saturday in the real estate section. I brought those figures with me I thought, but I can't lay my hand on them right at the moment. But I will supply figures on how much a house has gone up on the average over the last year as a result of lumber and plywood price increases.

Mr. LONG. That will be very helpful.

[The information follows:]

National Forest Products Association
INTER-OFFICE MEMORANDUM

TO: R. D. Hodges, Jr. cc: Division Heads DATE: March 26, 1973

FROM: G. F. Prange

SUBJECT: Phone Survey of Retail Lumber and Plywood Prices, June 30, 1972 and Jan. 31, 1973

In accord with our discussions Friday, March 23rd, the NFPA code staff was assigned the job of contacting a number of retail dealers for lumber and plywood price data for the respective months ending June 30, 1972 and January 31, 1973.

Due to the press of time, the prices of framing lumber sizes and grades were averaged. Also, plywood prices, 1/2" for roof sheathing and 5/8" for subflooring were averaged. It is very unlikely that this procedure has any significant bearing on the results.

Lumber and plywood volumes were based on a 1200 sq. ft. house in the $25,000 to $30,000 range. Size, however, makes little difference in that it is the cost differential we are comparing.

Average retail cost data for June 30, 1972 were found to be $181 per mbf for framing lumber and $185 per msf for plywood (C-D-X) At the January 31, 1973 date these prices had increased to $231 per mbf for framing lumber and $232 per msf for plywood.

Total retail cost for the 1200 sq. ft. house, lumber and plywood, in June 30, 1972 was $1422 and in Jan. 31, 1973 was $1808, a difference of $386.

Assuming that cost increases for other wood items would not have exceeded those of framing lumber and plywood, the same increases were applied to siding, millwork and trim. Total retail wood cost per house was then computed as $1840 in June 30, 1972, and as $2340 on Jan. 31, 1973, a difference of $500.

TELEPHONE SURVEY OF RETAIL LUMBER COSTS:

For June 30, 1972 and January 31, 1973

ITEM	Prices per mbf * June 30, 1972	Prices per mbf * Jan. 31, 1973
	$140	$244
	163	262
Framing lumber	174	168
(avg. of 2 x 4 and larger)	181	150
	189	229
	160	220
	133	210
	200	208
	215	275 **
	220	285 **
	235	295 **
	185	215
	190	240
	$181 Avg.	$231 Avg.
	June 30, 1972 Price per m sq. ft.	Jan. 31, 1973 Price per m sq. ft.
C-D-X Plywood	$237	$304
Combination of	200	260
1/2" and 5/8" prices	156	189
	190	245
	215	264
	146	249
	185	225
	121	152
	154	205
	170	210
	190	225
	250	275
	155	206
	205	242
	$184 Avg.	$232 Avg.

* range connotes grade and seasoning differences

** raised January 1, 1973 and presently hold

TELEPHONE SURVEY OF RETAIL LUMBER COSTS:

For June 30, 1972 and January 31, 1973

ITEM	Prices per mbf June 30, 1972	Prices per mbf Jan. 31, 1973
Framing lumber (avg. of 2 x 4 and larger)	$181 Avg.	$231 Avg.
	June 30, 1972 Price per m sq. ft.	Jan. 31, 1973 Price per m sq. ft
C-D-X Plywood Combination of 1/2" and 5/8" prices	$184 Avg.	$232 Avg.

Effect of Lumber and Plywood Price Increases, June 30, 1972 to January 31, 1973, per Average Home[1]

	Avg. Price June 30, 1972	Avg. Price Jan. 31, 1973
Framing lumber, 6040 bd. ft.	$1092	$1392
Plywood sheathing, wall, roof, floor 2660 sq. ft.[2]	330	416
Total Price, lumber and plywood	$1422	$1808
Difference, 1972-73	$386	

[1]Assume a $25,000 to $30,000 price range with 1200 sq. ft. avg. floor area

[2]Based on 3/8" thickness, volume adjusted to avg. 1/2"-5/8" price

Effect of Lumber-Plywood Price Increases June 30, 1972 to Jan. 31, 1973 on Total Wood Use in Average Home[1]

	Avg. Price June 30, 1972	Avg. Price Jan. 31, 1973
lumber: framing, sheathing siding, millwork 8150 bd. ft.	$1475	$1880
plywood: floor, wall, roof sheathing; underlayment siding, trim 2940 sq. ft.	365	460
Total Cost, Wood per house	$1840	$2340
Difference 1972-73	$500	

[1]Assumed to be approximately 1200 sq. ft. in size, priced in $25,000 to $30,000 range

Mrs. HANSEN. Do you have anything to add at this point?

SUPPLY OF WOOD

Mr. HODGES. The numbers of people who are now in being prove that we are going to have to supply a large number of dwelling units, space for people to live in, for the future. Regardless of the change in population increase rates, we are going to have a very high demand for housing in this country. It's going to have to be supplied from wood.

This committee is absolutely on the spot. You manage the only place that that wood can come from. It can't come off the industrial lands and it can't come off of the other private lands. It has to come off of the national forest lands because that is the only place it is. You have more than 50 percent of the softwood on the national forest lands.

The industrial lands will continue to supply a moderate increase in the amount that they are putting out. The nonindustrial forest lands really are putting out more than they should, under existing management levels, more than they can continue to put out. We are going to have to spend an awful lot of effort getting the nonindustrial forest lands to grow more timber and cut less so that we can supply the needs 20 years from now.

Mr. MCKAY. What do you mean by nonindustrial forest lands?

Mr. HODGES. The small private holdings that Mr. Pomeroy was talking about that are owned by 4 million people and not owned by the industry. The industry owns 13 percent of the forest lands of the country. The real bloc of timber that the housing needs of the future are going to have to come from is the national forest.

Mr. LONG. Madam Chairman, that is one of the most significant statements that has been made before this committee on this general subject. Mr. Hodges, you are leaving out the whole question of imports; are you?

Mr. HODGES. I told you the Canadians have come up to 9 billion feet a year. And they are going to continue to increase.

Mr. LONG. Can we increase our imports in response to this housing need or are we up against it because of its limits planned by what the other countries will give us?

Mr. HODGES. Our imports from Canada are going to increase. There is no question about it.

Mrs. HANSEN. Mr. McCracken.

Mr. MCCRACKEN. Thank you, Madam Chairman. This subject, of course, is deep to my heart, you know.

Mrs. HANSEN. I understand.

INCREASE IN LUMBER AND PLYWOOD PRICES

Mr. MCCRACKEN. I appreciate the opportunity of making a few remarks. To go to a point that Mr. Hodges was making and I think Congressman Long was asking about, a statement was made a month ago to the Senate Banking Committee by the president of the National Association of Home Builders and stated that the increase in 6 months of lumber and plywood prices to the builders had increased the price of an average home by $1,200 a unit. I talked to the president, Mr. George Barton of Louisville, Ky., a few days ago because of the recent

rises since they made that statement on the first of February. They now compute in the Home Builder's Association that—and, as Mr. Hodges said, this is not the only increase in housing construction—just lumber and plywood price increases had now gone to $1,500 per unit.

He stated that in this year, 1973, therefore, that the 7-month increase in these commodities was going to cost the American home buyers $3 billion. That is roughly 2 million units times $1,500 a unit. That is what the increase in the price of lumber and plywood in the past 7 months is causing the consumer of the United States—$3 billion this year.

DEMAND FOR TIMBER

The basic reason is fairly obvious. There is a strong demand. Housing has gone up dramatically here. Housing starts have gone up dramatically in Japan. They are going to build almost 2½ million units this year. The wood supply to provide this is increasingly inelastic. We are increasingly as an industry unable to come up with the amounts that the demand calls for.

There are two reasons for this, Madam Chairman. Both are involved in this committee, and the first one most particularly. When Mr. Hodges said that you indeed were on the spot they are really on a spot.

Mrs. HANSEN. This is the reason this committee is deeply concerned, because we realize we have to maximize the production and at the same time minimize the environmental damage and the destruction of our fragile lands. I think this is the crunch the country, the committee, and the budget finds itself in. If you are going to have high harvest areas you have to do some real planning and organizing. Otherwise you would be into the fragile areas. Once they are destroyed they are gone.

AMOUNT OF TIMBER SALES

Mr. MCCRACKEN. Just one comment about the budget is all I would make. We are again distressed, our association and industry, that this budget calls for the sale of approximately 3½ billion feet less than the official allowable cut on the national forests.

Mrs. HANSEN. Isn't part of this involved in litigation?

Mr. MCCRACKEN. There has been litigation and there has been a settlement of litigation involving roadless areas. Still and all, it's a fair statement, Madam Chairman, that the official allowable cut today in the Forest Service is about 13.7 billion board feet. This budget, as I understand it, calls for the sale of only 10.8 billion board feet, of which only 10.2 or 10.3 billion board feet are actually chargeable to that cut.

This is not the first year this has happened, despite the best intentions and the appropriations of your committee. This year we are not seeking less than that sold. We will sell less than 10 billion board feet from the national forests this year.

Two illustrations of what this has meant and why the inelasticity in our industry, why we can't respond to demand. In Idaho, Montana, region 1, where Dr. Wombach comes from, just 3 years ago the industry from the national forests had over 5 billion feet of timber under contract. Today it is less than 3 billion. That industry is getting close, as you can see, to a total disaster. In your own region, region 6, Oregon and Washington, in just 1 year up to last December 31, the

amount of timber we had under contract dropped 1.6 billion board feet. In other words, we cut 1.6 billion feet more than the Forest Service sold last year in that region, in that big region. As these supplies go down, people just will simply not continue to expand their production. They are just chewing up their assets and going out of business. The price stimulus just doesn't work any more.

With respect to the budget, with about a $5 million or $6 million increase in the budget for the sale of timber, you would get up to the allowable cut and the revenue the Government would receive would be $210 million at least.

DECREASE IN ALLOWABLE CUT

Mrs. HANSEN. Why is the allowable cut down?

Mr. MCCRACKEN. For this year, 1973, the budget that was approved by your committee and the Congress said that they should sell, I believe, 11.6 billion feet this fiscal year. They will sell less than 10. Part of the reason was the litigation and the amount of time that is going to be involved and the sales that were postponed as a result of litigation and the amount of time involved in going through impact statements as a result of that. Other reasons were increasing shortages of manpower, the personnel ceiling is going down, and increasing demands on the Forest Service for better management.

PERSONNEL CEILINGS

Mrs. HANSEN. You have hit on a very important point to this committee. Personnel ceilings are going down. Yet, everything that has been said today, implies the need for better management, management in practically every department.

The departments this committee handles are managerial departments. These are not concerned with hardware. These are not concerned with airplanes that we are building or battleships. It's a pure matter of managerial functions. However, there is increasingly a diminution of personnel. In the beginning this was accomplished by attrition. I no longer think it is going to be possible to reach some of these ceilings only by attrition. I suspect it's going to be directly reflected in inferior type of management as time goes by. You can only stretch the hours of a forest ranger or a person in the planning service so far. This is what is disturbing.

Mr. HODGES. Just to illustrate what you said. In 1970, fiscal year, the ratio of the sell to the cost of selling, it cost the Forest Service $3.65 a thousand to sell timber. In 1971 it cost $4.88. In 1972 it was $6.17. Their forecast is $6.25 for this year. The industry is guessing it is going to be $7.05. So since 1970, the cost of selling a thousand board feet of timber went from $3.65 to what we think will happen in this next fiscal year, to $7.05.

Mrs. HANSEN. It's obvious if you are going to classify your land and do it in the kind of management job that is required, it's going to cost more. So you have to have the personnel to do it.

Dr. Bethel, do you have to leave?

Dr. BETHEL. I have to catch a plane, Mrs. Hansen.

Mrs. HANSEN. I want to express the committee's deep appreciation for your coming. We certainly appreciate your participation today.

Dr. BETHEL. Thank you. I was glad to be asked.

COSTS OF ROADS IN SALES

Mr. VEYSEY. Madam Chairman, could I ask a question to clarify his numbers as to the cost of sales? Does that include construction of roads?

Mr. HODGES. No. That is the cost of selling the timber. This is included in the statement I submitted for the record.

Mrs. HANSEN. It's the appraisals, the preparations, and so forth?

Mr. HODGES. Yes.

Mr. VEYSEY. If we included the cost of roads, what does that do? As I understand the earlier discussion, roads are necessary before the timber moves out.

Mr. HODGES. The nationwide costs would be about $12.

Mrs. HANSEN. Mr. McCracken?

EXPORT POLICY

Mr. MCCRACKEN. The only other point is in a situation like this, and with the forecast ahead in this country, and in Canada, Japan, and Europe for the demands for softwood and the diminishing supplies from many of these countries' forests, as you know, we think it doesn't make any sense to continue to export as we did last year almost 3 billion feet of our finest softwood logs.

Congressman Long asked a question. We got about $370 million for those logs last year in terms of our balance of trade. We had to replace that with something over 4 billion feet of identical lumber that we would have made from Canada which cost us almost $800 million. So from a balance of payments point of view our estimate is that at least $400 million of our balance of trade went out because we exported a raw product and imported a finished one.

Aside from that, Madam Chairman, one of our major reasons for urging a prohibition on the export of unfinished logs, whether to Japan or Canada, is that since over 90 percent of it goes to Japan, our reason basically involves Japan. They have a sawmill in Japan—somewhere between 23,000 and 24,000 sawmills. At least there are an awful lot of them. These mills depend to a substantial degree or very significantly upon our timber. This is used in their construction industry, their homebuilding. They don't export finished products out of our lumber. They use it in Japan.

That sawmilling industry, I am satisfied, would have a very strong incentive to find soft wood or soft hardwoods elsewhere in the world. This would be one way of increasing the supply, which I think we are all confronted with.

I think on the other questions of log export, there have been voluminous hearings and testimony but that is one aspect that fits in here. The way it is now, we are like a Safeway store. We have made the billions and billions of dollars of investment with access roads and other facilities. We have the loggers and the logging camps and the use. They come to us and take logs off our shelf just like this. They can't do that anywhere else in the world. We think they ought to have an incentive to develop something themselves somewhere. We all need it. Thank you.

Mr. LONG. Madam Chairman, I am a little puzzled. Why can't they get it out of Canada?

Mr. McCracken. The Canadian Government won't permit it.

Mrs. Hansen. Aren't their conditions practically the same as in Alaska? They cannot be exported if there is a bid for the sawing in Canada.

Mr. McCracken. Yes.

Mr. Hodges. Alaska won't allow it. The Federal Government doesn't allow log exports from Alaska even if there is a market.

Mr. McDade. You are not confining it to logs. You are talking about the finished product, too, are you?

Mr. McCracken. We are talking about logs. At the present time, the homebuilders and the contractors are screaming about logs and lumber both.

CURRENT AND FUTURE LOG EXPORT POLICY

Mr. McDade. I understood you to advocate stopping this practice to enhance our domestic industry. I would assume if you are going to enhance it you are talking about the finished product as well as the logs. Is that your position?

Mr. McCracken. Our position at the moment——

Mrs. Hansen. It's their position now but they haven't always had this position.

Mr. McCracken. Our position is at the moment that at this time there should be a ban or embargo, if you want to call it that, on logs and lumber.

Mrs. Hansen. Shouldn't this be flexible, because the same conditions could occur that were present in 1961, 1967, and 1969. You have several labor groups involved in this. You have longshoremen, teamsters, carpenters, joiners, and the sawmill workers. The log market has not always been as you gentlemen have indicated; when interest rates go up, housing starts tend to decrease. Correct me if I am wrong, Mr. Hodges, you are going to have widescale unemployment if drastic measures are not taken.

I may say of the internal logging community, if they have employment problems similar to the rest of the country, they would rather work than go on welfare.

Of necessity, to keep the even flow of work and the economy up, you export. In the beginning it was the cull logs. These were the logs not milled in the United States. Perhaps we should have the flexibility of saying that is the only kind that can be exported.

The Japanese disturbed me a long time ago on their ability to finance a wide variety of things in a wide variety of places where our Government hasn't provided the funds in the budget.

ECONOMY AS IT RELATES TO SHIPPING

You also have port districts all over the Northwest which balance their shipping literally with this outflow because there are retaliatory groups around the world that, when you won't trade, they won't trade. I believe Governor Evans said 85 percent of the State of Washington's economy is based on shipping. This isn't limited strictly to shipping lumber or logs. This is shipping of airplanes and shipping of grain. This is shipping of a wide variety of items.

I hope in all the discussion we leave some flexibility so that when the need is there it can be done. I hope we don't get ourselves into the position of opening the way for the imposition of trade barriers and finding ourselves in great difficulty.

I well remember when Mr. McCracken's men were out of work and Mr. Long's men were out of work. I was in Vancouver, B.C., and the Frazier River was choked with ships. Guess what they were holding—lumber. And our industry was down because we had no market in the United States because of the number of housing starts. The consumption of lumber was down. It goes down periodically. We always say, there is no such a thing as middle ground in the industry. The lumber people are either bending their backs from carrying their money to the banks or they have lost their shirts. This is one of the great problems in the whole lumber industry. Isn't this correct, Mr. Towell?

Mr. TOWELL. It is very true, I am afraid.

FLEXIBLE LOG EXPORT POLICY

Mrs. HANSEN. I hope we approach this thing with wisdom instead of irrationality. We are not in this process of having to become violent advocates of something before we have reasoned the whole thing through. I have a rather dismal view of shipping and exporting public land logs because these are the taxpayer's logs.

I also have a dismal view of saying to the State of Washington, you are going to be out of work tomorrow because of export limitations.

Second, I think we have some grave thoughts about what we will say to private enterprise about the disposition of their lumber. I hope we maintain some flexibility. I think the committee has to see the total problem of housing and production. Mr. McCracken, it would be easy to say we are going to authorize money for complete sales. But it isn't quite that easy.

I think the thing that the committee has been confronted with is to provide adequate management funds so we don't authorize sales in places that shouldn't be cut at that point in time.

If you have quick and easy solution today, tomorrow you might be just like the exporter. You might have an embargo on all tree cutting.

This is the reason I appreciated the members of the panel participation today.

TAXES AND REVENUES

Mr. MCKAY. As I perceive the thoughts here, it's saying we are in a crunch. You have need for more money for reforestation and management and research and it's critical. Otherwise you are not going to have the fiber for this, and so on, and the crunch is on with population.

Would any of you here be willing to go on the record to raise the taxes in light of the fact that every other agency is saying there is the same kind of a crunch and that we therefore cannot reduce the Federal expenditures?

Mrs. HANSEN. I would like to point out that the budget this committee reviews, excluding the "people" agencies is a little over a billion dollars. The revenues coming in from our public lands vary between $2.5 billion and $4.5 billion.

Mr. MCKAY. I recognize that. The appearances is you are talking about a ceiling; there is so much money we have to operate under. If

the needs are that much, is there anyone willing to say, along the way, if the crunch is the same all over and we have no more money unless we raise taxes, are you ready to raise taxes?

Mr. HODGES. In the case of this issue it is a moneymaking issue. That is why we say, "spend the money," you will take in $4 for every $1 you are spending.

Mrs. HANSEN. Yet we distribute increasing amounts of funds to foreign countries.

Mr. LONG. In the last Congress I tried for a whole day to get Congress to cut our foreign aid back, not cut it out, but just to cut it back to last year's level, which was 1½ times what it had been at the beginning of this administration. The administration had come up with a budget request 2½ times what it was 4 years ago. Now we are operating under a continuing resolution in which foreign aid is double what is was 4 years ago. That is foreign aid narrowly defined. In addition foreign aid has been hidden, shoved under every rug that can be found.

There is plenty of money that can be found in wasteful programs which can be diverted to other uses.

Mrs. HANSEN. I think the thing that the committee is concerned about is if we are going to do a job of managing our natural resources, we ought to regard these natural resources of ours not as a short-term but as long-term investments.

Mr. Evans?

ENVIRONMENTAL IMPACT OF TIMBER CUT

Mr. B. EVANS. I would have an observation on that point which relates to the log export question. I have been told that the U.S. Forest publication "Timber Outlook for the Future," indicates a severe drop-off in cutting from private lands on the Pacific coast from 10 billion board feet to 4.4 by the year 2000.

This tells me there must be some overcutting of some form. The logging question relates to this.

How can we say we have to cut more timber from the public lands at the same time we are permitting our private industry to lease 3 billion board feet. It think this has most serious environmental impact.

We are exporting many things: We are exporting destroyed fishing streams, we are exporting scarred scenery, and we are exporting eroded soils. These are the consequences of large scale stripping if you are not managing it on a careful basis.

I agree we need to be flexible.

Mrs. HANSEN. I think we need to be flexible, to make sure that we do not get ourselves into a situation where we are doing no shipping of anything. I am not quite sure the economy could survive your latter statement.

Mr. B. EVANS. If this trend holds true, it can mean a large scale overcutting of the national forests in 10 or 15 years. It is a serious question.

Mrs. HANSEN. I do not think we are going to tolerate overcutting of anything.

Mr. MCDADE. Mr. Pomeroy?

Mr. POMEROY. My thought is closely allied with his. I am informed that the attractiveness of these export prices is inducing many small

private owners to cut timber that is immature and we will feel the effects of that further down the line.

Mrs. HANSEN. I think the whole thing needs a good hard look. I just hope we can maintain a sense of balance enough that we are not too inflexible.

FULL OPPORTUNITY BUDGET

Mr. TOWELL. May I offer a final comment with regard to your latter statement?

You were very complimentary this morning about a joint committee coming before your subcommittee for the past 2 years, conservation and industry. We did so in an effort to bring to you a balanced thinking between conservation forces and industry in our country. You were very kind in granting many of our requests.

I call to your attention that in the record, both for the 1973 fiscal year budget and the 1972 fiscal year budget, was our presentation of what we called a full opportunity program for the Forest Service.

If you will refer to that for the past 2 years you will find exactly what is needed to answer the shortages we are talking about here right now, to bring the total Forest Service program up to the level it needs to be. And we will be back if you will permit us.

DUPLICATION OF PROGRAMS

Mrs. HANSEN. We are expecting you back again. I was going to announce that this does not preclude your participation in the discussions at the end of our hearings. But we though as we have just finished the Forest Service and have listened to the natural resource overview by both Secretaries, that this would be a good opportunity to present your thinking on a wide variety of items that are within the scope of the committee.

The final question I have is whether you can identify for the committee any important areas where there is a conflict in agency objectives and where there is an overlap and duplication in agency programs?

This is something we are deeply concerned with. I will entertain comments from any one of you who wish to speak.

Mr. Hodges?

Mr. HODGES. Madam Chairman, the appropriations report for 1972, your subcommittee's report, said the Forest Service is urged in these times of conflicting demands to stress imaginative planning and administration which will provide maximum multiple use in the national forest for the production of needed lumber to meet the increasing social needs in the program of housing, accommodation of the ever-increasing use of those seeking recreation, and preservation of valuable watersheds, and so forth.

I think to allow in these times the export of national forest timber to Japan is not in harmony with that sentence. I would urge you in your report, as a result of your hearings, for the next fiscal year, to change that sentence just a bit to make it clear, that until the demand goes down, until we get ample funds to sell a full allowable cut and provide the manpower to do it, that you make sure that that sentence is expanded just a bit and make it clear there is to be no sales for export from the Federal lands.

Mrs. HANSEN. Public lands?

Mr. HODGES. I do think it is a conflict to allow that. I think this is a partial answer to the whole problem. And perhaps a temporary one and perhaps it should be temporary for the reasons you mentioned about labor and so forth. At least it will get the Japanese out of bidding up the prices on the west coast on Federal timber to the point where timber prices are related to the Japanese market instead of the domestic market.

Mrs. HANSEN. Mr. Pomeroy?

Mr. POMEROY. This is in slightly different vein. I do not see any particular overlap between the Forest Service, Extension Service, Soil Conservation Service, and others in their programs. These things were worked out by the Congress many years ago. But I do see one little problem that I would like to leave with your committee; the REAP program appears to to be on the way out, at least it is going to be different anyway. It includes or has included in the past funds for reforestation and timber stand improvement on private lands. Your committee might think of amending section 4 of the Clarke-McNary Act to include those forestry incentive type things along with ceiling production.

Mrs. HANSEN. May I recommend that you go to the Agriculture Committee and ask for an opportunity to be heard before their Forestry Subcommittee?

We can only place limitations on the language in the appropriation bill. Many people think that we can alter legislation. We cannot. We can only make recommendations and initiate prohibitions and limitations.

Mr. POMEROY. Yes, I understand. But there is another side to this thing, and that is it might be funded by using the import duties that come from all these forest products under section 35 of the act of 1935, something that Mr. Kyl brought up last year. If that were done, it certainly would involve your committee.

Mrs. HANSEN. Yes; they amended the bill last year.

Are there any other comments? If not, I want to thank each and every one of you for your particiaption. Some of you came from quite a distance. You have made it possible for the committee to have the opportunity of hearing your viewpoints and your suggestions.

As I say, we welcome all of you back at the conclusion of our hearings.

Mr. POMEROY. We are honored to have this statement.

Mr. LONG. I want to say this has been one of the most interesting sessions that we have had.

Mrs. HANSEN. I think once in a while we have to venture into the unknown. Thank you all.

MONDAY, MARCH 26, 1973.

BUREAU OF LAND MANAGEMENT

WITNESSES

BURTON SILCOCK, DIRECTOR
JACK O. HORTON, ASSISTANT SECRETARY, LAND AND WATER RESOURCES
GEORGE TURCOTT, ASSOCIATE DIRECTOR
EDWARD HASTEY, ASSISTANT DIRECTOR, ADMINISTRATION
MURL STORMS, CHIEF, DIVISION OF FORESTRY
PAUL VETTERICK, CHIEF, DIVISION OF BUDGET AND PROGRAM DEVELOPMENT
CARL GUIDICE, CHIEF, DIVISION OF BUDGET, OFFICE OF BUDGET

Mrs. HANSEN. The committee will come to order. This morning we have the Bureau of Land Management. We have as our principal witness Mr. Burton Silcock, currently the Director. Mr. Horton is going to be with us a little later, I understand.

INTRODUCTION OF WITNESSES

Before we start, would you introduce your staff, Mr. Silcock.

Mr. SILCOCK. Yes, Madam Chairman, I would be happy to do so.

We have on my right, Associate Director George Turcott.

Mrs. HANSEN. We have met Mr. Turcott.

Mr. SILCOCK. On my left, Mr. Hastey, Assistant Director of Administration.

Mrs. HANSEN. We have also met Mr. Hastey.

Mr. SILCOCK. We have Mr. Storms, our Chief, Division of Forestry; and then we have Paul Vetterick, our Chief, Division of Budget and Program Development.

Mrs. HANSEN. Who is your pretty girl?

Mr. SILCOCK. Pat is with our budget shop.

Mrs. HANSEN. Don't you think you ought to introduce her? You ought to introduce her first.

Mr. SILCOCK. I am sorry. Pat Harvey, she is in our budget shop.

Mrs. HANSEN. The other day one of our witnesses appeared and called one of the women in his shop a den mother.

ENERGY AND MINERAL RESOURCE HEARINGS

Today we begin our hearings on agencies within the Interior Department, which are concerned with research, analysis, and management of our country's energy and mineral resources.

It was hoped that by this time the President would have come forth with his long-awaited energy message and that we could talk to the various agencies in the context of this message. Unfortunately, the message has not yet been released, and so we are forced to proceed with only partial knowledge of the administration's policy in this vital area. The committee has a great interest in these programs. We

expect that when the energy message is released, we will want to review the message with representatives of the Interior Department and perhaps also with an outside panel of experts.

The committee had also expected that by this time there would be a new Assistant Secretary of Energy and Minerals. Mr. Wakefield has been nominated, and Senate confirmation hearings were held last week. I understand confirmation has been made, is that correct?

Mr. SILCOCK. That is my understanding.

Mrs. HANSEN. We look forward to talking to Mr. Wakefield about his new responsibilities.

We begin today with the Bureau of Land Management which falls under the jurisdiction of the new Assistant Secretary for Land and Water Resources, Mr. Jack Horton, who will be with us later.

Mr. Silcock, I know you have a statement. You may place it in the record and summarize it or read it.

Mr. SILCOCK. With your permission, Madam Chairman, I would like to read it. It is very brief.

Mrs. HANSEN. That is a welcome relief from some of the bureaus.

OPENING STATEMENT

Mr. SILCOCK. Madam Chairman, it is a distinct honor to appear before the committee again to discuss our 1974 budget request for the public lands, more recently called the national resource lands.

Our total budget request for 1974 is $122,688,000, excluding $96,096,000 in permanent appropriations and $665,000 in trust funds. This is an increase of $13,379,000 over the amount appropriated to date in fiscal year 1973.

PERMANENT APPROPRIATIONS

Mrs. HANSEN. Will you explain—because we do have new members on the committee, Mr. Silcock—your permanent appropriations.

Mr. SILCOCK. Our permanent appropriations come from receipts from the public lands. Receipts for oil and gas leases, timber sales, in fact all of the various revenues that are received from the public lands are apportioned on a percentage basis and go back to the States. That is where our permanent appropriations come from.

Mrs. HANSEN. It goes into the U.S. Treasury and back to the States?

Mr. SILCOCK. Yes; a percentage is reappropriated to go back to the various States from which it was collected under a variety of acts.

PAYMENTS TO STATES

Mrs. HANSEN. Will you place in the record at this point a list State by State and the receipts which they have received during the past 5 years.

Mr. EVANS. And the particular sources or law.

Mrs. HANSEN. Yes.

[The information follows:]

PAYMENTS TO STATES BY SOURCE OF RECEIPT
FY 1968 - FY 1972

	Sales of public lands and timber	Mineral leases and permits	Taylor grazing leases	Taylor grazing districts	Other	Total
Alabama	$ 214	$ 47,921	$ ----	$ ----	----	$ 48,135
Alaska	11,998	39,214,320	----	----	----	39,226,318
Arizona	20,945	665,760	187,287	123,055	----	997,047
Arkansas	1,149	96,724	----	----	----	97,873
California	269,016	15,692,976	246,057	34,684	----	16,242,733
Colorado	32,983	16,234,065	76,050	133,345	----	16,476,443
Florida	1,100	68,033	----	----	----	69,133
Idaho	109,788	927,703	59,771	239,226	----	1,336,488
Illinois	2	15	----	----	----	17
Kansas	56	819,507	52	----	----	819,615
Louisiana	1,611	1,907,364	----	----	----	1,908,975
Michigan	471	66,157	----	----	----	66,628
Minnesota	634	----	----	----	----	634
Mississippi	1,135	80,274	----	----	----	81,409
Missouri	18	----	----	----	----	18
Montana	65,304	14,646,273	223,472	161,197	273,906 a/	15,370,152
Nebraska	7	15,512	1,285	----	----	16,804
Nevada	118,129	1,963,641	54,698	436,765	----	2,573,233
New Mexico	44,883	60,744,091	279,817	311,472	10,905 a/	61,391,168
North Dakota	273	1,046,574	12,983	----	----	1,059,830
Oklahoma	1,257	929,368	366	----	----	930,991
Oregon	513,897	166,608	103,089	185,725	158,444,409 b/	159,413,728
South Dakota	2,766	768,965	99,307	----	----	871,038
Utah	13,611	16,752,245	----	234,470	58 a/	17,000,384
Washington	16,705	6,409	39,680	----	----	62,794
Wisconsin	40	----	----	----	----	40
Wyoming	36,063	94,146,619	529,762	284,542	----	94,996,986
Total	$1,264,055	$267,007,124	$1,913,676	$2,144,481	$158,729,278	$431,058,614

a/ Executive Orders 10787, Nov. 6, 1968, and 10890, Oct. 27, 1960, from grazing and mineral receipts, L. U Lands.
b/ From "O&C" Lands and Coos Bay Wagon Road Lands.

BASIS FOR STATE & COUNTY PAYMENTS

The following list indicates the nature of payments made to states and counties under Permanent Appropriations.

1. Payments to Oklahoma (royalties) receipts limitation).
The joint resolution of Congress approved June 12, 1926, provides for payment to the State of Oklahoma of 37 1/2 percent of oil and gas royalties received from the south half of the Red River, Oklahoma. The payment is in lieu of all State and local taxes upon Kiowa, Comanche, and Apache tribal funds received from such lands under the Act of March 4, 1923 (42 Stat. 1448), and is to be used by the State for the construction and maintenance of public roads, or for the support of public roads, or for the support of public schools, or other institutions of learning (44 Stat. 740).

2. Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands. Not to exceed 75 percent of the receipts in any one year from the Coos Bay Wagon Road grant lands in Oregon are for payment annually, in lieu of taxes, to Coos and Douglas Counties, as provided in the Act of February 26, 1919 (40 Stat. 1179), and the Act of May 24, 1939 (53 Stat. 753-754).

3. Payments to Counties, Oregon and California grant lands. In accordance with Title II of the Act of August 28, 1938 (50 Stat. 874, 43 U.S.C. 1181f), 75 percent of the moneys deposited in the Oregon and California grant-land fund is to be paid to the counties in which the revested lands are situated. However, the "Oregon and California Grant Lands" appropriation of the Bureau of Land Management provides that 25% of the receipts collected from sale of timber and other products on the O&C lands are available for construction, operation, maintenance of access roads, reforestation, and other Federal lands in the Oregon and California land-grant counties of Oregon. The amount appropriated will be a reimbursable charge against the Oregon and California land grant fund and be reimbursed to the general fund of the Treasury from amounts otherwise payable to the counties.

4. Payments to States (proceeds of sales) (receipt limitation).
Under various Acts of Congress including 31 U.S.C. 711, States receive for education, roads and improvements, 5% of the proceeds of sales of public lands and of various materials from the public land after deducting all the expenses incident to sale.

5. Payments to States from grazing receipts, etc., public lands outside grazing districts. States are paid 50% of moneys received as grazing fees from public lands outside grazing districts, under the provisions of section 10 of the Act of June 28, 1934, as amended (43 U.S.C. 315i, 315m).

6. Payments to States from grazing receipts, etc., public lands within grazing districts. Under the provisions of section 10 of the Act of June 28, 1934, (43 U.S.C. 315b, 315i), 12 1/2% of receipts from grazing fees from public lands within grazing districts is paid to States in which the lands are situated.

7. Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous. The States are paid such amounts from grazing fees on miscellaneous lands within grazing districts when fees are not susceptable to a standardized and uniform distribution on a percentage basis (43 U.S.C. 315).

8. Payments to States from receipts under Mineral Leasing Act. Alaska is paid 90% and other States are paid 37 1/2% of receipts from bonuses, royalties, and rentals under the provision of the Mineral Leasing Act (30 U.S.C. 191), and 37 1/2% of receipts from bonuses, royalties, and rentals from leases of potash deposits under the Act of February 7, 1927, (30 U.S.C. 1012).

9. Payments to counties, natural grasslands. Counties in which submarginal lands, under the Bankhead-Jones Farm Tenant Act of July 22, 1937 (50 Stat. 525, 7 U.S.C. 1010) transferred to the jurisdiction of the Department by Executive Order 10787, dated November 6, 1958, are located, are paid 25% of net revenues received during each calendar year from the use of such lands; such funds to be used for school or road purposes or both (7 U.S.C. 1012).

HIGHLIGHTS OF FISCAL YEAR 1974 BUDGET

Mr. SILCOCK. The following briefly summarizes the highlights of our 1974 budget proposals.

The 450 million acres of National Resource Lands, the 369 million acres of other lands where mineral rights remain in Federal ownership, and the 515 million acres of the Outer Continental Shelf managed by BLM are an increasingly important source of the goods and services that are necessary for the Nation's economic and social growth. For example, the National Resource Lands and the OCS provide 30 percent of the total minerals produced in the United States, and they satisfy 17 percent of our domestic production of oil and gas.

MINERAL RESOURCE KNOWLEDGE

Mrs. HANSEN. I want to interpose at this point, because when you read the justifications for the Geological Survey, you realize that you have a great number of acres where you have no idea what is under that land, isn't that true?

Mr. SILCOCK. This is correct.

Mrs. HANSEN. What percent of the Nation's land?

Mr. SILCOCK. We don't have the figure on that, but there is a vast amout of area.

Mrs. HANSEN. Will you place that figure in the record, because I think this is important to know, because your agency and everybody else is behind on their mapping and on their resource exploration.

[The information follows:]

MINERAL MAPPING AND RESOURCE DATA

All public lands are covered by some form of topographic and geological maps in varying degrees of scale, detail, and accuracy. However, about 25 percent of the public lands have been adequately mapped and evaluated to determine with any degree of certainty as to what mineral resources might be available. Less than 5 percent of the public land areas have been studied and mapped where not only the types of mineral resources may be predicted but the quantity of the resource estimated as well.

Mr. TURCOTT. With respect to oil and gas, Madam Chairman, it would be the difference in the total acreage, and that which is certified by the U.S. Geological Survey as a known geologic structure. We can get that.

Mrs. HANSEN. But you are behind also on knowledge about other minerals.

Mr. TURCOTT. Yes; ma'am.

Mrs. HANSEN. And particularly Alaska. You haven't the vaguest idea what is under some of that land at a time when we are getting ready to distribute the land, isn't that correct?

Mr. TURCOTT. There is a great paucity of information in some regards, there is no question about that.

Mr. YATES. Why don't we know more about it?

Mrs. HANSEN. Because the budget requests haven't been adequate to explore this land; isn't that correct?

Mr. SILCOCK. To provide for survey.

Mr. YATES. Why is that? It seems to me this is of very great importance.

Mrs. HANSEN. We are locking up millions of acres or disposing of millions of acres without any knowledge about what is under them. Please proceed, Mr. Silcock.

BUDGET REQUESTS VERSUS RECEIPTS

Mr. SILCOCK. Known and potential public land reserves of coal, oil shale, offshore oil and gas, and geothermal steam are of increasing importance in meeting urgent national requirements for energy sources. Other vital resources include water, forage, timber, wildlife, recreation opportunities, open space and land upon which to build. Federal revenues from the sale and lease of these resources are substantial—estimated to be in excess of $4 billion in 1973.

Mrs. HANSEN. This is $4 billion off your lands?

Mr. SILCOCK. That is off the public lands and OCS in fiscal year 1973.

Mrs. HANSEN. Your total budget for the management of these leases, and so on, is $122 million.

Mr. SILCOCK. That is correct, for 1974.

Mrs. HANSEN. It tells the story right there, Mr. Yates.

BUDGET EMPHASIS

Mr. SILCOCK. Our 1974 budget has been developed within the context of tight fiscal constraints, but it does reflect the additional resources necessary to manage the national resource lands if we are to increase their contribution toward meeting urgent national priorities while preserving the quality of the environment.

In this budget, we have placed heavy emphasis on improving the Bureau's capability to provide new sources of clean energy that will be developed under comprehensive land use plans and environmental quality standards. The increases we are requesting for fuel and energy programs are for accelerating the Outer Continental Shelf leasing program; for initiating a geothermal steam leasing program; for improving our capability to minimize adverse impacts on surface resources from exploration and extraction activities; for inspection and monitoring of Alaska pipeline construction should construction permits be issued; and for developing environmental analysis, and impact statements, and conducting land use planning activities in priority energy source areas including those with large deposits of low sulfur coal.

In addition to fuel and energy programs, the budget reflects our needs to continue the implementation of recently enacted legislation such as the Alaska Native Claims Settlement Act and the Act for the Preservation of Wild Horses and Burros. Also there are modest additional efforts to provide the safety and protection measures that are needed as a result of the tremendous explosion in the use of 4 million offroad vehicles on the National Resource Lands, and to insure an adequate level of maintenance of Bureau facilities. These include water retention structures in accordance with Congressional concern and Public Law 92–367 establishing the national dam inspection program.

National resource land management programs which will be continued at basically the fiscal year 1973 level include range, forest, wildlife, and watershed management and development, and supporting programs for fire protection and cadastral surveys. These programs

are highly important to local and regional economy in the West, and they contribute substantially to national needs for food, forest products, recreation opportunities, water supplies, and a clean environment.

For construction activities, the budget generally proposes reduced program levels necessary for priority projects. For public land road construction, a $4 million appropriation of liquidating cash is proposed, along with a $4 million obligation program. In the building and recreation construction activities, our reduced request permits continuing requirements for projects begun in 1973 and prior years. One new building construction start is proposed. This is for an urgently needed warehouse and related improvements in Anchorage, Alaska. Two new national resource land recreation projects are included—a small project to help preserve and protect the Garnet Ghost Town in Montana, and a joint project between BLM and the Arizona State Highway Department at Virgin Canyon in Mohave County, Ariz.

BUDGETARY CHANGES IN 1974

In closing my statement, I would like to briefly mention two aspects of our budget request which are new:

The 1974 request includes a $7.4-million increase item for the Alaska pipeline inspection program. This is an anticipation of the resolution of current litigation and the issuance of construction permits for the pipeline, in accordance with the Secretary's decision, some time prior to June 30, 1974. New proposed language for the Appropriations Act provides that expenditure of any or all of the requested increase will be dependent upon permit issuance. Also as required by the Congress, all expenses directly related to permit issuance, monitoring, and surveillance of pipeline construction activities will be recovered from the successful applicant.

We are requesting additional pipeline funds now so that we will be in a position to quickly meet our responsibilities at the time a permit is issued. Plans are ready and materials on hand in Alaska to begin construction almost immediately, weather permitting. If it were necessary to request a supplemental appropriation after permit issuance, either construction would be delayed for a matter of some months, or would proceed without adequate surveillance and monitoring to insure compliance with stipulations and environmental safeguards.

The other new item is a new special fund appropriation that is proposed, in accordance with the provisions of the Land and Water Conservation Act of 1965 as amended, for recreation development and operation of recreation facilities. This appropriation which will be derived from user fees collected at BLM recreation sites is estimated at $165,000 in 1974. Although the amount is relatively small, these funds will help significantly in maintaining safe and attractive developed recreation facilities for the increasing number of visitors to the national resource lands.

MANAGED RECREATION LANDS

Mrs. HANSEN. What percent of your recreation lands are managed at the current time?

Mr. SILCOCK. I wouldn't have a percent figure on hand, but it certainly is on the small side. For example, we are only able to take care of some of the 214 campgrounds which we have developed.

Mrs. HANSEN. Did I hear you mention a figure last year of something between 10 and 12 percent?

Mr. SILCOCK. I would say that is probably representative.

Mr. TURCOTT. I believe the figure was in reference to the number of visits and individual use of the public lands. We estimate somewhere between 12 and 14 percent is adequately managed through the use of programs and developed sites.

Mrs. HANSEN. And that is all?

Mr. TURCOTT. Yes. ma'am.

Mrs. HANSEN. We will get into the details of this later on. In the meantime, Mr. Yates, do you have any questions on the statement?

DOMINATION OF OIL AND GAS LEASES BY LARGE COMPANIES

Mr. YATES. Yes. Let me ask this question.

The BLM justification proposes an accelerated leasing schedule which combines a larger number of sales with greater acreages for each sale. Won't this encourage domination by the bigger companies? Are the bigger companies the ones who are taking over your oil leases?

Mr. SILCOCK. I don't necessarily think so. I think in the past there have been experiences where some of the smaller companies have gone together on joint ventures, and have bid against the bigger companies. Even in the case of some of the oil company drilling on the north slope you find the bigger companies going together on joint ventures.

Mr. YATES. Isn't there competitive bidding for the leases?

Mr. SILCOCK. Yes; there is.

Mr. YATES. So that the bigger companies, which are wealthier, can usually outbid their smaller competitors?

Mr. SILCOCK. I think past experience in development of the Outer Continental Shelf, and again in Alaska, shows it is a pretty expensive job. It takes a lot of capital, and therefore it is a tough place for a small company to try to break in, because it is just too expensive, and so they do go together, as I indicated the bigger ones do.

Mrs. HANSEN. If the gentleman will yield, how much risk is involved on any one of these explorations for various companies?

Mr. SILCOCK. There is a big risk. First of all, there is the investment for the drilling rigs and these kinds of things, as well as the speculation as to whether there really is oil there or not.

Mrs. HANSEN. In other words, they could drill and find no oil.

Mr. SILCOCK. That is right.

Mr. YATES. Has this happened?

Mr. SILCOCK. Yes.

Mr. YATES. On the Outer Shelf?

Mr. SILCOCK. Yes, there have been dry holes in the Outer Shelf, off Louisiana.

Mr. YATES. Are any of the companies which receive leases for the Outer Continental Shelf, being given leases for other public lands as well?

Mr. SILCOCK. They bid both places. They bid on the uplands as well as the Outer Continental Shelf. I think there are actually about 150

companies on the record now, who hold leases on the Outer Continental Shelf, so there must be quite a few small companies involved in leaseholding one way or another.

Mr. YATES. What I really meant was, are the companies that are receiving leases for the Outer Continental Shelf also receiving leases for coal lands and for oil-shale acreage?

Mr. SILCOCK. They can apply, yes, and they do apply.

Mr. YATES. I just wondered whether your records indicate how many such cases there are. For instance, can a company like Consolidation Coal also have oil interests as well as other energy leases?

Mr. SILCOCK. Yes, they do.

Mr. YATES. They do?

Mr. SILCOCK. Yes.

CONCENTRATIONS OF OIL COMPANY HOLDINGS

Mr. YATES. Has the Department ever considered the question as to whether or not this may evolve into an undue concentration of wealth and power in the hands of only a few companies?

Mr. TURCOTT. Yes, sir; this has been very closely studied of late. It has been done on an interagency basis also, involving OMB with respect to some special staff studies. At this point, study results are privileged as far as I know, but there are such things as different types of bidding that might be proposed, different types of leasing arrangements where, for example, the bonus bidding could be changed substantially.

Mr. YATES. When you talk about OMB studies, what do you mean? What kind of studies has OMB been making?

Mr. TURCOTT. These are some of the kinds of things I know that they are making. They requested them of us, for their assessment, but mostly oriented toward the very problem you are bringing up, because it is a matter of some concern, and it is being watched.

Mr. YATES. What has OMB done about it?

Mr. TURCOTT. Well, sir, they haven't taken any action, as far as I know, such as issue a definitive signal or policy thrust to the Department. The only thing I can say is, I wouldn't be a bit surprised that some of the things may be in the President's energy message, when and if it is promulgated.

Mr. YATES. I would think it would be. I wonder whether the information I have is correct? It is this. According to information supplied by the Department of the Interior in January 1973, 136 companies have at least partial ownership of one or more oil leases on the Outer Continental Shelf. Of the 671 active leases, 10 companies have ownership of 342. The other 126 companies have only 81 of the leases. The remaining 248 leases are held jointly by two or more companies; and according to the information I have, the 10 companies which are in the group are Continental, Atlantic Richfield, Getty, Cities Service, Humble, Shell, Tenneco, Texaco, Union Oil of California, Mobil, and Standard Oil of California. Would this information be correct?

Mr. SILCOCK. Yes, it seems substantially correct.

Mr. YATES. I would hope somebody would take this up with the Attorney General. I would hope that the Attorney General would be interested in pursuing a matter of this kind, to make sure that the

Nation's energy resources do not come into the ownership of relatively few companies, and under the domination of a relatively few companies. Has the Attorney General ever looked at this?

Mr. SILCOCK. A few years ago an investigation was made by Justice to see if there was possible collusion among companies in bidding for offshore leases.

Mr. YATES. Thank you, Madam Chairman.

Mrs. HANSEN. Your Solicitor has, I think, at various times, has he not?

OSC BIDDER QUALIFICATIONS

Mr. TURCOTT. All I can say, ma'am, is that on each sale we have the prerequisites for the qualified applicant, and each bidder is checked closely to insure rigid adherence as to what the law states as to the qualifications of applicants.

Mrs. HANSEN. You must sell in accordance with terms of the law?

Mr. TURCOTT. Right, so far our Solicitor has been much involved. The only challenges, the only real questions on some of the recent sales, have been made under the rules and regulations of equal employment opportunity and that type of thing. There have been a couple of questions on those that had to be cleared up before sale was finalized.

Mr. YATES. Is there no power in the Federal Government to prevent an undue concentration of energy in the hands of a few companies? When you say you must sell, must you sell to the highest bidder automatically?

Mr. TURCOTT. No; not if the highest bidder fails to meet qualification standards.

Mr. YATES. No matter if that person has already a great portion of the leases in a particular area?

Mr. SILCOCK. As long as they meet the requirements of the existing laws, there is no basis for us to turn them down.

Mrs. HANSEN. Would you insert in the record the law or laws under which you sell?

Mr. SILCOCK. The Mineral Leasing Act of 1920 or the OCS Leasing Act?

Mr. YATES. We are not only talking about the Outer Continental Shelf. We are talking about the other public lands as well because you have coal, oil shale, and other valuable minerals on the other lands.

[The information follows:]

Bureau of Land Management
Provisions for Mineral Leasing

Type of Mineral	Method of Disposal	Applicable Legislation and Regulations
Oil and Gas		
Public domain lands	Noncompetitive Leases Competitive Leases Maximum acreage per State: 246,080 acres, including applications, leases and options (exc. Alaska: 300,000 acres in each leasing district, N&S)	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 181,221) 43 CFR 3120, 3210 30 CFR 221
Compensatory Royalty Agreements	Negotiated arrangement	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 226g) 43 CFR 3120.3 30 CFR 221
Oil & Gas Storage Agreements	Negotiated arrangement	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 226j) 43 CFR 3121.6
Acquired Lands	Noncompetitive Leases Competitive Leases Future Interest Lease Noncompetitive Competitive Supplemental Agreement	Acquired Land Mineral Leasing Act of August 7, 1947 (30 USC 351) 43 CFR 3210 30 CFR 221
Lands under Rights-of-Way	Preference right lease Compensatory Royalty Agreement	Act of May 21, 1960 (30 USC 301) 43 CFR 3310
Outer Continental Shelf	Competitive lease only	Outer Continental Shelf Lands Act of Aug. 7, 1953. (43 USC 1337) 30 CFR 250 43 CFR 3380
	Subsurface Storage Compensatory Royalty Sale of Royalty Oil & Gas	Outer Continental Shelf Lands Act of August 7, 1953 (43 USC 1334)
Coal	Prospecting permit Preference Right Lease Competitive Lease Limited License	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 181, 201) 30 CFR 211 43 CFR 3130

Bureau of Land Management
Provisions for Mineral Leasing

Type of Mineral	Method of Disposal	Applicable Legislation and Regulations
Potassium	Prospecting Permit Preference Right Lease Competitive Lease Noncompetitive Lease	Act of Feb. 7, 1927 (30 USC 281-287) 30 CFR 231 43 CFR 3140
Sodium	Prospecting Permit Preference Right Lease Competitive Lease Use Permit	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 261) 43 CFR 3150 30 CFR 231
Phosphate	Prospecting Permit Preference Right Lease Competitive Lease Use of deposits of silica, limestone, etc. Fringe acreage	Mineral Leasing Act of Feb. 25, 1920 as amended (30 USC 211-214) 43 CFR 3160-3 30 CFR 231
Oil Shale, Native Asphalt, Solid & Semisolid Bitumen & Bituminous Rock	Asphalt: Competitive Lease Only Oil Shale: Qualified applicant	Mineral Leasing Act of Feb 25, 1920 as amended (30 USC 241) 43 CFR 3190 30 CFR 231 (30 USC 241) 43 CFR 3170 30 CFR 231
Sulphur La & N. Mexico only	Prospecting Permit Preference Right Lease Competitive Lease	Act of April 17, 1926 (30 USC 271-276) 43 CFR 3180 30 CFR 231
Outer Continental Shelf	Competitive Lease only	Outer Continental Shelf Lands Act of Aug. 7, 1953 (43 USC 1337) 30 CFR 250 43 CFR 3380
Hardrock Minerals-Acquired Lands	Prospecting Permit Preference Right Lease Competitive Lease	43 CFR 3220 30 CFR 231
Gold & Silver in confirmed private land claims	Noncompetitive Lease	Act of June 8, 1926 (30 USC 291-293) 43 CFR 3321 30 CFR 231

Type of Mineral	Method of Disposal	Applicable Legislation and Regulations
Locatable Minerals	Lode claim	General Mining Law of May 10, 1872 as amended (30 USC 29) 43 CFR 3450
	Mill Site	(30 USC 42) 43 CFR 3460
	Placer claim	(30 USC 37) 43 CFR 3470
Mineral Materials	Competitive or negotiated Sales	Materials Sales Act of July 31, 1947 as amended (30 USC 601-604) 43 CFR 3610
Geothermal	Competitive Leases Noncompetitive Leases	Geothermal Steam Act of December 24, 1970

Mrs. HANSEN. Has this act been brought up-to-date since 1920?

Mr. TURCOTT. Yes; the Mineral Leasing Act has been modified several times since 1920.

Mrs. HANSEN. But never with respect to the concentration of corporate power.

Mr. SILCOCK. I don't think the question has come up.

ACREAGE LIMITATIONS

Mr. TURCOTT. There are limitations on acreage to be held by any one individual and/or corporation per State.

Mr. YATES. Does this limitation apply to a consortium, where you have 10 companies gathered together? Are they entitled to only what one person can get, or are they entitled to what 10 people can get?

Mr. TURCOTT. As I understand it, in a consortium or joint venture, the percent of interest held by a particular company in a lease applies to the total acreage limitations. Thus it still applies to an individual of a consortium.

Mr. YATES. Per individual of a consortium.

Mr. TURCOTT. Yes. Sometimes it can be very difficult to evaluate. We had numerous checks on this over the years, and have found very few problems with keeping track, once we completed our initial research.

PRODUCTION REQUIREMENTS

Mr. YATES. Are those who receive your leases required to exploit the minerals in the lands under the terms of the leases within a particular time, or may they just hold the land?

Mr. SILCOCK. In connection with oil and gas drilling?

Mr. YATES. Any of the properties.

Mr. SILCOCK. They have 5 years, for example, on the outer continental shelf under the lease terms.

Mr. YATES. What if they don't drill within 5 years?

Mr. SILCOCK. Then the lease terminates.

Mr. YATES. Is this true with respect to coal on the mainland?

Mr. SILCOCK. No; it isn't.

Mr. YATES. They can just hold those leases indefinitely.

Mr. SILCOCK. They are 20-year leases.

Mr. YATES. They can hold the lease for 20 years and not do anything about using them?

Mr. SILCOCK. That is right. On the uplands oil and gas it is a 10-year primary term lease. They have to drill within 10 years.

Mr. YATES. They have to drill within 10 years?

Mr. SILCOCK. Yes. Then if they get production the same principle applies as on the Outer Continental Shelf in that it then goes into a production status, and continues so long as production is maintained.

Mrs. HANSEN. Dr. Long.

Mr. LONG. Nothing.

Mrs. HANSEN. Mr. Evans.

DEFINITION OF CADASTRAL SURVEY

Mr. EVANS. I have a couple of questions, Madam Chairman.

On page 2 of your statement, I don't know what the word "cadastral survey" means.

Mr. SILCOCK. It involves, placing a rectangular land grid over the public lands by surveys so you can identify land. It divides the land base up into townships, sections, and so on. It is a method of land identification which has gone on for many years and is used as a means of land description so you can locate it, manage it, and patent it. It is similar to a survey in a city which divides property into lots and blocks only this is done on a broader scale with 36 square mile townships and 1 square mile sections in each regular township.

WATER RETENTION STRUCTURE INSPECTIONS

Mr. EVANS. The first paragraph, page 2, the last sentence you say:

These include water retention structures in accordance with congressional concern and Public Law 92-367 establishing the national dam inspection program.

How many men do you have in that inspection program budget for 1974?

Mr. SILCOCK. There was some temporary help budgeted in our increase request but no permanent manpower. We do have a permanent staff on board in our soil and watershed program and this duty would be carried on in addition to their regular duties of reviewing our projects in the field for maintenance, and so on. There are about 70 permanent people who are engaged in all watershed maintenance functions more or less full time.

Mr. EVANS. How many dam sites do they have to inspect, do you have any idea?

Mr. SILCOCK. We have about 21,000 water structures that have been constructed over time, which goes way back. They are in various states of repair and condition, and we are in the process of evaluating those.

Mr. EVANS. These 70 people are the ones who are going to be making these inspections under that law?

Mr. SILCOCK. Yes.

Mr. EVANS. In addition to other duties as well?

Mr. SILCOCK. That is right.

Mr. EVANS. How many dams have they inspected so far?

Mr. SILCOCK. In fiscal year 1973 they have inspected about 3,000 of the structures, to date.

Mr. EVANS. In regard to each one of which they submitted or filed a report?

Mr. SILCOCK. That is right, as to whether it needs maintenance, estimated cost, and so on.

TRANS-ALASKA PIPELINE

Mr. EVANS. You are asking for an increase of $7.4 million in regard to implementing the Alaska pipeline. This is, of course, held up by suits that have been filed. If the money is provided and the suits are not settled within the next fiscal year, what would happen to that $7.4 million? Would it revert to the Treasury?

Mr. SILCOCK. It will revert to the Treasury because the fiscal year will have expired. These are annual funds which, if not obligated, are no longer available to the Bureau.

Mrs. HANSEN. It is not no-year money.

Mr. EVANS. I have another question which would go beyond my 5 minutes but which I would like to submit for answers later on.

Mrs. HANSEN. Yes. Mr. McDade.

Mr. MCDADE. Thank you, Julia.

FISCAL YEAR 1973 OCS RECEIPTS

Mr. Director, I want to compliment you on a most informative statement. I have just a few questions.

You have indicated on page 1 that the receipts for fiscal year 1973 are estimated to be about $4 billion. On a percentage basis, how much of that results from bonus sales in the Outer Continental Shelf? About how much of it is that?

Mr. HASTEY. About $4.2 billion is from the Outer Continental Shelf, and about $200 million from the upland sources.

Mr. MCDADE. From all other sources it is about $200 million?

Mr. HASTEY. Yes, sir.

Mr. MCDADE. When were your last sales in the gulf, how long ago did they take place?

Mr. SILCOCK. December of 1972 was the last sale.

Mr. MCDADE. And how many tracts did you put out for bid in December?

Mr. SILCOCK. I think it was 132.

Mr. MCDADE. I am interested in knowing what the price ranges were. Were they all equivalent sizes, first of all? Were the tracts pretty much the same?

Mr. SILCOCK. Yes.

Mr. MCDADE. How big were they?

Mr. SILCOCK. They were pretty uniform in size. The regular leasing bloc was roughly 5,000 acres.

Mr. MCDADE. 5,000 acres per tract?

Mr. SILCOCK. Per tract.

Mr. MCDADE. What was the lowest successful bid for one of those tracts?

Mr. SILCOCK. We could furnish that for the record. We have a summary of the whole sale that shows the spread.

Mrs. HANSEN. Insert the summary in the record, please.

Mr. SILCOCK. We can do that.

[The information follows:]

DECEMBER 1972 OCS LEASE SALE

The following material relates to the December 1972 OCS lease sale:

132 tracts were available;
119 tracts were bid on; and
116 tracts were leased.

The prices ranged from a low of $27 per acre to a high of $21,630 per acre. The lowest price for a tract was $135,000 and the highest was $108,150,000.

For the tract which sold for $21,630 per acre and a total of $108,150,000, the next highest bid was $14,225 per acre and a total of $71,126,000. The high bid was received from a combination of seven companies (Transocean Oil 16 percent, Ashland Oil 22 percent, Hamilton Bros. Oil 10 percent, Highland Resources, Inc. 5 percent, Hunt Oil 19 percent, Kewanee Oil 8 percent, and Placid Oil 20 percent). The second high bid was received from a combination of five companies (Phillips Petroleum 20 percent, Skelly Oil 20 percent, Texas-Gulf 20 percent, Allied Chemical 20 percent, and American Petrofina Exploration Co. 20 percent).

A statistical summary of the sale is attached.

OUTER CONTINENTAL SHELF

Oil and Gas Lease Sale

December 19, 1972

New Orleans, Louisiana

STATISTICAL SUMMARY

Table 1
OPEN TO BIDDING

Location	No. of Tracts	Acreage
Louisiana	132	604,029.26

Table 2
HIGH BIDS RECEIVED (BEFORE REJECTIONS)

Location	No. of Tracts Bid On	Acreage	Amount
Louisiana	119	548,374.16	$1,673,054,912.06

Table 3
AVERAGE PRICE PER ACRE ON HIGH BIDS

Location	Amount
Louisiana	$3,050.94

Table 4
REJECTED BIDS

Location	Tract	Bidder	Acreage	Per Acre Bid	High Bid
Louisiana	2325	Continental/Cities Service	2,500	$644.63	$1,611,581.00
	2380	Continental/Atlantic Richfield/Getty/Cities Service	5,000	421.87	2,109,350.00
	2388	Continental/Atlantic Richfield/Getty/Cities Service	5,000	762.87	3,814,350.00

[illegible]	Number	Acreage	Total
[illegible]	116	535,874.16	$1,665,519,631.06

Table 6
AVERAGE PER ACRE BID ON ACCEPTED BIDS

Location	Amount
Louisiana	$3,108.04

Table 7
TOTAL AMOUNT OF MONEY EXPOSED

Location	Total Amount
Louisiana	$6,191,018,226.94

Table 8
TRACT RECEIVING HIGHEST NUMBER OF BIDS

Location	Tract No.	No. of Bids Received	Total Amount
Louisiana	2416	14	$325,736,839.87
	2476	14	139,219,227.99

Table 9
THREE HIGHEST SUCCESSFUL PER ACRE BIDS

Location	Tract No.	Bidder	Acreage	Per Acre Bid
Louisiana	2426	TransOcean Oil/Ashland/ Hamilton Brothers Oil/ Highland/Hunt/Placid	3,237.16	$21,630.00
	2427	TransOcean Oil/Highland/ Hunt/Placid/Ashland/ Hamilton Brothers Oil/ Kewanee	5,000	21,630.00
	2435	Pennzoil La. & Tex. Off./ Pennzoil Off. Gas Oper./ Burmah Oil Dev./Mesa Petr./ Mobil	5,000	12,296.40

Table 10
FIVE HIGHEST SUCCESSFUL BIDS

Location	Tract No.	Bidder	Acreage	Amount High Bid
Louisiana	2427	TransOcean Oil/Highland/ Hunt/Placid/Ashland/ Hamilton Brothers Oil/ Kewanee	5,000	$108,150,000.00
	2426	TransOcean Oil/Ashland/ Hamilton Brothers Oil/ Highland/Hunt/Placid	3,237.16	70,019,770.80
	2435	Pennzoil La. & Tex. Off./ Pennzoil Off. Gas Oper./ Burmah Oil Dev./Mesa Petr./ Mobil	5,000	61,482,000.00
	2440	Marathon/La. Land Off. Expl./ Texas Eastern Expl.	5,000	49,010,000.00
	2392	Shell/Transcontinental Prod.	5,000	43,338,000.00

Table 11
DISTRIBUTION OF RECEIPTS

Fund Symbol	Total Bids Accepted	Total Amount by Fund Symbol
141820	116	$1,665,519,631.06

Table 12
PROJECTED RENTALS

Location	Acreage	Rental Rate	First Year Rental
141820	535,887	$3.00 p/a	$1,607,661.00

Mr. McDade. What is your best recollection, a ballpark figure on the lowest. Can you recollect at all for my information?

Mr. Vetterick. I think it is about $3,000 an acre.

Mr. McDade. About $3,000 per acre?

Mr. Vetterick. About $3,000 per acre is an average successful bid.

Mr. McDade. The lowest?

Mr. Vetterick. I think the low might run about $30 an acre.

Mr. McDade. What was the top dollar?

Mr. Vetterick. It was around $21,000 an acre.

Mr. McDade. For the top?

Mr. Turcott. Yes.

Mr. Silcock. We have this summary in a sheet that I think would be best to submit.

Mr. McDade. And I want you to do that for the record. I am just trying to get some information now. Did your December sale of 132 tracts average out to about $4 billion in bonus income to the Treasury?

Mr. Silcock. $1.666 billion.

Mr. McDade. $1.6 billion?

Mr. Silcock. That is right, that is what was collected in bonuses from that one sale.

Mr. McDade. And there were how many other sales in fiscal year 1973?

Mr. Hastey. We had a sale in September; $586 million in bonuses were paid for that sale, and then we had a release of funds from escrow, which amounted to about $1.1 billion.

Mr. McDade. From previous fiscal years?

Mr. Hastey. There are funds from previous years which were placed in escrow pending settlement of a dispute over jurisdictional boundaries with Louisiana. We have an estimate of about $300 million for royalties or payments for ongoing production. There are estimates of about $500 million for the upcoming May or June sale.

Mr. McDade. So about $500 million of your $4 billion figure is an estimate.

Mr. Hastey. Yes, sir.

Mr. McDade. Some of it is royalties?

Mr. Hastey. $300 million in royalties is pretty firm but the $500 million May sale is the only real unknown that is left in 1973. The other two sales are actual, as is the escrow amount.

Mr. McDade. What was the closest dollar figure between a successful and unsuccessful bidder? I am sure you can't remember that. Would you supply it for the record.

Mr. Silcock. Yes, sir, that has been supplied with our other bid data.

Mr. McDade. Would you identify the close bidders by designation? I would like to know who the effective owner was if you can sort that out. In other words, if you had a company bidding that was either a part of a combine or was a subsidiary, I would like to know who the parent is, if you can do that, on those close dollar sales.

Mr. Turcott. Yes; we have that.

Mr. McDade. Can you furnish that without any difficulty?

OCS BID ANALYSIS

Mr. Turcott. I think so, sir. We should also give a general laymen's description of our evaluation process which determines whether the

Secretary will issue a lease or not from the bids. It is not just the high dollar. There is a very sophisticated evaluation process.

Mr. McDade. Could you summarize that for me verbally and then furnish it for the record?

Mr. Turcott. I would be willing to try it.

Mr. McDade. What sort of other factors do you consider besides that dollar figure?

Mr. Turcott. The projected value of the tract by the petroleum geologists is one of the main factors. How much competition has been evident through the numbers of different bids on the lease is another one. Other considerations include how successful and how close is the apparent high bidder for any particular lease, especially if he is down in the projected low range bid value and how close has he been on other bids in the current or previous sales. A linear regression analysis is what we use to evaluate, to get some handle on whether the Secretary should lease at his discretion or not.

Mr. McDade. These are all looking toward the responsiveness of the bids; aren't they?

Mr. Turcott. Right.

Mr. McDade. In terms of whether or not they will perform, even assuming successful bid; is that right?

Mr. Turcott. Yes, sir; these are qualification considerations.

OCS BIDS AND PERFORMANCE BONDS

Mr. McDade. Are the companies required to furnish any kind of bond in connection with their bids?

Mr. Turcott. A bid bond; yes, sir.

Mr. McDade. That essentially provides what? What does the bid bond require the company to do?

Mr. Turcott. It is only required that 20 percent of their bid be submitted at the time of the sale. It is the bid bond that insures that if they are the successful bidder they will perform and pay the 80 percent balance, and the first year's rental.

Mr. McDade. And do you hold this for the entire 5-year period of the lease?

Mr. Silcock. No. They have within 30 days to submit the remaining bonus and first year's rental.

Mr. McDade. If they begin operations is that returned to them? Are they released from the bond?

Mr. Silcock. That is a different bond.

Mrs. Hansen. Don't you have a performance bond?

Mr. Silcock. Under actual operations; yes.

Mrs. Hansen. And so if you get into a pollution problem, you have a handle on them.

Mr. Silcock. Yes, that is a nationwide bond which we have, versus the bid bond, which is just on that particular sale tract. That is so they will be responsive to that sale.

Mr. Hastey. The initial 20-percent payment is immediately put in the Treasury. That belongs to the Government. Then they have 30 days to provide the additional 80 percent of their bonus bid. So once that is turned over to the Government, it too goes into the Treasury.

Mrs. Hansen. What you require is a 20-percent down payment.

Mr. HASTEY. That is what it amounts to.

Mrs. HANSEN. In addition to a performance bond, are there any other kinds of bonds that are required?

Mr. SILCOCK. The performance bond would only come into effect if they were actually granted a lease. To my knowledge that is the only other kind of bond we have in connection with OCS leases.

AVAILABLE OCS RESERVES IN GULF OF MEXICO

Mrs. HANSEN. Is there any way you can tell me now where we stand in terms of utilization of the resource that we call the Outer Continental Shelf in the gulf. Have we used very much of it, in terms of leasing and exploration? Is there a great deal of it that is still available?

Mr. SILCOCK. We are approaching full utilization of known reserves under the 200 meter depth, in the Gulf of Mexico.

Mrs. HANSEN. Which is the effective limit of the Outer Continental Shelf?

Mr. SILCOCK. I guess that is the international question, where the ownership lies, but beyond 200 meters there is still potential, and they feel that there is oil out there.

Mrs. HANSEN. But within the recognized, defined area of the Outer Continental Shelf in the gulf, you are close to 100-percent utilization?

Mr. TURCOTT. Yes; we are. We feel by around 1980, or sooner, all of the known leasable acreage for potential oil and gas in the Gulf of Mexico will be leased within 200 meters.

Mrs. HANSEN. How many more sales based on the equivalent tracts are possible? You can furnish that for the record.

[The information follows:]

REMAINING OCS SALES IN GULF

The gulf coast OCS includes 86,400,000 acres within the 200 meters isobath; 6,820,892 acres have been leased, leaving 79,579,108 acres available for lease. Of this acreage, only about 5.4 million acres will remain after fiscal year 1975 which have been given a high potential known geologic structure rating by the USGS This 5.4 million acres would equate to six to seven sales.

ATLANTIC OCS

Mrs. HANSEN. Essentially you are telling me that you have pretty well utilized that area. There is a lot of conversation, a lot of concern on the eastern seaboard about potential there. What is the current assessment of your plans for the OCS on the east coast?

Mr. SILCOCK. At the present time we have made a cursory review of the information that is on file in the various agencies and libraries. We have contacted the State fish and games agencies, the Governors of the States, and so on, and have compiled a very sketchy report. Now we are asking for funds this year to go into greater depth, in analyzing the area from the standpoint of resource development and the impacts that it would have to environment.

Mrs. HANSEN. You have not gotten your analysis to the point where you single out specific areas, have you?

Mr. SILCOCK. There is knowledge about some areas, like the Baltimore Canyon in the mid-Atlantic area. They are indications of oil and gas there.

NATURE OF OCS STUDIES

Mr. MCDADE. The only funds that you have in this budget related to any of those sites, relate to studying the environmental consequences when and if you did go to the public sale there.

Mr. SILCOCK. Yes.

Mr. TURCOTT. And the social and economic impacts also.

Mr. MCDADE. The social?

Mr. TURCOTT. And economic; yes, sir.

Mr. MCDADE. What do you mean, "social"?

Mr. TURCOTT. The needs of the particular regions along the mid-Atlantic for the oil, or other regions.

Mr. MCDADE. The needs for the oil?

Mr. TURCOTT. Yes; and the impact on local regions from both a social and economic standpoint. We do that now for the gulf. Every sale has that type of analysis in it.

Mrs. HANSEN. An environmental impact statement?

Mr. TURCOTT. Plus an environmental impact statement; Yes, ma'am. We go through quite an analysis, to determine what the demand is, what the need is for the oil. We do this by petroleum administration defense districts, known as PAD's.

[Discussion off the record.[

OIL EXPORTS AND AGENCY CONTROLS

Mrs. HANSEN. How much of your oil is exported from the lessee sales?

Mr. SILCOCK. It is negligible. It is very little.

Mrs. HANSEN. What do you mean by negligible?

Mr. SILCOCK. Next to nothing. Oil and gas consumption in the United States exceeds our domestic production. We are importing fuel, not exporting it.

Mrs. HANSEN. It is all domestic consumption?

Mr. SILCOCK. That is right.

Mr. MCDADE. And after your counter records another barrel of oil having been produced and it is put into the pipeline, have you any control over it at all after that?

Mr. SILCOCK. It becomes the purchasers' oil.

Mr. MCDADE. After it is recorded?

Mr. SILCOCK. That is right. After it has gone through the meter from which the Government's royalty is determined, the oil is under owner responsibility.

Mr. MCDADE. Then it is totally out of your hands. Then it is their oil?

Mrs. HANSEN. The same as timber.

Mr. TURCOTT. As far as the Bureau of Land Management is concerned. There may be other Federal agencies with controls on it.

Mr. MCDADE. Are there that you know?

Mr. SILCOCK. Not that I know of.

Mr. TURCOTT. Pipeline safety and that kind of thing is under the Department of Transportation.

Mr. MCDADE. OEP is supposed to have a lead role in trying to see there is an evenhanded flow of oil and gas supplies across the country.

OCS EVALUATIONS

Mr. TURCOTT. May I make a suggestion, Madam Chairman? We have written up, as I indicated, the entire evaluation process. In general language the whole process beginning prior to the tract selection on the OCS through the end of the process is available.

Mrs. HANSEN. You have been reviewing it for the committee?

Mr. TURCOTT. I have been reviewing parts of it but we can furnish the entire process for the record if you wish.

[The information follows:]

Description of OCS Leasing System

Under Section 8 of the Outer Continental Shelf Lands Act of August 7, 1953, (67 Stat. 462: 43 USC Secs. 1331-1343), the Secretary of the Interior is authorized to issue mineral leases on the OCS. The Act requires that oil and gas leases may be issued only on a competitive bidding basis as follows:

(1) Sealed bids on the basis of highest cash bonus with fixed royalty; or

(2) Sealed bids on the basis of highest royalty with a fixed cash bonus.

The Bureau of Land Management (BLM) is charged with the Departmental responsibility to implement the leasing objectives of the Outer Continental Shelf Lands Act, subject to certain limitations, e.g., Secretary has to approve call for nominations. The BLM performs its leasing functions within the purview of its three leasing and management goals of (1) orderly and timely resource development, (2) protection of the environment, and (3) receipt of fair market value. The Geological Survey (GS) is the agency within the Department responsible, after leases are issued, for supervising and regulating exploration, development and production activities on the leaseholds. The GS is also authorized to grant pre-leasing exploration permits on the OCS under Section 11 of the OCS Lands Act.

The Department's leasing function on the OCS consists of seven major procedural components:

1. Tentative Schedule
2. Calls for Nominations
3. Tract Selections
4. Environmental Analyses
5. Pre-Sale Evaluations
6. Sale
7. Post-Sale Analyses

A brief description of these components follows:

Tentative Schedule - This is the development and updating of the Department's tentative OCS leasing schedule. In this stage, general sale areas are identified. Departmental policy has been to offer two general sales a year, each containing between 300,000 to 600,000 acres. Limited historical evidence has shown that this combination of size and timing of sales maximizes the attainment of two of the Department's leasing objectives, that of orderly resource development and the receipt of fair market value. Tentative acreage figures for each sale are developed and the contribution of the leasing program to the Nation's supply of oil and gas is analyzed. The schedule is designed to provide for orderly development of OCS resources while ensuring that the OCS makes its optimum contribution to meeting our Nation's long-term energy needs. Advance notice of tentative leasing actions,

gives Government, industry, and the public adequate lead time to evaluate the efficacy of the proposed actions.

The schedule is flexible, and subject to regular revisions and modification as the level of knowledge expands.

Call for Nominations - Calls for nominations from the oil and gas industry of specific leasing tracts are issued by BLM with the approval of the Secretary. The calls are published in the Federal Register. A decision to issue a call for nominations is part of a plan to promote the orderly development of marine resources on the OCS, to assure that the OCS plays an important part in helping the Nation meet its long-term energy needs, and to maximize total benefits from offshore resources through multiple-use management. Calls are issued for large contiguous areas usually embracing several million acres offshore a single state. Industry is normally allowed a period of 60-90 days to submit tract nominations.

Tract Selections - After nominations have been received, specific tracts are selected for possible lease offering. This is a joint responsibility of the BLM and GS. In the tract selection process, the Department gathers and reviews more detailed geophysical, geological, engineering and economic resource information and nominations on areas proposed for sale. The BLM responsibility involves an evaluation of: the number of weighted and non-weighted nominations per tract; the need to initiate leasing in wildcat areas in terms of industry development capability, competition, and timely future availability of resources to consumers; tract leasing history; nominations patterns; consideration of a mix of tracts by water depth, distance from shore; and identification of tracts deleted from prior sales for environmental impact reasons or for which special environmental stipulations have been developed. The GS responsibility involves a technical evaluation to ensure proper consideration of development of geologic structures and trends, and identification of tracts in imminent danger of drainage and tracts which are most prospective for production and tracts demonstrating a need for or susceptibility for prompt drilling and development. Based on these agency analyses a joint BLM-GS field office review is made to prepare final recommendations of tracts. The Washington offices of BLM and GS, after review of the joint field reports, makes the final tract selection for the sale within existing policy guidelines. Currently, the sale size in acreage is generally within policy established parameters of 300,000 to 600,000 acres per sale.

Environmental Analyses - This component involves the preparation of environmental impact statements under Section 102 of the National Environmental Policy Act of 1969. A Draft Environmental Impact Statement (EIS) is first prepared, a public hearing is held and a final EIS is prepared for each OCS General oil and gas lease sale. Environmental statements (draft and final) are also prepared for all OCS oil and gas drainage sales. Consultation and coordination with the interested federal agencies is routinely undertaken in preparation of EIS concerning proposed OCS lease sales.

The EIS contains the following discussions:

1. Description of the proposed action.
2. Description of the environment.
3. Environmental impact of proposed action
4. Mitigating measures included in the proposed action.
5. Any unavoidable adverse environmental effects.
6. The relation between local short-term use and maintenance and enhancement of long-term productivity.
7. Any irreversible or irretrievable commitment of resources.
8. Alternatives to the proposed action (including alternate sources or resources).
9. Coordination and consultation with others.

The draft EIS is made available to the public and is sent out to be commented on by Federal agencies with jurisdiction or expertise; by State and local agencies authorized to develop or enforce environmental standards; and by anyone else requesting a copy (at cost of reproduction). Thirty days after the draft has been made available, a public hearing is held. Anyone who wishes may comment on the proposed action at the hearing.

The Final EIS is then prepared after comments on the draft (solicited and unsolicited) and testimony from the hearing are analyzed. The final EIS is then submitted to the Council on Environmental Quality (CEQ) with the incorporation of any new relevant information, unresolved issues, or attitudes toward the proposed action.

Pre-Sale Evaluations - Prior to a lease sale, the GS calculates presale values of the OCS tracts offered for lease with BLM performing an audit and review function. GS provides the geologic, geophysical and engineering inputs which are obtained through in-house analysis of industry data submitted to the Government and through the purchase of seismic information. BLM provides certain economic inputs which are obtained through review of industry publications, adherence to Departmental guidelines and by independent research. Such inputs include estimates of capital and operating expenses, discount rates and procedures to follow in calculating taxes.

An evaluation agreement between BLM and GS has been formalized which establishes the responsibilities of each organization in the evaluation process. Under this agreement the Geological Survey field office furnishes to the BLM Washington Office, at least three weeks prior to the sale, detailed reliability categories for each tract indicating the adequacy of available technical data. At the same time they also indicate other factors that will be used in the resource evaluation. Prior to the sale, the GS field office gathers data on all the tracts in the sale and then places one or more potential value estimates, normally calculated using a discounted cash flow, on each tract.

At least one week prior to the sale, the GS field office provides the BLM evaluation review team with the tract values that have been cal-

culated. The review team receives the reserve estimates and all pertinent data used in the evaluation process. On the day before the sale, the review team submits to the responsible GS and BLM officials a report indicating the team's findings with respect to its review of the GS pre-sale evaluation. This report examines the consistency of application of the evaluation procedures and discusses any area of possible concern regarding selected evaluation inputs such as price, discount factors, taxation methods, etc.

Ninety days after a sale, BLM reviews and analyzes the manner in which the pre-sale evaluation procedures were implemented. This review and analysis identify areas where research is needed and suggests changes in the pre-sale evaluation process for use in succeeding lease sales. As the necessity arises over time, the Department conducts further reviews and analyses looking toward improved OCS sales' operations and procedures. These reviews set the stages for improvement in procedures at future sales.

Sale - Sales are conducted by the Manager of the BLM's appropriate leasing office pursuant to the detailed procedures that are issued by him prior to each sale. Following all opening of sealed bids, they are checked for technical and legal adequacy; qualifications of bidders, sufficient advance bonus (20% at time of bidding) powers of attorney, compliance certificates, bonds, etc.

Post Sale Analyses - Following a sale the BLM conducts a procedural review of the high bids to assist the Manager in his determination of whether particular leases should issue. The analytical system is divided into three major components: (1) factors influencing the Government's receipt of fair market value; (2) factors influencing environmental protection; and (3) factors influencing orderly and timely resource development. All of the factors which are analyzed in conjunction with the results of the sale, aid the OCS Manager in determining whether leases shall be issued.

The primary emphasis in the post-sale analysis is on the receipt of fair market value. The factors analyzed in the fair market value portion of the analysis system are: the GS reliability category; the high bid as a percent of risked and risk-free values; the correlation coefficient of the high bid to the risked and risk-free values; a statistically determined low value based on pre-sale evaluations. Factors included in the analysis of sale competition are: the number of bids which equals one standard deviation below the average number of bids for the sale; the correlation coefficient between the high bid and the number of bids; a statistically determined low value based on the number of bids received. The competitive bidding performance of high bidders ranked by quartiles;

average number of bids on all tracts on which high bidders bid. Also a comparison of high bids in the area is considered, i.e., recent and current per acre bids on adjoining and nearby tracts are analyzed to determine general values.

Orderly and timely development of the mineral resources of the OCS require the analysis of each sale so that the following information be provided the Manager to aid in the determination of whether particular leases should issue: 1) Tract reserves, including both an estimate of total reserves and an estimate of the reduction in value due to drainage; 2) leasing history of the tract, i.e., information concerning the number of times a tract has been nominated and offered, including bids submitted and rejected; 3) status of production in the area. It is possible that some tracts are being drained or could be drained by production from adjoining tracts producing from the same structure. This requires an analysis of the effect of not leasing a tract on the initial or ultimate development of the structure.

As mentioned earlier, protection of the environment is more heavily weighted in the earlier phases of an OCS leasing action. In the post-sale evaluation or actually post-bid opening evaluation, new or additional environmental information is considered, along with information developed in the environmental impact statement, i.e., tracts with stipulations, environmental matrix analysis results.

A matrix analysis system for assigning relative weights to all of the above factors is being designed.

Following the foregoing review, decisions to accept or reject high bids that were submitted at the sale are made by the BLM OCS field office Manager. All decisions rejecting bids are subject to appeal to the Department's Board of Land Appeals. The decision of the Board constitutes the final administrative determination of the Government.

Policy decisions made in connection with recent decisions have resulted in substantially all information that the OCS Manager has before him when he rendered his decision being made available to the Board when it considers appeals.

Note: In the normal course of events the procedural steps relating to a specific sale (starting with a call for nominations) usually consumes a period of approximately 12 months.

Mrs. HANSEN. Do you not receive your first evaluation from the Geological Survey?

Mr. TURCOTT. Yes. One of the first assessments from a technical, engineering, and geologic standpoint we get is from the USGS.

[Discussion off the record.]

Mrs. HANSEN. If the State of New York, for example, is faced with demands for energy, you include the impact of this in terms of your decision to hold a lease sale?

Mr. TURCOTT. That is correct.

Mrs. HANSEN. I liken it to the sale of timber, where you have *x* number of people dependent upon this resource. You do the same kind of a social impact study regarding the sale of oil as you would in any other category of resources, where an entire base of the economy and life is developed from this area; is this correct?

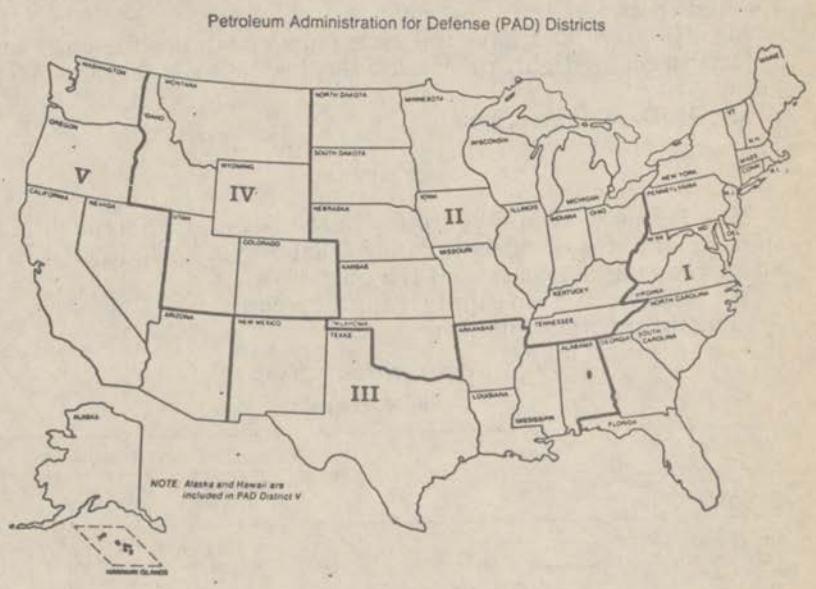
Mr. TURCOTT. That is correct. Analysis is geared to these regional PAD's, where shortages are recorded as well as productive capacity and the like.

Mrs. HANSEN. Do you want to insert in the record the petroleum districts in the United States? Some members of the committee are familiar with the districts and some aren't.

[The information follows:]

Five Petroleum Districts

The following map depicts the five petroleum districts:



Mr. LONG. Will the chairman yield?

Mr. MCDADE. I have just one more question.

Am I correct in stating also that you are not about to engage in any eminent sales on any other coastal areas of the country, except for the gulf?

Mr. SILCOCK. That is correct, but we are studying and will study the east coast.

Mr. MCDADE. You have the same ongoing studies for other areas?

Mr. SILCOCK. Right, in Alaska, the Pacific coast and the Atlantic coast.

Mr. MCDADE. Thank you.

OCS ACREAGES

Mrs. HANSEN. Would you place in the record at this time the total number of acres of offshore land? That would include all the west coast, the Alaskan coast, and the gulf coast.

Mr. SILCOCK. We can supply it for the record.

[The information follows:]

FEDERAL OFFSHORE ACREAGES

[In OCS acreages]

Area	Acres (in thousands)		
	Depths under 200 meters	Depths over 200 meters	Total
Atlantic coast	89,600	537,600	627,200
Gulf coast	86,400	16,000	102,400
Pacific coast	16,000	30,080	46,080
Alaska	352,000	48,000	400,000
Total	544,000	631,680	1,175,680
Less State jurisdiction	−29,000		−29,000
Total Federal	515,000	631,680	1,146,680

STUDIES ON THE ATLANTIC OCS

Mr. LONG. I have a number of questions I would like to ask about this, because the proposed drilling of the oil on the Continential Shelf off the coasts of New Jersey, Delaware and Maryland, the so-called Baltimore Canyon is, of course, of great interest to us. Are you making the same type of social and economic study, when you talk about exploring the possibility of developing these oil areas, that you made for Louisiana and for the gulf area?

Mr. SILCOCK. Yes, sir.

Mr. LONG. No different?

Mr. SILCOCK. To my knowledge it wouldn't be any different. It might be in a little greater depth, because this is a frontier area, where we are plowing some new grounds.

Mr. LONG. When did you first start to drill for oil off the coast of Louisiana, Mississippi, and the gulf?

Mr. SILCOCK. I think it was probably 18 or so years ago.

Mr. LONG. There are a lot of oil wells there, is that correct?

Mr. SILCOCK. Yes, sir; there are.

Mr. LONG. You realize, of course, that we have tremendous beaches all up and down the eastern seaboard.

Mr. SILCOCK. Yes, sir; we are familiar with that.

Mr. LONG. Which constitute enormously valuable real estate. In your social and economic studies, are you planning to take any account of the threat to those?

Mr. SILCOCK. Yes, we would, as well as your marshlands, your wetlands. There would be base line studies conducted on all of those resources and the impact that would accrue from oil and gas operations.

Mr. LONG. Did you make all those studies in the case of the gulf area?

Mr. SILCOCK. Not originally, but we have moved into that in great detail since the passage of the National Environmental Policy Act.

Mr. LONG. You see, I asked you whether you were making the same studies now that you made when you first developed the oil in the gulf area and you said yes. Now apparently you are shifting your ground.

Mr. SILCOCK. No, to clarify what I said was that we would be making similar type studies on the Atlantic coast that we are making now on the Gulf. Those studies that we are making now were not made initially when we first started leasing in the Gulf of Mexico.

Mr. LONG. That is what my question was.

Mr. SILCOCK. I think the first drilling was begun in 1955. That of course was quite sometime ago.

Mr. LONG. Are the studies you are making now in the gulf area causing you to modify this at all?

Mr. SILCOCK. Yes.

DAMAGES

Mr. LONG. I gather damage has already been done since you claim it is mostly exploited. What good does it do to examine now?

Mr. SILCOCK. We don't consider there has been any real damage done. There have been some spills, some pipeline breaks and these kinds of things, but there hasn't been a great amount of damage.

Mr. LONG. Aren't you taking the oil company point of view on this—not to worry?

Mr. SILCOCK. No.

Mrs. HANSEN. How many people in the Gulf States have asked for a cessation of all leasing?

Mr. TURCOTT. Very few.

DELETION OF HIGH RISK TRACTS

Mr. SILCOCK. I would like to further point out that in our analysis we have held out some tracts, where we thought there was a real risk. In this last sale we held out some tracts.

Mr. LONG. One minute, we are told there aren't any great risks, and the next minute you tell us you have held out tracts.

Mrs. HANSEN. Let's get this straight. Isn't it true that up until about 6 years ago our own Geological Survey didn't know as much as those people who were leasing our lands?

Mr. SILCOCK. That is right.

Mrs. HANSEN. And that since that time, with the additional money that this committee has provided, the Geological Survey has been able to provide this kind of necessary geological information prior to offering tracts for leasing? Now, these dangerous tracts have been withheld; is this not correct?

Mr. SILCOCK. This is true.

Mr. LONG. Isn't "geological" the wrong word for this? I would think the term "geological" would be a narrow, technical, engineering question—how much oil is there and all that kind of thing.

Mrs. HANSEN. No.

Mr. LONG. We are dealing with much broader questions, I would hope, than geological questions.

Mrs. HANSEN. Dr. Long, the Geological Survey would be the first people to have knowledge as to where drilling might be done, where certain undesirable events might happen, like the gushers, the spills, the Santa Barbara kind of incident, which would have adverse impact on the environment.

Mr. TURCOTT. Sir, we can furnish you, or for the committee's files, or for the record, those portions of the December sale environmental impact statement which highlight the rationale and the reasons in a rather complex matrix wherein we made the determinations, tract by tract, as to which ones should be leased and which ones shouldn't. It very clearly shows those where, as far as the environmental impact was concerned, there was a high hazard.

There are no decisions made in an environmental statement. The Secretary makes those; but in his analysis of the environmental impact statement, he directed the Bureau of Land Management not to lease certain tracts.

Those high-risk tracts will show up in these statements. You can see the reasons, both geologic and environmental, for deleting them. One of the most important parts of it are the tides. If there is a spill, or a flareup, or a break, what are the tides going to do to it? That is one of the keys as far as the impact on beaches and the wildlife refuges are concerned.

Mr. LONG. I would think the unsightliness of having these platforms stretching to the horizon might be taken into consideration. I would hope these environmental impact studies are not of the sort that we have just received from the Army Corps of Engineers where they make what is purported to be a scientific study, but is obviously loaded so that the Secretary of the Army can come in with his decision on the basis of what is supposed to be a scientific study but is not. Where the words of all the experts would favor the proposal are used, objections are dismissed with a word or a sentence—certainly with no real examination or analysis. It is a high-class brushoff. I hope you are not doing that kind of thing. I hope these are real analytical studies, and not set up so that somebody can smack them down.

OCS ENVIRONMENTAL IMPACT STUDIES

Mr. TURCOTT. Sir, I cannot speak for the Corps of Engineers, of course. I will say that the environmental impact study under which we were taken to court—and we were told to go back, by the circuit court of appeals, and do a better job—taught this Bureau and the Department many lessons. I feel at this point in time that the environ-

mental impact statements that we do on the Outer Continental Shelf for lease sales are of the highest quality done in the U.S. Government. They are quite voluminous.

When I say I am going to furnish parts to you, that is why. It is too much for the whole record. As I said before, we have learned that too much justification, or any orientation toward justification itself in the environmental impact statement is self-defeating. Obtuse language, or an indication that you are making decisions and justifying, is not going to clear the courts. Justifications are done in separate documents.

We hope they are not a brushoff and that they meet the requirements of NEPA.

[The information follows:]

TRACT SELECTION PROCESS

The following is an explanation of our tract selection process.

Having determined through development of the tentative 5-year schedule, the timing, size, and location of a specific sale, it must be determined which tracts should be offered in the sale. A call for nominations of tracts is issued by the Department. Industry responds by nominating tracts in which they are interested. With improved seismic, geologic, and economic data on the specific sale under consideration, the Department analyzes the past leasing history of tracts under consideration and the nominations themselves, and makes an initial identification of tracts to be included in the sale.

1. RESPONSIBILITIES AND PROCEDURES

Responsibility for the initial selection of tracts lies with the field offices of the Bureau of Land Management (BLM) and the U.S. Geological Survey (GS) under guidance as to departmental objectives furnished by the respective Washington offices.

(*a*) BLM-New Orleans Office (NO) is responsible for furnishing the historical and current leasing status of all tracts nominated and their locations with respect to fairways, anchorage and warning areas, and pipelines. BLM-NO makes preliminary identification of tracts based on the following criteria: Number of weighted and unweighted nominations;[1] need to initiate leasing in rank wildcat areas from an economic standpoint; tract history; nomination patterns; mix of tracts by water depths, distance from shore, and nominators, and through analysis of past environmental statements, those types of tracts that have been deleted from past sales or from which special environmental stipulations were developed.

(*b*) GS–NO is responsible for furnishing technical, information including geological, geophysical, engineering, and paleontological information in determination of tracts to be recommended for selection. GS–NO identifies tracts based on the following criteria: Need to initiate leasing in rank wildcat areas from a geologic standpoint; drainage tracts or those in imminent danger of drainage; tracts for which companies have presented data for GS inspection and evaluation demonstrating their necessity and desirability for further development; tracts which are most prospective for production; other tracts susceptible to prompt drilling and development.

(*c*) The Washington office of BLM and GS furnish guidelines which flow from the departmental objectives: orderly and timely resource development; protection of the marine environment; and receipt of fair market value for leased marine resources. These guidelines include but are not limited to: recommended size of sale; tracts or areas for special consideration; and information relative to administrative or Department policy. The Washington office also reviews the joint recommendation of tracts submitted by the BLM and GS field offices for conformity with these objectives and guidelines.

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[1] Unweighted: Nomination of a tract by a single company; counts as one nomination. Weighted: Nomination of a tract by a group or combine of a number of companies; counts as one nomination.

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2. PURPOSE OF THE TRACT SELECTION PROCESS

It is intended that by this initial tract selection process, tracts which have the highest geological potential normally will be selected. In response to the Department's call for nominations for the east Texas general sale, 39 oil companies representing 20 bidding groups nominated approximately 5.2 million acres. From this total, a list of 129 tracts comprising 697,643 acres was selected in accordance with the process described above to be included in the proposed sale.

In order to assess the environmental impact which may occur as a result of leasing these tracts, BLM prepares a draft environmental statement, soliciting a wide spectrum of views from Federal, State, and local agencies, and the public. This environmental statement evaluates the potential effect of the proposed lease sale on all components of the environment of the entire area during exploration, development, and operational phases. Pertinent published and unpublished resources reports and evaluations are reviewed and portions are included in this statement. In the case of a general sale a public hearing is held. Through these processes, further modification of the list of tracts may result, or special stipulations may be required for the leasing of certain tracts as well as reflected in the final environmental statement.

FROM DRAFT ENVIRONMENTAL IMPACT STATEMENT, EAST TEXAS PROPOSED OCS OIL AND GAS SALE

RELATIVE ENVIRONMENTAL IMPACT FACTOR

A relative environmental impact factor is a product of importance, and proximity, and is expressed both for structures, F (St) and oil spills, F (O.S.). The equation for obtaining this factor can be expressed simply as $I \times P = F$ (St. or O.S.).

The higher the relative environmental impact factor, the higher the potential for environmental damage. Tracts with overall high environmental indices will be singled out for additional consideration in accordance with the scale below. It is very important for the decisionmaker or reviewer to keep in mind the possible synergistic and/or accumulative effects resulting from a tract having one or more categories within a high index range.

This scale of relative environmental impact factors is proposed for determining the potential damage a tract might pose to a significant resource or activity.

RELATIVE ENVIRONMENTAL IMPACT SCALE

Greater than or equal to 50: Relative environmental impact factor in this range indicates that the tract should be carefully scrutinized. Depending upon the significance and character of the resource that may be affected, possibilities in the decision include:

(1) Withdraw the entire tract from the proposed offering.

(2) Offer only a portion of the tract.

(3) Offer the tract with special stipulations included in the lease to reduce the potential for damage or hazard.

(4) Offer the tract because of mitigating circumstances with or without special stipulations.

Greater than zero but less than 50: Relative environmental impact factor in this range indicates that the tract could be developed safely within existing standard practices and operating regulations without significant damage to the resource involved. Additional special stipulations in the lease would not normally be necessary.

EXAMPLE

ANALYSIS OF POSSIBLE ADVERSE ENVIRONMENTAL IMPACT

Lease Area and Block
GALVESTON
BLOCK 190 (E½)

Tract Data:
Statute Miles from Shore 13
Water Depth - Feet 50
Est. Type of Production OIL

SIGNIFICANT RESOURCE FACTORS	IMPACT FACTORS					
	Structures			Oil Spills (1000+ bbl)		
	IM	PR	F(ST)	IM	PR	F(OS)
Natural Resource Systems: Refuges/Management Areas	20	0.0	0	100	0.0	0
Estuary/Marsh/Nursery Areas	20	0.0	0	100	0.5	50
Biota Seaward of Estuary/Nursery Areas	0	1.0	0	40	1.0	40
Beaches	40	0.0	0	80	0.5	40
Coastal Activities/Multiple Use Shipping	80	0.4	32	20	1.0	20
Recreation (Outdoor)	40	0.0	0	80	0.5	40
Commercial Fishing	80	1.0	80	80	1.0	80
Sport Fishing	0	1.0	0	80	1.0	80

Lease Area and Block
GALVESTON
BLOCK 211 (N½)

Tract Data:
Statute Miles from Shore 14
Water Depth - Feet 55
Est. Type of Production OIL

SIGNIFICANT RESOURCE FACTORS	IMPACT FACTORS					
	Structures			Oil Spills (1000+ bbl)		
	IM	PR	F(ST)	IM	PR	F(OS)
Natural Resource Systems: Refuges/Management Area	20	0.0	0	100	0.1	10
Estuary/Marsh/Nursery Areas	20	0.0	0	100	0.4	40
Biota Seaward of Estuary/Nursery Areas	0	1.0	0	40	1.0	40
Beaches	40	0.0	0	80	0.4	32
Coastal Activities/Multiple Use Shipping	80	0.4	32	20	1.0	20
Recreation (Outdoor)	40	0.0	0	80	0.4	32
Commercial Fishing	80	1.0	80	80	1.0	80
Sport Fishing	0	1.0	0	80	1.0	80

Legend: IM=Importance F(ST)=Impact Factor - Structures
PR=Proximity F(OS)=Impact Factor - Oil Spills
NCG-Not Computed for Gas only Blocks

SUMMARY RISK ANALYSIS

Three risk categories will be used to rank the degree of potential hazard the tracts in this proposal sale pose to the environment. These categories are discussed below:

1. HIGH HAZARD POTENTIAL TO THE ENVIRONMENT

Highly hazardous may be defined as a tract which is oil or oil and gas prone and within such close proximity to a high value-critically vulnerable resource as to disallow the minimum present practical response time [1] necessary to effectuate oil spill containment, cleanup and contingency measures to stop or retard the spill from impacting upon the resource. Also, a tract may be considered highly hazardous if it is oil prone and is wholly located in an unstable sediment zone. No tracts in this proposed sale are considered to be highly hazardous to the environment.

2. MODERATE HAZARD POTENTIAL TO THE ENVIRONMENT

Moderately hazardous may be defined as an oil or oil and gas prone tract whose proximity to a high value-critically vulnerable resource does not preclude adequate response time (based on current industry capability in the Gulf of Mexico, offshore Louisiana, and Texas) necessary to effectuate containment, cleanup, and contingency measures to stop or retard the spill from impacting upon the unique resource area. However, all oil prone tracts, if not determined to be highly hazardous to the environment, are placed in this category for primarily two reasons: (a) all are capable of spilling oil; the effects of an oil spill on open ocean marine biota is also considered adverse although not as severe as the effects on unique (usually nearshore or onshore) high value resources; (b) no cleanup and containment equipment can be effectuated during adverse weather conditions, such as violent storms and hurricanes and none of this type of equipment available today is very effective in 5-foot or more seas.

In this proposed offering there are nine tracts considered to be moderately hazardous to the environment. These tracts are Galveston area, blocks 190, 211, 212, 325, 326, 381, 382, and 393. Three of these tracts [blocks 190, 211, and 212] range from 12 to 14 miles from shore and in the event of a spill from any one of these three tracts, the response time necessary to stop oil from reaching Galveston Island beaches would be critical. Under normal conditions, an oil spill from any one of these three tracts would allow a response time ranging from 24 to 28 hours (computed at a highly liberal estimate of 0.5 knot per hour shoreward increment of ocean current velocities in the area) from the time a spill occurred to the time it would take to reach the beaches. The Clean Gulf Associates [see section IV, mitigating measures] has indicated that their oil containment and cleanup equipment can be on the scene of a spill within 12 hours of notification that a spill has occurred. The effectiveness of this operation of course, would be dependent upon attendant weather conditions and sea state at the time of a spill.

3. MINIMAL HAZARD POTENTIAL TO THE ENVIRONMENT

Minimally hazardous may be defined as a gas prone tract whose development under existing operating orders, regulations, and safety requirements promises a low level of disruption and adverse effects to the environment. Experience indicates that the impacts resulting from development of tracts of this type are not so much ecological in nature as they are conflictual with other uses or activities in a marine area. In most cases, such conflicts or hazards can be mitigated by enforcement of existing regulations or by attaching special conditions or stipulations to the lease concernng its development.

In this proposed sale, all of the tracts [120 in all] in the following lease areas are considered to be minimally hazardous to the environment:

Galveston—South Addition; High Island—South Addition; High Island—East Addition; High Island—East Addition—South Extension; West Cameron—South Addition; East Cameron—South Addition.

[1] Minimum practical response time would be 12 to 18 hours from the time a spill occurred to the time appropriate equipment can be at the spill site.

This conclusion is based on the following factors: (a) all are gas prone tracts; (b) approximately 94 percent of the tracts are over 55 miles from shore, thus reducing to some degree the conflict of structures to recreational boating and commercial fishing activities; (c) none of the tracts are located in unstable sediment zones; (d) conflicts with other uses and activities of the area and any threats to the protection and preservation of unique coral reefs will be mitigated by regulations, operating orders, and where necessary, special stipulations. For discussion of effects on coral reefs see action III and for stipulations concerning development of tracts in close proximity to coral reefs see section IV.

ADEQUACY OF OCS FUNDS

Mr. LONG. May I ask you, in view of your proposed accelerated schedules for sales and leases on the outer continental shelf, is the $1.7 million increase you are requesting for this program adequate to do a thorough evaluation of all the environmental aspects.

Mr. SILCOCK. We think it is adequate to get our base line studies started.

Mr. LONG. Just to get them started.

Mr. SILCOCK. We will have to continue it for 2 to 3 years.

Mr. LONG. This is just a start?

Mr. SILCOCK. That is right.

Mr. LONG. How long do you estimate that the study of the Outer Continental Shelf areas of the middle Atlantic coast will take?

Mr. SILCOCK. I would say 18 months to 2 years.

TIMING OF ATLANTIC OCS LEASES

Mr. LONG. What do you estimate is the earliest possible date for leasing in the area?

Mr. SILCOCK. On the Outer Continental Shelf in the Atlantic?

Mr. LONG. Yes.

Mr. SILCOCK. The Secretary has not made a decision as to whether he will or won't lease. It is down the road.

Mr. LONG. What I am asking you is not a decision of the Secretary as to when he is going to do it, I want to know what is the earliest possible date for leasing on these areas, assuming he gave the word when the time came.

Mr. SILCOCK. It hinges on a lot of things. It depends on an analysis of what our studies actually find. There are also some legal questions involved with the States. It is impossible to say.

Mr. LONG. I am trying to get some idea when is it going to happen to us.

Mr. SILCOCK. I just don't think we can say.

Mr. LONG. It cannot happen next week!

Mr. SILCOCK. That is right.

Mr. LONG. It cannot happen next year?

Mr. SILCOCK. No.

Mr. LONG. Five years? Ten years? Give us some feeling.

Mrs. HANSEN. If the gentleman will yield a minute, we have Mr. Horton here, the Assistant Secretary for Land and Water Resources. I am going to direct the question to Mr. Horton.

Mr. HORTON. If I can only apologize to you for being slightly later than I wanted to.

The chairman of the hearing I just left was not able to release me punctually at 11. I am happy to answer that question. I would say we cannot indicate a time frame in which these lease sales may actually take place because a decision has not been made at this point in time whether there will be a sale.

That decision the Secretary indicated in the past will be made after thorough discussions with the State Governors and State officials. There may never be one.

Mr. LONG. I hope there won't be.

What I am trying to find out is if all went well from the point of view of the oil companies who want to do this, when would it happen? When is the earliest date it could happen?

Mr. HORTON. I think we have to proceed sequentially. We have to get a decision yes or no whether in fact we will go ahead.

Mr. LONG. Suppose you got all these decisions?

Mrs. HANSEN. How many Governors are involved?

Mr. HORTON. There would be primarily the Governors of the Coastal New England States.

Mr. LONG. New England States?

Mr. HORTON. Or of the eastern coast. I thought you were focusing on the Northern Atlantic.

Mr. LONG. No, I am from Maryland. I am interested in the waters off the coasts of Maryland, Delaware and New Jersey—the mid-Atlantic area, as I understand.

Mr. SILCOCK. That is correct, it would be the mid-Atlantic.

Mr. LONG. The so-called Baltimore Canyon, which I think extends up and down that whole area. I am trying to find out whether if all went well from the point of view of the oil people and I gather they very much want to do this, when would it start?

Mr. SILCOCK. It would be impossible to say because, for example, the Alaska pipeline, which started in 1968, is still going through the process. We would have to develop our environmental impact statements, they would be subject to review, and so on. At this point in time it is just out in the future, if at all.

Mrs. HANSEN. Then you are subject to congressional action.

Mr. SILCOCK. That is right.

Mr. LONG. I hope it is a long time, say a hundred years from now. I am trying to get some feeling on what we have to brace ourselves for and nobody seems very anxious to help us on this.

OIL SPILL LIABILITY

Mr. EVANS. If the gentleman would yield for one question, what do your leases provide in terms of the liability of lessees in the event of an oil spill?

Mr. SILCOCK. They are required to clean it up.

Mr. EVANS. It is their total economic responsibility.

Mr. SILCOCK. That is their responsibility.

Mr. EVANS. That is true on all the leases that are in existence.

Mr. SILCOCK. Yes.

Mr. EVANS. Thank you.

Mr. YATES. May I ask a question?

UTILIZATION OF OCS PRODUCTS

Mr. YATES. I saw a television program about a month ago showing some of the drilling platforms in the Gulf of Mexico, and the point was made that they were wasting gas. You could see the gas bubbling through the water and into the air. Is this a common practice?

Mr. SILCOCK. I am not familiar with that.

Mr. TURCOTT. There is some wasting of gas and there is some flaring of gas where they actually touch it off and put it on fire.

Mr. YATES. Why do they do this when there is such a gas shortage?

Mr. TURCOTT. It has to do with the problems of pumping the oil and/or gas from below ground. The U.S. Geological Survey just issued new working orders from the gulf on the wasting of gas, both flaring and coming up through the water.

Mr. YATES. What do those orders provide?

Mr. TURCOTT. They provide for a much better conservation of this resource.

I do not have the details with me.

Mrs. HANSEN. They will be here tomorrow.

REFINERY LIMITATIONS

Mr. YATES. Very well. Is there a limitation on the number of leases that you can give because of a lack of sufficient refineries? I am told that the refinery capacity of the country is being used almost 100 percent at the present time.

Mr. SILCOCK. That is not tied to refineries.

Mr. YATES. In a sense it is. You can give all the leases you want if you don't have the refineries you will not be able to use the oil.

Mr. TURCOTT. This gets back to your question on the social and economic impact, with respect to refinery capacity and transportation capacity and work force available and so forth.

Mr. YATES. Is this a consideration of yours?

Mr. TURCOTT. Yes, these are part of the considerations that go into the social and economic studies on each of the sales and are part of the base studies which we want to advance in our appropriation requests.

Mrs. HANSEN. In other words, you don't sell leases when there is no refinery capacity in the United States, is that correct?

Mr. SILCOCK. That is only partially true.

We hold lease sales and the leases are issued whether there is immediate refinery capability or not.

Mrs. HANSEN. What are they going to do with the oil?

Mr. YATES. What if they bring in oil in 5 years and they have no refineries to refine them?

Mr. SILCOCK. Your question was, do we issue leases, and we would. As I indicated earlier, we are using virtually all petroleum produced domestically in the country and importing the balance to close the gap between consumption and production. This deficit amounted to almost 1.5 billion barrels in 1971.

Mr. YATES. But then your 5-year limitation begins.

Mr. SILCOCK. But they can drill and if they develop an economic exploitable reserve which can't be brought into production right away

they can cap it and hold it, because they have production potential there.

Mr. YATES. And this satisfies your requirements.

Mr. SILCOCK. This puts it into a holding category.

POTENTIAL OCS LEASES

Mr. YATES. How many potential leases are there in the Outer Continental Shelf; have you ever estimated that?

Mr. SILCOCK. I have no idea.

Mr. YATES. How many possible leases are there that you know about?

Mr. SILCOCK. I just don't know of any way of forecasting that.

Mr. YATES. You are selling a certain number of leases every year.

Mr. SILCOCK. Over time, we have issued over 1,600 leases in the gulf, and we have 890 now in a current status.

Mr. YATES. What remains is what I am trying to find out. What potential lease sales are there?

POTENTIAL LEASING AREAS IN THE GULF OF MEXICO

Mr. SILCOCK. It is pretty well expended.

Mr. YATES. The whole Outer Continental Shelf is already divided and leased?

Mr. TURCOTT. Substantially, sir; yes, with respect to the Gulf.

Mr. YATES. All the way around?

Mr. TURCOTT. Up to 200-meter isobath.

Mr. YATES. Does this go from the tip of Florida all the way to the southwest tip of Texas?

Mr. TURCOTT. Yes.

Mr. YATES. What area are we talking about, the whole gulf?

Mr. TURCOTT. Yes; as far as known potential areas for oil and gas leases.

Mr. YATES. How far out do your leases go? The Continental Shelf descends how far into the gulf?

Mr. TURCOTT. It goes beyond 200 meters somewhat. Then there is the continental slope which goes out to 2,500 meters. Beyond 2,500 meters, there is another even deeper area. The known oil and gas potentials within 200 meters in the Gulf of Mexico, from Florida clear around to the southwestern tip of Texas, has been substantially leased. There are only a few really viable potential areas left.

The 1974 fiscal year sales plan includes at least one sale beyond 200 meters in the Gulf of Mexico.

Mr. YATES. What you are saying is that all the area within 200 meters in the gulf has been leased substantially.

Mr. TURCOTT. Yes, areas with potential.

Mr. YATES. What about the area beyond 200 meters?

Mr. TURCOTT. There has been none.

Mr. YATES. This is a potential for leasing.

Mr. TURCOTT. Yes; this area has a potential for leasing.

Mr. YATES. Is there any reason why this asset, which belongs to all the people of the United States, cannot be used for all the people, by requiring your lessees to serve areas of shortage when there are times of critical shortage in various parts of the country?

Mr. SILCOCK. Isn't this a role that OEP tries to fit into?

Mr. YATES. Has OEP done this?

Mr. SILCOCK. I think they have—I don't know to what extent—but in emergency situations and crises, they do.

Mr. YATES. Has the United States ever developed any of these oil lands itself?

Mr. SILCOCK. No.

Mrs. HANSEN. Congress has to appropriate the money and provide a law to do it.

DISTRIBUTION OF GULF OF MEXICO OIL

Mr. SILCOCK. We have some figures showing the distribution of the gulf oil, if you are interested.

Mr. YATES. I would like to have those in the record.

[The information follows:]

DISTRIBUTION OF CRUDE OIL—GULF OCS

Crude oil from the Gulf of Mexico is distributed as follows:

35 percent refined in Louisiana
18 percent shipped to east coast
20 percent shipped to Midwest
20 percent shipped to Texas
7 percent shipped to Mississippi

INTRODUCTION OF THE ASSISTANT SECRETARY FOR LAND AND WATER RESOURCES

Mrs. HANSEN. Mr. Horton, it is a pleasure to have you appear before the committee today for the first time. We will insert your biography in the record at this point.

[The information follows:]

BIOGRAPHY—JACK O. HORTON

Jack Horton, 35, of Saddlestring, Wyo., was sworn in by Secretary of the Interior Rogers C. B. Morton for the position of Assistant Secretary for Land and Water Resources on March 12, 1973.

Mr. Horton was previously serving as the Federal Co-Chairman, Joint Federal-State Land Use Planning Commission for Alaska having been appointed to that position in July 1972. He also served as Deputy Under Secretary of the Interior from August 1971 up until his appointment to the Joint Land Use Planning Commission.

Mr. Horton was raised on the H F Bar, a family ranch established by his grandfather, the late Congressman Frank A. Horton. He graduated from Princeton University with honors in geology and read in the Honors School of Politics, Philosophy, and Economics at Oxford University under a Rhodes Scholarship. He interrupted his studies there to enter the Naval Air Training Command. Receiving his wings in 1962, Lieutenant Horton was assigned to a Naval Jet Airborne Reconnaissance Squadron outside of Tokyo, Japan. For 3 years, he studied Japanese, traveled extensively through the Far East, and was separated from naval service in 1965 with seven decorations and 165 combat and reconnaissance missions in Southeast Asia. He returned to Oxford and received an M.A. degree in 1967.

Subsequently, Mr. Horton returned to Wyoming where he became vice president of the H F Bar Ranch, a family cattle and resort corporation.

During 1969, Mr. Horton was employed as an assistant to Russell E. Train, former Under Secretary of the Interior. In this assignment, Mr. Horton was named Executive Secretary of the Federal Task Force on Alaskan Oil Develop-

ment established by President Nixon in May 1969. He served as a Special Assistant to former Interior Secretary Walter J. Hickel and was appointed Deputy Assistant Secretary for Program Policy and, later, Deputy Under Secretary by Rogers Morton.

An avid outdoorsman, Mr. Horton participated in football, lacrosse, and crew in college and was elected to All-American honors in lacrosse in his junior and senior years. He was selected a member of the All-South of England Lacrosse Team while at Oxford. He attended the Swiss National Mountaineering Institute, participated in Wyoming rodeos, and was a hunting guide and ski enthusiast.

ASSISTANT SECRETARY'S OPENING STATEMENT

Mrs. HANSEN. You may proceed with your statement.

Mr. HORTON. Madam Chairman and members of the committee, it is an honor to appear before you today with representatives of the Bureau of Land Management. I was sworn on March 12 of this year as the Assistant Secretary of the Interior for Land and Water Resources. Today represents my first appearance before this committee and I look forward to working closely with you because in the past 4 years I have had a close and very rewarding experience and association with the Bureau of Land Management.

Through previous assignments within the Department since 1969, and more recently with the Joint Federal-State Land Use Planning Commission for Alaska, I have been exposed to many of the problems and programs which face the Bureau in its management of the national resource lands. These responsibilities cover the entire spectrum of natural resource management—from the development of mineral and energy sources to the enhancement of land and water—from the use of forage for livestock to accommodating recreational demands—from the production of timber to the protection of habitat for wildlife.

The diversity of BLM activities and the many constituencies which it serves puts the Bureau in a unique posture. Nowhere are the potential conflicts between the various users of public lands brought into sharper focus. Conversely, nowhere does there exist such a single land and resource base which can provide such a breadth of resources and intangible commodities. The Bureau of Land Management, today, seeks to provide a total natural resource management system under a single administrative entity.

The budget for fiscal year 1974 is essential to the protection and development of the national resource lands. More importantly, it is vital to the welfare of millions of Americans who depend directly or indirectly on the continuing harvest which this estate provides.

Mrs. HANSEN. I am sorry you are late, Mr. Horton, because we have had an interesting discussion on the whole subject of the Outer Continental Shelf area.

JUSTIFICATION MATERIAL

Please insert justification pages 1 through 8 in the record at this point.

[The pages follow:]

Highlight Statement

Public lands managed by the Bureau of Land Management comprise 450 million acres, 20% of the land area in the United States. In addition, the Bureau has administrative responsibility for the public mineral resources on 369 million acres of private and other Federal lands and on 515 million acres that makeup the Outer Continental Shelf.

The public and OCS lands are a major source of resources necessary for the Nation's continued social and economic growth. This estate furnishes 30 percent of the total minerals produced in the United States and 17% of the domestic requirements for oil and gas. A national energy shortage has resulted in intensified interest in coal reserves and known geothermal resource areas, most of which are located on public lands. New areas of the Outer Continental Shelf are being studied with respect to increasing oil and gas leasing. Other vital public land resources include water, forage, timber, wildlife, recreation opportunities, open space, and land upon which to build. As an important source of revenue, these National Resource Lands and the Outer Continental Shelf are expected to produce receipts in excess of 4 billion dollars in FY 1973.

Program proposals for FY 1974 contribute to a level of management that will assure the proper use, development, and protection of the public lands. Increases requested are required to implement enacted legislation, and to contribute directly to meeting urgent national priorities. Accelerated efforts to provide new sources of clean energy are proposed; they must be developed under comprehensive land use plans and with emphasis on preserving the quality of the environment.

This budget also provides for continuing natural resource land management programs for range, forest, recreation, wildlife, and soil and water resources. These continuing programs are highly important to local and regional economics and contribute substantially to national needs for food, forest products, recreation opportunities, minerals, water, and a clean environment.

Proposed program increases for FY 1974 are highlighted below:

Alaska Native Claims Settlement Act

The Alaska Native Claims Act requires that the Bureau complete various actions involving some 250,000,000 acres of public land in Alaska. The Act established short time frames for satisfying native land grants, for withdrawing and making recommendations on national interest areas and for processing other land claims. In order to finalize the land transfers to Alaska natives and others, cadastral surveys must be completed on most of the land selections. Inventory data on vast acreages must be developed and cataloged in a central resource data bank to aid in land use designations and to facilitate informative land selections by qualified natives. The primary work for the Bureau involves processing applications for native selections, allotments and primary residences, classification of lands for management and disposal and processing other associated applications including state selections, private settlement cases and mineral lease applications.

The requested increased FY 1974 funding is essential if the Bureau is to complete the necessary actions in scheduled order and as mandated by Congress.

Fuel and Energy Resource Development

Increased development of public land energy sources can contribute substantially to alleviating developing energy shortages and sustaining a healthy level of economic growth. The public lands and the Outer Continental Shelf provide major sources of energy including oil, gas, geothermal steam and coal.

In meeting accelerated energy requirements, the Bureau must assure the orderly development and distribution of energy resources through a permit and monitoring system based upon comprehensive land use planning. Environmental and surface protection activities must be expanded to insure that the development of new energy sources is accomplished with minimum adverse environmental impacts. The budget proposes increases in the following high priority energy areas:

- Outer Continental Shelf

Substantial potential for alleviating the Nation's current domestic oil and gas shortage lies in increased development of the Outer Continental Shelf. To this end, an accelerated leasing schedule which combines a larger number of sales with greater acreages per sale is now being developed. Three general OCS offerings are tentatively proposed in FY 1974.

Before any leasing decision can be made, there must be a complete evaluation of scientific, environmental, economic, and technological data pertinent to the area of development. As leasing plans propose possible future sales in frontier lease areas such as the Mid-Atlantic and Gulf of Alaska, added capability to analyze and assess environmental impacts and to develop and improve methods of management and operations is needed.

The FY 1974 program provides for the capability to accommodate the accelerated oil and gas leasing schedule while intensifying efforts to protect the Marine environment. To this end, environmental study field groups will study the Mid-Atlantic, Alaskan, and the Pacific (California) areas. Additional staff will be assigned to the Bureau's New Orleans Office to prepare pipeline environmental impact statements, to conduct economic analysis and develop automatic data processing capability for purposes of data storage, sales analysis, and minerals management.

- Geothermal Steam Leasing

Geothermal steam provides a relatively new and clean source of energy for electrical power. Under the Geothermal Steam Act of 1970, the Secretary of the Interior is responsible for leasing geothermal steam on all Federal lands. About 60% of the 96 million acres with either known or prospective potential for geothermal steam are Federal lands. The FY 1974 increase program will consist of analysis and selection of potential leasing tracts, completing associated resource use plans and environmental analyses, and development of a leasing schedule. Subject to final rulemaking, a major component of the FY 1974 workload will involve determining the rights of some 70 applicants who have claims to geothermal areas based on prior activity.

- Surface Protection

The rapidly accelerating energy and mineral needs of the Nation are resulting in increased exploration and development of public land mineral resources. BLM must insure that accelerated upland mineral activities are conducted in a manner to minimize adverse impacts upon surface values of the public lands. The Bureau's expanded FY 1974 surface protection program will provide capability to perform required technical examinations, develop protective stipulations for specific leases, review restoration efforts, and perform other associated surface protection activities on some 14 million acres of public land.

- Trans-Alaska Pipeline

On May 11, 1972, the Secretary announced his decision to issue a permit for construction of 800 miles of pipeline across the interior of Alaska to a warm water port at Valdez. The requested budget increase is contingent on a permit being issued. BLM as the lead agency, has overall responsibility for monitoring and surveillance of the pipeline and must be prepared and

equipped to facilitate construction while protecting environmental values. The Bureau's overall Federal coordination and supervision responsibilities include the pipeline, 375 miles of road, and the many accessory construction activities. Upon issuance of the permit, construction activities will occur on a 7 day week 24 hour day basis simultaneously on 12 to 13 widely scattered locations along the pipeline corridor.

The increase will provide the Bureau with the capability for surveillance and monitoring what is considered to be the largest construction project of its kind ever attempted in North America. Funding is included for the Corps of Engineers to assist the Bureau in this program on a reimbursable basis.

- Inventory and Planning and Environmental Analysis

Proposed increases in Inventory, Planning, and Environmental Analysis activities are oriented to areas in which the demand for energy sources is high and their development requires significant land use decisions. These include areas with extensive coal deposits, oil and gas potential including oil shale and geothermal steam.

The general concern of a large segment of the public for their environment coupled with environmental legislation reinforces the need to review all activities on the public lands and to have knowledge of the environmental impact prior to any actions. Of equal importance, plans for development of the energy resource must consider all other resources and land uses.

The Bureau's planning system provides the vehicle for resolving conflicts between resources and land uses, allows for public input and specifies environmental considerations that must be adhered to in individual activity plans. The proposed increase provides for:

- Completing comprehensive resource and land use plans on priority energy source areas.

- Formulating energy development plans.

- Completing environmental analyses and impact statements, and holding required public hearings for proposed energy development actions pursuant to the requirements of the National Environmental Policy Act of 1969.

Adequate land-use planning and environmental analysis are needed to insure proper development of the energy resources in concert with other land uses on a long-term basis. Failure to properly plan and consider environmental aspects could result in extensive delays in energy development, and/or unnecessary damage to the environment.

Protection of Wild Horses and Burros

High public interest in the protection, control and management of wild horses and burros led to the enactment of P.L. 92-195. The objective of this program is to assure the protection and management of an estimated 17,000 wild horses and 10,000 burros on National Resource Lands.

The proposed program is a continuation of the small initial effort funded in FY 1973. Primary efforts involve inventories, removal and/or relocation of animals where needed, cooperative agreements with private, state, and local groups, and support of advisory board activities.

Off-Road Vehicles

An estimated 4 million off-road vehicles of all types are currently using public

lands. The proposed increase is urgently needed to protect the public lands and resources from irreversible damage as well as provide for the safety and enjoyment of the off-road vehicle enthusiasts.

Initial efforts will involve designation of off-road vehicle areas, dissemination of maps identifying ORV areas and listing rules of use, marking boundaries of intensive use areas and initiating studies to determine both the affect of ORV use on the resources and rehabilitation practices to be used for restoration.

Facility Maintenance

There is a need to accelerate our corrective maintenance program to keep pace with new construction and increasing demands upon public land facilities. The accelerated maintenance program for buildings, developed recreation sites, and roads provides for upgrading standards where increased use is occurring and for taking corrective measures to repair or replace damaged or deteriorating features.

Additional emphasis for maintenance of soil and watershed structures primarily includes annual emergency type maintenance of detention dams and water diversion structures with preventive maintenance on wells, pipelines, and other improvements. The soil and watershed maintenance program emphasizes prevention of downstream damage, reducing erosion, and enhancing public safety.

Summaries of requested appropriations and receipts appear on the following pages.

Summary of Receipts

As shown in the table below the Bureau continues to produce substantial revenues for the U.S. Treasury and for public land states and counties.

Receipts Collected by the Bureau ($ in millions)

	1971	1972	1973 a/	1974 a/
Total Receipts	$1,287	$ 524	$4,439	$2,365
For payment to States & Counties	-85	-90	-94	-95
Deposited in Treasury	1,202	434	4,345	2,270

a/ Estimated

Summary of Appropriations

	FY 1973	FY 1974	Increase + Decrease -
	(in thousands of dollars)		
Management of lands and resources			
1. Resource Management, Conservation, and Protection	$61,407	$74,662	$+13,255
2. Cadastral Survey	7,976	8,201	+ 225
3. Firefighting and Rehabilitation	5,400	5,400	---
4. General Administration	2,984	3,084	+ 100
Total, Management of lands and resources	77,767	91,347	+13,580
Construction and maintenance			
1. Construction	4,580	2,735	- 1,845
2. Maintenance	3,185	3,565	+ 380
Total, Construction & maintenance	7,765	6,300	- 1,465
Public lands development roads and trails (Liquidation of contract authority)	3,265	4,000	+ 735
Recreation development and operation of recreation facilities a/	0	165	+ 165
Oregon and California Grant Lands (Indefinite)	17,500	17,500	---
Range improvements (indefinite)	2,714	3,376	+ 662
Subtotal	109,011	122,688	+13,677
Permanent appropriations	94,881	96,096	+ 1,215
Grand Total	203,892	218,784	+14,892

a/ New appropriation to be derived from receipts for user fees at recreation facilities operated by BLM pursuant to Public Law 92-347.

RECEIPTS BY SOURCES

The following table shows actual receipts of the Bureau of Land Management for fiscal years 1970, 1971, 1972 and estimated receipts for 1973 and 1974.

	Actual 1970	Actual 1971	Actual 1972	Estimate 1973	Estimate 1974
Sales, Public Lands and Materials	$ 2,099,849	$ 2,013,823	$ 1,941,520	$ 2,700,000	$ 3,200,000
Fees and Commissions	4,468,455	4,096,965	5,351,278	5,400,000	5,500,000
Mineral Leasing	141,217,162	151,332,134	145,098,401	156,851,000	160,206,000
Mineral Leasing, Outer Continential Shelf	186,861,451	1,050,549,370	279,352,756	4,175,000,000*	2,100,000,000*
Grazing Fees	5,668,742	7,549,969	8,021,646	9,828,000	11,152,000
Right-of-Way Leases	249,892	270,963	293,908	300,000	310,000
Timber Sale	65,419,401	70,663,296	83,519,703	77,368,000	76,789,000
Trans Alaska Pipeline	-	-	-	10,938,000	7,120,000
Miscellaneous Receipts ...	401,606	482,104	341,584	621,000	625,000
Total	406,386,558	1,286,958,624	523,920,796	6,439,066,000	2,364,902,000

* Despite a critical need for additional resources, the receipt level for FY 1973 and FY 1974 will depend upon the anticipated impact of each proposed sale upon the environment as well as the continuing safe operation of existing OCS facilities.

NOTE: This table does not include Public Land Administration or Litter Prevention and Cleanup receipts.

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PAYMENTS OF BUREAU OF LAND MANAGEMENT RECEIPTS TO STATES, FY 1972

State	Sales of Public Lands and Timber	Mineral Leases and Permits	Taylor Grazing Districts	Taylor Grazing Leases	Other	Total
Alabama	124	10,165	---	---	---	10,289
Alaska	2,385	7,816,243	---	---	---	7,818,628
Arizona	7,021	177,842	21,733	40,420	---	247,016
Arkansas	116	18,063	---	---	---	18,179
California	60,154	3,083,418	3,118	53,307	---	3,199,996
Colorado	3,995	3,116,239	32,152	17,454	---	3,169,841
Florida	60	4,632	---	---	---	4,692
Idaho	15,182	180,654	58,117	13,814	---	267,767
Kansas	---	165,227	---	22	---	165,249
Louisiana	672	280,642	---	---	---	281,315
Michigan	---	16,677	---	---	---	16,677
Mississippi	---	10,678	---	---	---	10,678
Montana	8,396	2,556,253	40,271	53,819	136,073 a/	2,794,812
Nebraska	---	1,249	---	230	---	1,482
Nevada	13,633	338,886	109,920	14,338	---	476,777
New Mexico	9,462	12,921,730	77,703	90,340	5,541 a/	13,104,777
North Dakota	132	210,621	---	3,206	---	213,958
Oklahoma	391	191,502	---	114	---	192,007
Oregon	107,127	70,094	45,731	23,403	32,274,386 b/	32,520,742
South Dakota	105	102,817	---	26,313	---	129,236
Utah	2,236	3,506,199	54,759	---	1,675 a/	3,564,870
Washington	6,714	5,620	---	9,283	---	21,617
Wyoming	13,473	21,085,849	68,931	117,927	---	21,286,181
All others	529	---	---	---	---	529
Total	251,914	55,871,299	512,437	463,989	32,417,676	89,517,315

a/ Executive Orders 10787, November 6, 1958, and 10890, Oct. 27, 1960, from grazing and mineral receipts, L.U. Lands.
b/ From "O&C" Lands, $29,401,894; Coos Bay Wagon Road Lands, $448,514.

FISCAL YEAR 1973 BUDGETARY DEVIATIONS

Mrs. HANSEN. Mr. Silcock, has there been any significant deviations so far in fiscal year 1973 from the plan contained in your 1973 budget estimate?

Mr. SILCOCK. No; there has not.

Mrs. HANSEN. Do you have any funds currently impounded or administratively held up in any way?

Mr. SILCOCK. We have some funds placed in reserve, some 12 million.

Mrs. HANSEN. That is a polite way of impounding.

Mr. SILCOCK. $12,961,292 of unfunded contract authority from Public Lands Road Development and Trails which continues in reserve, but this reserve has had no impact and will have no impact on the funds appropriated by the Congress for 1973 fiscal year.

Mr. HASTEY. The 1973 budget as appropriated by Congress is intact and we are carrying out the programs as appropriated by the Congress. The money that was placed in reserve was placed in the reserve as part of the Federal highway funds.

Mrs. HANSEN. You had not programed these funds?

Mr. HASTEY. No, ma'am.

BLM FUND INCREASES

Mrs. HANSEN. You have budgeted a total increase of $12,444,000, for the activities of your Bureau. With the exception of the National Park Service this is the largest increase of the Interior agencies funded by this committee.

Considering the current budget constraints, how does your Bureau rate such a high priority, or how did you manage to get that amount approved?

Mr. SILCOCK. Madam Chairman, if you will recall last year when Secretary Loesch was here testifying he indicated a high interest and a favorable attitude by the Department as far as public lands are concerned. I think they recognize that the resource is there and the need for accelerating the management and development of it. So the Secretary saw fit to push our 1974 budget, primarily toward the energy side of our programs. This is the basis for our request.

COST OF ENVIRONMENTAL WORK

Mrs. HANSEN. You state:

> The 1974 program provides for the capability to accommodate the accelerated oil and gas leasing schedule while intensifying efforts to protect the marine environment. To this end environmental study field groups will study Mid-Atlantic, Alaskan, and Pacific [California] areas. Additional staff will be assigned to the Bureau New Orleans office to prepare pipeline environmental impact statements, to conduct economic analyses, and develop automatic data processing capability.

Will you give us the total cost of your environmental impact studies for the fiscal year 1973, and what do you anticipate in 1974?

Mr. SILCOCK. The total Bureau cost in 1973 for all functions will be approximately $3.8 million.

Mrs. HANSEN. That is 1973.

Mr. SILCOCK. Yes, ma'am. That is funds specifically appropriated for environmental work plus funds used from within other activities.

Mrs. HANSEN. What other activities?

Mr. SILCOCK. It would be all the activities that require the preparation of environmental statements or analyses.

Mrs. HANSEN. You charge it against that activity?

Mr. SILCOCK. Yes.

It is another added cost of doing business.

Mrs. HANSEN. What is your 1974 estimate of environmental impact costs?

Mr. SILCOCK. We project $5.7 million, which will come from the funds appropriated for the various activities.

For example within timber funds we are doing timber environmental analysis and impact statements.

Mr. MCDADE. You do file negative impact statements when you believe it appropriate?

Mr. SILCOCK. What we do is in accordance with the National Environmental analysis to determine if an impact statement is necessary. In this analysis process, a part of the recommendation determines whether an impact statement is necessary or not. If it is not, then we say it is not necessary.

Mr. MCDADE. So you do file negative impact statements?

Mr. SILCOCK. Yes.

DEPARTMENTAL ENVIRONMENTAL WORKLOAD

Mr. HORTON. It is estimated this calendar year in the Department we will write 250 draft impact statements, 150 final impact statements, and we will be commenting on 2,500 impact statements from other agencies. Because of the confidence and expertise in BLM they will be involved in a significant percentage of these. It is an enormous workload.

Mrs. HANSEN. What will be the total cost in the entire Department?

Mr. HORTON. I don't have those figures but they are available.

Mr. GUIDICE. We have that.

In 1973 we are estimating about $16,500,000, and in 1974 about $18,300,000.

Mr. HORTON. In the entire Department.

Mr. GUIDICE. That would cover salaries and support costs for the Department.

LANDS UNDER BLM JURISDICTION

Mr. HANSEN. In order to have a proper perspective of your activities, I think it would be well to insert in the record at this point a tabulation by State of the public lands under exclusive jurisdiction of the BLM in 1973. A listing of the recreation lands administered by the BLM, showing the acreage by State, and a table indicating the commercial forest lands administered by the Bureau by State.

[The information follows:]

Lands under BLM Jurisdiction

The following tabulation shows acreages of total public domain, commercial forest lands and recreation lands managed by BLM.

	Acres FY 1972		
	Public Domain	Commercial Forest Lands	Recreation Lands *
Alabama	401		
Alaska	276,307,960	19,500,000	12,917,030
Arizona	12,536,968	7,000	7,494,336
Arkansas	348		
California	15,585,619	250,000	11,821,411
Colorado	8,331,896	221,200	7,641,550
Florida	644		
Idaho	12,048,825	244,300	7,928,726
Kansas	954		
Louisiana	886		
Minnesota	43,396		
Mississippi	1,091		
Montana	8,145,052	314,700	8,070,259
Nebraska	7,684		
Nevada	48,359,949		51,881,291
New Mexico	13,038,688	88,900	576,738
North Dakota	68,639		
Oklahoma	7,143		
Oregon	15,729,628	2,165,000	13,507,805
South Dakota	276,352	5,800	
Utah	22,722,316	5,400	22,204,301
Washington	291,826	52,600	270,000
Wyoming	17,486,953	238,900	13,616,842
Total	450,993,218	23,093,800	157,930,289

* While these lands have been formally inventoried by BLM as recreation lands, in fact all the public domain is available for recreation type activities and in the broadest sense could be considered recreation lands.

Mrs. HANSEN. What is your total land acreage east of the Mississippi?

Mr. SILCOCK. We have about 46½ thousand acres east of the Mississippi River.

Mrs. HANSEN. Where is the predominance of your land?

Mr. SILCOCK. The predominance of public land is in the 10 Western States and Alaska.

PERMANENT POSITIONS

Mrs. HANSEN. How many permanent positions were funded in your fiscal 1973 appropriation?

Mr. SILCOCK. Our fiscal year 1973 authorized strength amounts to 3,916 permanent positions.

Mrs. HANSEN. What is your end-of-year personnel ceiling for 1973?

Mr. SILCOCK. 3,744. Our on board strength as of March 20 is 3,715, so we are slightly under our June 30 ceiling.

Mrs. HANSEN. Give me the same information with regard to authorized positions and personnel ceiling for fiscal 1974.

Mr. SILCOCK. For 1974, our authorized positions are 4,170; our permanent end-of-year ceiling is 3,880. Our temporary ceiling amounts to 2,066, for a total of almost 6,000.

TRANS-ALASKA PIPELINE STATUS

Mrs. HANSEN. On February 9, 1973, the U.S. Court of Appeals ruled that the Government cannot issue permits for the Alaska pipeline because the width of its right-of-way breaks a law already on the books. Summarize for the committee the current situation in this regard.

Mr. SILCOCK. The present situation in connection with the pipeline is that it is under litigation. There has been a writ of certiorari filed with the Supreme Court, to see if they want to hear the case. It is my understanding that the Supreme Court has asked both sides to submit additional briefs in connection with the pipeline. That is where we are from the legal side of the pipeline.

In the field, we have been doing additional work on base-line studies, analysis, and determination of what is there in the way of basic resources—fish, wildlife, and so on—as well as looking at possible minor modifications of routes because of the terrain and permafrost.

Mrs. HANSEN. I assume the Department was aware of the 25-feet limit for some time; and if so, why wasn't legislation proposed earlier to correct this deficiency? Why didn't you take cognizance of this fact?

Mr. SILCOCK. This is the first time that matter had been challenged legally.

Mrs. HANSEN. You should have known that with all the controversy, this aspect was going to be challenged.

Mr. SILCOCK. In the past, we have been authorizing the use of additional land through a special land use permit.

Mrs. HANSEN. But you were not in as many controversial areas as you are in the Alaskan pipeline.

Mr. HORTON. It is true, Madam Chairman, for my involvement with the pipeline had been extensive before I left Alaska with the Land Commission. We had known for 2 or 3 years that the challenge could

be brought against the Department because of the inadequacy of the width of the right-of-way.

We had believed that the policies of the Bureau in the past were adequate to defend it and that a special land permit use could continue to be granted legally, since nobody had ever challenged that.

I think there was a reluctance for us to raise the issue before the Congress when we were right in the middle of our environmental statement preparation.

Mrs. HANSEN. Did your environmental impact statement take cognizance of this difficulty?

Mr. HORTON. It certainly examines the environmental impact of the right-of-way. It did not examine the legal issues from the Mineral Leasing Act of 1920. I think in the overall scope of the project, the effort required to amend the 1920 act is less substantial than perhaps the environmental issues behind the environmental challenge.

Mr. MCDADE. If you are unsuccessful in your appeal to the Supreme Court, can you give us assurance that you are not going to have to re-do all of the environmental impact statements again with the public hearings and all the rest of it?

Mr. HORTON. I regret I cannot give you that assurance.

Mr. MCDADE. You are asking us for $7.4 million, based on a court decision that you may or may not win?

Mrs. HANSEN. There is another question involved. The Court did not rule on the environmental questions. Considering this fact, in addition to the limit difficulties, there has been some speculation that the pipeline might again be delayed for more than a year. May we have your comments?

Mr. HORTON. There are two separate issues here. One is the preparation of the statement which is complete, nine volumes.

The $7.4 million is to fund the authorized officer team which in fact would supervise the implementation of the environmental stipulations and manage and provide an overview of the construction of the system, if the permit is granted for it.

Mrs. HANSEN. Supposing you get the right-of-way width question settled, still no court has ruled on the environmental question.

Mr. HORTON. That is correct.

The court of appeals did not rule on that issue. They only ruled on the right-of-way issue.

Mrs. HANSEN. Supposing someone brings that into court?

Mr. TURCOTT. The Solicitor General in his request for expeditious ruling on the pipeline right-of-way part has also requested the court to rule on the environmental issue. So that has been put before the Supreme Court, the adequacy of environmental considerations, which were not considered by the court of appeals.

Mr. TURCOTT. It is in his writ of certiorari.

Mrs. HANSEN. What has the Supreme Court said about it?

Mr. TURCOTT. All they have done to my knowledge is to request the briefs expeditiously and there is some speculation in the press that perhaps the court will rule on the matter this term. Perhaps they will.

FISCAL YEAR 1974 BLM RECEIPTS

Mrs. HANSEN. You indicate the receipts will decrease about $2 billion from the amount for 1973. What is the basis for this projection?

Mr. HASTEY. The 1974 receipts?

Mrs. HANSEN. Yes.

Mr. HASTEY. The large receipts in 1973 were primarily because of the large amount of escrow that was released which inflated the 1973 receipts of $4.1 billion. In addition, the December 1972 sale was in a highly productive area which contributed to high bonuses in excess of $1.6 billion. The $2.3 billion in receipts is based on the three sales on the Outer Continental Shelf in lesser productive areas which makes up 90 percent of the total receipts.

REIMBURSEMENT OF PIPELINE FUNDS

Mrs. HANSEN. You estimate a decrease in receipts of about $3,818,000 in relation to the Trans-Alaska Pipeline in 1974. What accounts for that?

Mr. HASTEY. The accumulation of the obligations against appropriations from fiscal year 1969 to ¾ of fiscal year 1973 are in the fiscal year 1973 estimate. So the receipts for 1973 are based on almost a 5-year period.

Fiscal year 1974 receipts are based on just the 1 year.

Mrs. HANSEN. What has the Department spent to date on the Trans-Alaska pipeline?

Mr. HASTEY. A little over $11 million in total.

Mrs. HANSEN. How does this break down?

Mr. HASTEY. I have the figures through fiscal year 1972. Bureau of Sport Fisheries and Wildlife, $1.2 million, Geological Survey, $3.8 million, Environmental Protection Agency and Federal Water Quality, $268,000, Bureau of Land Management, $3.8 million. That is just through fiscal 1972. There will be an additional $2½ million this fiscal year by B.S.F. & W., USGS, and the Bureau of Land Management.

Mrs. HANSEN. How much of this is reimbursable to the Department based on the Solicitor's ruling of some 3 years ago?

Mr. HASTEY. Right now we are contemplating collecting the total amount, if and when a permit is issued.

Mrs. HANSEN. The total amount is reimbursable to the Department?

Mr. HASTEY. Yes.

The language in the appropriation act states all costs are subject to reimbursement and this would be included.

PAYMENTS TO STATES AND COUNTIES

Mrs. HANSEN. Of the total $2.4 billion in receipts you are estimating for fiscal 1974, what portion is for deposit in the Treasury, and what amount is for payment to States or counties?

Mr. HASTEY. About $95 million will be paid to States and counties. About $2.3 billion will go to the general fund of the Treasury.

MANAGEMENT OF LANDS AND RESOURCES

Mrs. HANSEN. We will insert justification pages 9–45 in the record.

[The pages follow:]

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Management of Lands and Resources

Appropriation, 1972	$71,035,000	
Supplemental appropriation, 1972	85,000	
Second supplemental appropriation, 1972	17,534,000	
Total Appropriation, 1972		$88,654,000
Transferred to "Salaries & Expenses", Office of the Secretary		-320,800
Transferred to "Operating Expenses, Public Buildings Service", General Services Administration		- 91,108
Total available, 1972		88,242,092
Appropriation, 1973	78,065,000	
Total appropriation, 1973		78,065,000
Transferred to "Operating Expenses, Public Buildings Service", General Services Administration		-298,000
Total available, 1973		77,767,000

Summary of Increases and Decreases, 1974

	Base for 1974	Increase/Decrease 1974
Resource Management Conservation and Protection		
To implement the Alaska Native Claims Settlement Act	$2,100,000	+$1,355,000
To implement an accelerated Outer Continential Shelf leasing schedule with adequate environmental safeguards	1,460,000	+ 1,700,000
To provide for systematic development of geothermal steam	-----	+ 200,000
To safeguard surface resources subject to damage due to mineral leasing and exploration	500,000	+ 550,000

To accelerate public land inventory and planning	$4,890,000	+$650,000	
To help insure adequate consideration for the environment in all BLM actions in accordance with the National Environmental Policy Act	300,000 [a]	+ 600,000	
To provide for supervision of construction of the Trans-Alaska Pipeline and related facilities	776,000	+7,400,000 [b]	
To implement Public Law 92-195 for the protection of wild horses and burros	100,000	+ 300,000	
To increase soil and watershed facility maintenance to protect public health and safety and the Federal investment	1,120,000	+ 200,000	
To meet the requirements of the Executive Orders for off road vehicle management	100,000	+ 300,000	$13,255,000
Cadastral Survey			
To expand Alaska cadastral survey capability to meet the requirements of the Alaska Native Claims Settlement Act	1,000,000 [c]	+ 225,000	225,000
General Administration			
To provide for increased administrative workload	2,984,000	+ 100,000	100,000
Net Increase, FY 1974			+13,580,000
Budget estimate, FY 1974			$ 91,347,000

a/ Funds specifically provided for environmental work. Does not include environmental work accomplished at the expense of other programs.
b/ Direct BLM amount, $2,700,000; reimbursable funds for Corps of Engineer involvement, $4,700,000.
c/ Work related to ANCSA only.

MANAGEMENT OF LANDS AND RESOURCES
Analysis by Activities

Activity	FY 1972 Amount Available	FY 1973		
		Appropriation	Transfers b/	Adjusted Amount Available
1. Resource management, conservation and protection	$57,217,726	$61,679,000	-272,000	$61,407,000
2. Cadastral survey	7,593,542	8,002,000	- 26,000	7,976,000
3. Firefighting and rehabilitation	20,592,406	5,400,000 a/	-----	5,400,000
4. General adminstration	2,706,343	2,984,000	-----	2,984,000
Unobligated balance lapsing	132,075	-----	-----	-----
Total	88,242,092	78,065,000	-298,000	77,767,000

a/ Amount presently available. A supplemental request of $19 million for fiscal year 1973 firefighting expenses is proposed for separate transmittal.

b/ Transferred to Public Buildings Service, General Services Administration

MANAGEMENT OF LANDS AND RESOURCES
Analysis by Activities

	FY 1972 Amount Available	FY 1973 Adjusted Amount Available	FY 1974 Estimate	Increase (+) Decrease (-) 1974 Compared with 1973	Page Ref.
1. Resource management conservation, and protection	$57,217,726	$61,407,000	$74,662,000	+$13,255,000	13
2. Cadastral survey	7,593,542	7,976,000	8,201,000	+225,000	38
3. Firefighting and rehabilitation	20,592,406	5,400,000	5,400,000	-----	41
4. General administration	2,706,343	2,984,000	3,084,000	+100,000	43
Unobligated balance lapsing	132,075	-----	-----	-----	
Total	88,242,092	77,767,000	91,347,000	+13,580,000	

1. RESOURCE MANAGEMENT, CONSERVATION & PROTECTION

Analysis by Subactivities

Subactivity	FY 1972 Amount Available	FY 1973 Amount Available	FY 1974 Estimate	Increase (+) or Decrease (-) 1974 Compared with 1973 Total Program
Land & Minerals Management...	$15,342,448	$17,958,000	$22,528,000	+4,570,000
Alaska Pipeline Inspection...	1,642,891	776,000	8,176,000	+7,400,000
Range Management.....	6,953,158	6,863,000	7,226,000	+ 363,000
Forestry.....	8,261,555	8,241,000	8,295,000	+ 54,000
Soil & Watershed Conservation	13,719,504	14,187,000	14,497,000	+ 310,000
Fire Protection.....	6,888,948	7,891,000	7,891,000	- -
Recreation & Wildlife.....	4,409,222	5,491,000	6,049,000	+ 558,000
Total.....	57,217,726	61,407,000	74,662,000	+13,255,000

1. RESOURCE MANAGEMENT, CONSEPVATION AND PROTECTION
Analysis of Change in Subactivities
by Program Feature
FY 1974 Compared with FY 1973

	PROGRAM FEATURES (in thousands)										
	(1) Alaska Native Claims	(2) OCS Leasing	(3) Geothermal Resources	(4) Surface Protection	(5) Inventory & Planning	(6) Environ. Analysis	(7) Trans-Alaska Pipeline	(8) Wild Horses	(9) S&W Conserv.	(10) Rec. Mgt. (ORV)	Net Change
Land and Minerals Mgt.....	$+1,355	$+1,700	$+200	$+550	$+315	$+450	$----	$----	$----	$----	$+4,570
Alaska Pipeline Insp.....	----	----	----	----	----	----	+7,400	----	----	----	+7,400
Range Mgt...	----	----	----	----	+ 32	+31	----	+300	----	----	+ 363
Forestry....	----	----	----	----	+ 27	+27	----	----	----	----	+ 54
Soil and Watershed Conserv.....	----	----	----	----	+ 75	+ 35	----	----	+200	----	+ 310
Fire Protection..	----	----	----	----	----	----	----	----	----	----	----
Recreation and Wildlife....	----	----	----	----	+201	+ 57	----	----	----	+300	+ 558
Total...	+1,355	+1,700	+200	+550	+650	600	+7,400	+300	+200	+300	+13,255

1. Resource Management, Conservation and Protection: FY 1973, $61,407,000; FY 1974, $74,662,000; an increase of $13,255,000. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) $+ 1,355,000	52	$3,455,000	107	To implement the Alaska Native Claims Settlement Act (P.L. 92-203)
(2) + 1,700,000	49	3,160,000	102	To implement an accelerated Outer Continental Shelf leasing schedule with adequate environmental safeguards.
(3) + 200,000	6	200,000	6	To provide for the systematic development of geothermal steam.
(4) + 550,000	24	1,050,000	48	To safeguard surface resources subject to damage due to mineral leasing and exploration.
(5) + 650,000	20	5,540,000	193	To accelerate public land inventory and planning with emphasis on energy areas.
(6) + 600,000	20	900,000 a/	30	To help insure adequate consideration for the environment in all BLM actions in accordance with the National Environmental Policy Act.
(7) + 7,400,000	55	8,176,000	95	To provide for supervision of the Trans-Alaska Pipeline and related facilities. b/
(8) + 300,000	10	400,000	10	To implement Public Law 92-195 for the protection of Wild Horses and Burros.
(9) + 200,000	--	1,320,000	70	To increase soil and watershed facility maintenance to protect water resources, public safety & the federal investment.
(10) + 300,000	14	400,000	14	To meet the requirements for Off-Road Vehicle Management.
Total+13,255,000	250			

a/ Funds specifically provided for environmental work, does not include environmental work accomplished at the expense of other on-going programs.

b/ Increases distributed as follows: $2,700,000 for BLM, $4,700,000 for Corps of Engineers. Excludes estimated 121 positions associated with Corps of Engineers amount.

Cost Factors Involved in Increase

(1) Fifty two permanent man-years at an average annual cost of $17,800, $925,000; Seven temporary man-years at an average annual cost of $11,000, $77,000; Travel and per diem for field studies at an average cost of $4,000, $250,000; Rent, communications, supplies, materials and equipment, $53,000; Aircraft rental, $50,000.

(2) Forty nine man-years at an average cost of $15,400, $755,000; Travel, and per diem for field examination and analysis at an average annual cost of $3,000, $145,000; Rent, communications, supplies, materials and equipment, $130,000; contractual costs for studies and analysis $670,000.

(3) Six permanent man-years at an average cost of $14,500, $87,000; Travel and per diem for field studies and examinations at an average annual cost of $4,000, $24,000; Rent, communications, printing, supplies, materials and equipment, $39,000; contractual costs for studies and analysis $50,000.

(4) Twenty four permanent man-years at an average annual cost of $14,500, $350,000; Four temporary man-years at an average annual cost of $9,000, $36,000; Travel, transportation of persons and per diem at an average annual cost of $3,600, $100,000; Rent, communications, supplies, materials and equipment, $64,000.

(5) Twenty permanent man-years at an average annual cost of $14,500, $290,000; Six temporary man-years at an average cost of $9,000, $54,000; Travel, transportation of persons, per diem at an average annual cost of $4,000, $100,000; Rent, communications, printing, supplies, materials and equipment, $56,000; contractual costs for studies, inventories and analysis, $150,000.

(6) Twenty permanent man-years at an average annual cost of $14,500, $290,000; three temporary man-years at an average annual cost of $9,000, $27,000; Travel, transportation of persons and per diem at an average cost of $3,000, $69,000; Rent, communications printing, supplies, materials and equipment, $70,000; contractual costs for studies and analysis $144,000.

(7) Fifty-five (BLM) permanent man-years for supervision of the Trans-Alaska Pipeline at an average annual cost of $19,600; $1,070,000; twenty-eight temporary man-years at an average annual cost of $15,000, $420,000; Travel, transportation of BLM persons and per diem at an average cost of $5,000; $400,000; BLM rent, communications, printing, supplies and materials, $400,000; BLM contractual services $410,000; Corps of Engineers participation in pipeline surveillance activities, $4,700,000.

(8) Ten permanent man-years for surveillance and protection of wild horses and burros at an average cost of $14,500, $145,000; Five temporary man-years at an average cost of $9,000, $45,000; Travel, transportation of persons and per diem at an average cost of $3,000, $45,000; Rent, communications, supplies, materials, equipment, $35,000; contractual costs for analysis and studies of horses and burros, $30,000.

(9) Six temporary man-years for surveillance of soil and water protection devices at an average annual cost of $9,000, $54,000; Travel, transportation of persons and per diem at an average cost of $2,000, $12,000; contractual costs for maintenance of watershed protective structures, $134,000.

(10) Fourteen permanent man-years for management of ORV use areas at an average annual cost of $14,500, $203,000; four temporary man-years at an average cost of $8,000, $32,000; Travel, transportation of persons and per diem at an average cost of $2,200, $40,000; Rent, communications, supplies, materials and equipment, $25,000.

Need for Increase:

(1) Alaska Native Claims, $1,355,000: The proposed increase of $1,355,000 is for the lands and minerals management activities in support of Native Claims work. An additional $225,000 and 4 positions is proposed for cadastral survey and is discussed under the cadastral survey activity.

The Alaska Native Claims Settlement Act sets short time frames for accomplishing land withdrawals and provides only four years for the Natives to complete selection of their 40 million acre grant. The Act requires the Secretary to immediately patent the land selected by the Natives. This results in a massive realty services, mineral, and cadastral survey workload that cannot be deferred.

INDIVIDUAL ALASKAN NATIVES AS WELL AS NATIVE VILLAGES AND REGIONAL CORPORATIONS ARE ENTITLED TO LAND GRANTS UNDER THE SETTLEMENT ACT

The current objective is to provide the land and resource services including the massive land title records, adjudication, and field examinations, and the land use information and planning necessary to support:

- Patenting 40 million acres to the Alaskan Native peoples.
- Processing of approximately 9,000 pending native allotment applications, 3,000 pending land title and use applications, and approximately 14,000 pending mineral lease applications.
- Processing of State Selection applications for approximately 46.5 million acres.

Work in 1974 will include:

- Processing approximately 4,500 Native Allotment applications at a rate that will permit the applicants to declare by December, 1973, their option of choosing between continuing with their application based on the Native Allotment Act of May 17, 1906, or filing an application for their primary residence under the ANCSA.

- Acting on other lands and minerals applications which must be processed simultaneously with Native Grant applications in order to consider prior rights. Such applications include mineral leases, mineral entries private settlement cases and other prior right filings.

- Issuing patents under state selection applications.

- Compiling and cataloging inventory data in a central resource data bank to facilitate informative land selections by qualified Natives, and to provide resource data needed by the Bureau in recommending land use designations.

- Proceeding with automation of land status records.

Fuel and Energy Programs

With only 6% of the world's population, the United States uses 33% of the world's energy production. If we are to alleviate an impending energy shortage, new sources of energy must be developed.

The public lands and the Outer Continental Shelf provide a major source of energy resources including oil, gas, geothermal steam, and coal.

In meeting accelerated requirements, the Bureau must assure orderly development of energy sources with full consideration for environmental impacts, based on comprehensive multiple use plans. Proposed program increases related to energy development are: Outer Continental Shelf Leasing, Geothermal Steam, Surface Protection, Inventory, Planning, and Environmental Analysis on behalf of potential producing areas, and the Trans-Alaska Pipeline. The need for each of these increases is decribed below.

(2) Outer Continental Shelf Leasing, $1,700,000: To meet the energy crises, an accelerated leasing schedule which combines a larger number of sales with greater acreages for each sale is now being developed. Three OCS general sale offerings are proposed in FY 1974. Also, to satisfy the demand for increased development, leasing plans propose possible future sales in new frontier areas such as the Mid Atlantic and the Alaskan Gulf. New area proposals necessitate a complete evaluation of scientific, environmental, economic, and technological data prior to any leasing proposals.

Currently, teams from concerned Bureau's (BLM & USGS) are studying the environmental impacts of OCS leasing in general and oil spillage in particular. They are determining ways to improve lease stipulations, analyzing existing pipeline networks, developing a joint plan for future pipeline management, and improving rights-of-way requirements. Their efforts will provide inputs and backup for the preparation of environmental impact statements required for lease sales and undersea pipeline rights-of-way. In addition, supporting studies of possible new lease sale areas, a general study of pipeline system planning, an economic analysis study of OCS supply/demand conditions, and value and production cost estimate studies in previously undeveloped areas of the OCS will be concluded.

The increased emphasis on more comprehensive environmental impact statements, the recognition of the need for closer management of pipelines on the OCS because of high potential environmental hazard, and the introduction of specific regulations for mining hardrock minerals on the OCS will require increased staff and a continued applied studies program.

The FY 1974 increase of $1,700,000 provides the capability to accommodate a further acceleration of the Department's OCS oil and gas leasing schedule while concurrently intensifying our efforts to adequately protect the marine environment.

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These increases will be utilized for the following functions:

(a) Mid-Atlantic OCS Analysis. ($110,000)

Recent analyses of the scientific and technical information available indicate that certain areas off the Atlantic Coast merit attention for future exploratory drilling for oil and gas and exploration for other minerals. The Department does not have sufficient information to properly evaluate the possible environmental impact of potential mineral development in this heavily populated area. A field study group will be assigned to the Mid-Atlantic area with the following basic responsibilities.

(1) Using experience gained in the Gulf of Mexico, initiate inhouse studies on the potential environmental impact of specific types of mineral exploration, leasing, and production on the Atlantic OCS.

(2) Establish liaison with State Agencies, the scientific community and industry along the East Coast to benefit from their data and research in their respective areas of expertise.

(3) Initiate and oversee special contract studies that are required to assess the environmental and socio/economic impact of OCS mineral leasing in that area.

(4) Conduct public hearings.

(b) OCS Environmental Statement Work. (Pipelines and Hardrock Minerals) ($65,000)

It is estimated that ten to tweleve environmental impact statements will be required for new major pipeline projects in FY 1974 and subsequent years because of expansion into new undeveloped areas. The potential environmental hazard of pipelines caused by breaks and seeps in the offshore areas and the impact on the coastal marsh environment where lines go ashore can be substantial. Additional expertise is required for the preparation of pipeline environmental impact statements as well as for the environmental and administrative responsibilities associated with the initiation of hardrock mineral leasing on the OCS.

(c) Economic Analysis - ADP Data Bank. ($100,000)

Expertise in the ADP area is needed to design ADP systems that will incorporate the data collected by the environmental analysis teams into the basic OCS status and data bank. Other planned ADP projects include applications for post sale analyses and for analysis of interfuel competition and interchangeability in relation to present and future 5-year leasing schedules.

(d) Alaska OCS Analysis. ($525,000)

The Alaskan OCS is an area of large potential resource values with use and environmental concerns of international proportions. It contains the largest salmon fishery in the world; is an international fur fishery; and provides the habitat for many marine mannals, including several whale species on the rare and endangered species list. We do not presently have the capability to conduct the needed resources and environmental assessments. To meet the tentative schedule requirement for general sale in the Alaskan OCS by 1976 requires that expertise necessary to provide these assessments be available in FY 1974 to allow adequate lead time for a comprehensive studies and analysis.

(e) Gulf of Mexico. ($120,000)

Studies are required to assess the impact of deep water OCS leasing in the Gulf of Mexico beyond 200 meter depths.

(f) Pacific Analysis Team. ($215,000)

Studies are required to properly evaluate the possible environmental impact of additional mineral development on the Outer Continental Shelf of the Pacific Coast off southern California. Using experience gained in the Gulf of Mexico, the study team will initiate studies on the environmental impact of specific types of mineral exploration, leasing, and production. The team will also initiate and monitor special contract studies that assess the environmental and socio/economic impact of mineral leasing in this area.

(g) Contract Studies. ($390,000)

Contract studies are planned to complement the work of the environmental field groups to be set up in the new areas. Their purpose is to provide general environmental, economic, and resource information for new areas.

(h) Evaluation of Alternative Energy Sources. ($110,000)

Evaluation of alternative energy sources and their environmental impact has occupied at least 40 percent of the effort of producing the most recent OCS environmental impact statements and has given rise to the most serious interagency coordination problems. Currently each agency preparing an environmental impact statement must research its own data on energy sources. Costs in time and funds are high for each statement, and individual statements vary in facts, interpretation, and presentation of policy. The increase will enable BLM to publish semi-annually a report including current and projected production from each source, and current appraisals of environmental impacts associated with each energy source. This report will be a central source of current information for all Federal agencies working on energy-oriented environmental statements. Supplemental reports to the semi-annual report will be published if significant changes occur in the energy field. Such a reporting system will enable the preparation of environmental statements based on a published and accepted body of current information and will allow interagency coordination to be conducted on an objective, orderly basis.

(i) Operational Support. ($65,000)

The further acceleration of leasing sales will create an additional operational workload in pre and post-sale evaluations, public hearings, economic operational studies, and supervision of contract studies.

(3) Geothermal Leasing, $200,000: Development of a geothermal leasing program is an integral part of Departmental efforts to make available energy resources on Federal lands. Under the Geothermal Steam Act of 1970 the Secretary of the Interior is responsible for leasing of public lands for the development and utilization of geothermal steam and associated geothermal resources.

About 1.8 million acres of land in the western States have now been classified as "being within known geothermal resource areas" (KGRA's). An additional 96 million acres are listed as having "prospective values" for geothermal steam. Nearly 60% of each of these area classifications are on Federal lands.

The proposed increase will expand the Bureau's program to stimulate the development of geothermal resources while concurrently assuring that geothermal exploration, development, and extraction is accomplished in a manner to minimize impacts on other land resource values. Efforts will be concentrated in the

states of California, Nevada, Oregon, and Utah which contain the principle known geothermal resources areas. Major program features will include adjudication of the conversion rights established by Section 4 of the Geothermal Steam Act, analysis and selection of potential leasing tracts, development of resource use plans and environmental analyses, coordination with other Federal agencies, and development of a leasing schedule. Other features of the geothermal program involve evaluation of resource cost and market data, post-sale and pre-sale evaluation of tracts, and a continuing study program to update and refine leasing regulations and procedures.

Analysis and selection of potential leasing tracts and development of a leasing schedule will involve a joint effort between the Bureau of Land Management and Geological Survey. Identification of areas will be followed by appropriate land use planning, environmental analyses, and public hearings as necessary. Based upon these actions it is estimated that there will be about 4 geothermal lease offerings in FY 1974.

(4) Surface Protection, $550,000: The energy needs of the Nation are rapidly accelerating, necessitating the development of new energy sources. Public lands provide 10% of the Nation's domestic supply of oil and natural gas. Environmental considerations are eliminating some energy sources and restricting use of others. Public concern for marine environmental protection has contributed to the delay of lease sales on the OCS and could affect the upland program as well. BLM must insure that all proposed upland mineral management activities are properly conducted to minimize adverse impact upon the surface management of public lands. This is to be done in close cooperation with USGS.

Departmental regulations (43 C.F.R. 23), implementing instructions, and the Council on Environmental Quality guidelines provide for the protection of all public land resources and the environment, as well as reclamation of land during and after exploration, development, surface mining and on-site processing of minerals and mineral materials. They apply to permits, leases, or contracts issued under various Mineral Leasing Acts and the Minerals Act of 1947.

The Bureau's surface protection program seeks to:

(1) Safeguard those surface resources subject to damage because of on-shore mineral leasing and exploration activities on up to 80 million acres of public domain by 1978.

(2) Initiate technical and compliance examinations on all new permits, leases and contract areas especially as related to rehabilitation and access roads.

MAN'S CAPACITY TO CHANGE THE EARTH'S SURFACE IS ALMOST LIMITLESS

(3) Perform comprehensive technical and compliance examinations on all cases by the end of FY 1977.

In the GAO review of the Department of Interior's administration of regulations concerning surface exploration, mining and reclamation of public lands, GAO found that these regulations were not being effectively implemented in several significant areas. The FY 1974 increase will provide additional capability to deal with the BLM deficiencies identified by GAO.

The FY 1974 surface protection program will provide a satisfactory capability to perform required technical examinations, develop protective stipulations, review restoration efforts, and other associated activities. Approximately 14 million acres will be covered under this program in FY 1974.

The proposed increase of $550,000 builds upon efforts initiated in FY 1972 and FY 1973 to provide the nucleus of multi-resource teams in 5 states (Utah, Wyoming, New Mexico, Montana, and Colorado) which have very active mineral leasing programs (particularly for coal). The teams will conduct technical examinations as required by Departmental regulations. Additional capability is provided to develop and include protective stipulations, review surface restoration efforts, review exploration and mining plans, and perform compliance checks in conjunction with USGS. Funds are also provided for 5 additional states with smaller but locally important mineral leasing programs to support their surface protection needs.

Surface protection efforts must be expanded if we are to protect and preserve the environment while also being responsive to the need for development of new energy and mineral sources.

(5) Public Land Inventory and Planning, $650,000: The proposed increase provides for completing land and resource use plans on priority energy resource areas. These will be multiple use plans, to provide guidance for integrating energy materials production with other public land resource uses.

BLM operates a planning system for public lands and resources which integrates information from a variety of disciplines and relates it to major public land activities. This system has two distinct processes. The first is referred to as Management Framework Planning (MFP's), and involves developing socio-economic and environmental information, and a physical resource inventory. Conflicts between competing resource uses are identified. The plan shows how these conflicts will be reconciled. It establishes guidelines for coordinated and balanced use of all resources in the planning unit. Public participation plays a significant role in this process, and insures that plans are coordinated with other local, state, and regional plans and are responsive to public thinking. The second process, termed Activity Planning, develops specific action plans for individual resources within the guidelines of the MFP's so that properly coordinated resource utilization programs can be effectively implemented to meet public needs.

Accelerated Inventory and Planning efforts will include completion of MFP's in priority energy source areas. Subsequent energy development activity plans will be formulated recognizing the guidelines set forth in the MFP. Specific areas scheduled for planning efforts in 1974 include:

- Coal regions in Montana and Wyoming, Utah and Colorado.

- Oil Shale Regions of Utah, Wyoming and Colorado.

National importance continues to be focused on public lands and the need for advance planning. There are penalties of inaction. Planning efforts develop the basic information with which to make the analyses of proposed actions and for environmental impact statements. Resource programs such as energy production will be delayed administratively or in the courts if there is a lack of information to prepare an adequate statement. If the public lands are to fully support national goals for clean energy, environmental protection, housing, open space and outdoor recreation, and if the Bureau's efforts are to be compatible with NEPA and the

proposed National Land Use Policy Act which requires coordination between Federal and local land use plans, we must move aggressively to inventory and plan for the utilization of public land resources, under environmentally sound conditions.

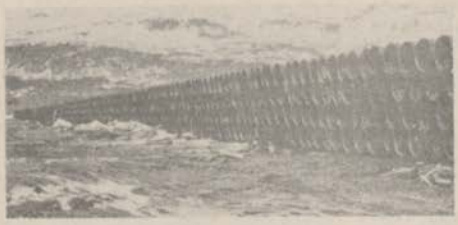
PUBLIC PARTICIPATION IS AN ESSENTIAL INGREDIENT OF THE PLANNING PROCESS

(6) Environmental Analysis and Statement Preparation, $600,000: The National Environmental Policy Act (NEPA) of 1969 has been an increasingly important factor affecting the management of public land. Since passage of NEPA the workload in the preparation of environmental analyses and environmental impact statements, the holding of related public hearings and the review of other agency work has expanded at a substantial rate. As a support function to the Bureau's overall program for environmental protection and enhancement of public lands through public appreciation and comments, efforts have also been initiated to provide the public with knowledge about environmental matters through a modest educational program, which includes environmental study areas for local communities and institutions. This additional workload has. been and will continue to be absorbed by the benefiting resource managements programs.

The proposed increase is intended to conduct environmental analysis activities as necessary to develop and lease energy resources such as oil shale, coal and geothermal steam. Principal components of the planned environmental work are: (1) an interdisciplinary analysis of energy actions which have an impact on the environment but do not require statements; (2) preparation of environmental statements for energy development actions which significantly affect the environment; (3) public hearings as required in connection with statements.

Failure to complete comprehensive environmental evaluations as related to energy development could cause major delays in energy development. Also under NEPA land use decisions must give full consideration to environmental values and their protection.

(7) Trans-Alaska Pipeline, $7,400,000: The budget increase proposed for FY 1974 is contingent upon clearance of current litigation in the Appeals Court in favor of the project and issuance of a permit for the construction of an 800 mile pipeline from Prudhoe Bay in the north to a warm water port at Valdez. When initiated, this undertaking will be the largest construction project of its kind ever attempted in North America. Adding to the complexity of this project are the remoteness of much of interior Alaska, the northern climatic conditions, and unique environmental characteristics. Two major factors influence the pipeline decisions and activities: (1) the need to utilize the vast oil reserves of the Arctic in the face of current energy shortages and (2) the necessity to adequately protect the fragile Alaskan Environment.



PIPE ON STATION READY FOR CONSTRUCTION

The Bureau has overall responsibilities for surveillance and monitoring pipeline construction activities. Under a tentative agreement with BLM, the Corps of Engineers would support the project with engineering reviews and technical surveillance of pipeline construction and related pumping and terminal facilities. Of the total increase, $4.7 million is intended for reimbursement to the Corps.

In view of current and projected energy shortages and enormous investments committed to the project, construction will proceed as rapidly as feasible once the permit is issued. Work will be based on a seven day week with two ten hour shifts per day. Pipeline and associated construction activities will proceed simultaneously on 12 to 13 widely separate spreads. Construction features include 800 miles of pipeline, 350 miles of road (Yukon to Prudhoe Bay), construction pads, lateral access roads, valve and pump station sites and terminal facilities.

The Bureau workload is outlined as follows:

- Project Management including preparation and administration of eight or more inter-agency agreements; coordination and resolution of conflicts; coordination of inter and intra agency resource and environmental analysis and evaluation; overall enforcement of the pipeline permit and preparation and review of related land and resource use authorizations. Enforcement includes permit stipulations and special conditions.

- Office Management including coordination of design and review and change orders by all agencies; coordination of surveillance by State and Federal agencies; transportation and logistics coordination; documentation of project progress; maintenance of files and response to public inquiries; analysis, preparation, review, appraisal, adjudication, issuance, and compliance investigations and reports for all pipeline system permits. Use authorizations and material sales workload estimates include: 122 cases for roads and communications sites; 3 airport leases; 250 material sales; 160 material free use permits; 200+ waste and storage areas; 150 tracts of timber to be sold; 16 camp and airstrip permits; and an unknown number of mining and other prior right claims. Coordination of accounting

for such items as motor vehicle and aircraft use, housing, meals, etc. is also required.

- Technical and environmental reviews which include coordination and conduct of pre-to-post resource studies and investigations including fish, wildlife, aesthetics and recreation, soils, geology, hydrologic, vegetative, mining, rehabilitation, and engineering analysis; evaluation of alignments, re-alignments and project actions; design reviews and adjustment of stipulations to meet field conditions. This includes land clearing, filling, grades, fuel storage, access, water crosssings, painting of structures, and field inspections, consultations and coordination of all technical and environmental interests.

- Overall responsibility for surveillance which encompasses continuous monitoring of all work performed both on and off the right-of-way and coordination of surveillance by other agencies.

The Corps of Engineers will be responsible for technical inspection of the physical facilities involved in the transport and storage of crude oil. These construction features include:

- Line pipe, valves, and other line pipe appurtenances.

- Pumping units, tanks, and containment dikes.

- Pipes, tanks, docks, and loading facilities at the Valdez terminal.

- Power generating equipment at pump stations and the Valdez terminal, and related switch gear and power distribution systems.

- Remote control facilities for block valves, pump stations, and the Valdez terminal.

- Communication system for remote control, telemetering, supervision, and voice communication including repeater stations.

- Provisions for corrosion protection, fire protection, lighting protection and grounding.

The Corps specific activities will involve:

- Review of preliminary and final designs, specifications and modifications thereto.

- Review of plans and procedures for start-up, operation, maintenance, and monitoring of the pipeline.

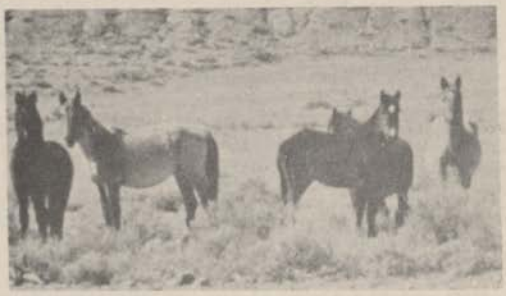
- Engineering quality control including structures, foundations, electrical and mechanical equipment

- Surveillance of construction (design validation) and necessary field tests.

These proposed efforts are essential to expediting the proper construction of the pipeline and protection of Alaska's environmental resources.

(8) Protection of Wild Horses and Burros, $300,000: High public interest in the protection, control and management of wild horses and burros led to the enactment of P.L. 92-195. The purpose of this new law and the objective of this program is to assure the protection and management of an estimated 17,000 wild horses and 10,000 burros as part of our national heritage.

The proposed program increase for FY 1974 is a continuation of the small initial effort begun in FY 1973, resulting from Congressional action on the Bureau's FY 1973 budget requests:



The FY 1974 program will:

- Initiate surveillance and protection, including training for law enforcement associated with implemention of the Act.
- Continue an inventory of wild horses and burros.
- Determine ownership and permit removal of privately-owned animals.
- Provide funding support for the joint BLM-USFS advisory board required by the Act. This advisory board has been established and is now operational.
- Provide cooperative agreements with private national, state and local groups interested in wild horses and burros.

Special emphasis is given to completing an intensive inventory of wild horses and burros on some 15 million acres of public land that makeup their major habitat. Based on these inventories, management plans will be developed for the purpose of their preservation and protection. An indication that a positive management program is underway will help alleviate the concerns of over 16,000 people who have expressed their interest and concern in writing to the Bureau regarding wild horses and burros.

(9) Soil and Watershed Maintenance, $200,000:

For a number of years the funding level for the Bureau's Soil and Watershed maintenance program has not kept pace with the construction of soil and watershed structures. This program provides maintenance of facilities built over the years to protect soil and watershed resources and improve water quality by reducing soil erosion and improving vegetative cover. Some of the water detention structures were installed as early as the CCC days and are in need of evaluation and repair. To avoid possible repetition of a disaster such as the 1972 Buffalo Creek, West Va. incident where failure of a dam caused loss of

life, an accelerated inspection and maintenance program is required.

The FY 1974 program increase would be used for annual evaluations and emergency type maintenance on high priority detention dams, dikes, and water diversion structures. To the extent of fund availability, the increase will also be used for yearly preventive maintenance on wells, water pipeline, and fences.

Over 26,000 projects have been constructed by the Bureau with soil and watershed monies over the past twenty years and must be properly maintained.

The major benefits to be derived are the protection of the capitol investments already expended in the construction of these facilities, the prevention of downstream damages, and the control of further watershed deterioration. Perhaps the most important benefit is that public safety interests would be satisfied when structures that could potentially endanger many western communities are properly maintained.

(10) Off Road Vehicles (ORV), $300,000: The unprecidented growth of off-road vehicle use and its implications for public land management and protection have prompted new emphasis on the part of all affected Federal agencies in this area. In order to protect the public land from irreparable damage, to promote the safety of land users, to minimize conflicts between various land uses and to enhance the enjoyment of the off-road vehicle enthusiast, additional FY 1974 program capability is needed for ORV management.

There are some 4 million motorcycles, dune buggies, snowmobiles, and other all-terrain vehicles using the public lands. Although a major portion of this use is unorganized, there is an average of 500 organized events held annually on the public lands. In 1971 there were 18 ORV deaths and over 500 injuries in California alone.

Proposed program features of the Off-Road Vehicle program are as follows:

- Designation of off-road vehicle areas to include appropriate efforts in planning, environmental analyses and public participation prior to designations.
- Development and issuance of maps and brochures that clearly identify the areas of use and desirable conditions of use.
- Marking of ORV use area boundaries and trails.
- Conducting studies to determine the effect of ORV use on resources and to identify the need and type of rehabilitation on damaged lands.
- Providing for use supervision of organized events.

START OF 150 MILE RACE ON PUBLIC LANDS IN CALIFORNIA

This program will contribute to the protection of the land and fragile resources as well as the off-road vehicle enthusiast.

Program of Continuing Work

This activity provides for the interdisciplinary multiple-use management of the National Resource Lands. Technical Support functions such as cadastral survey and facility and road construction and maintenance are financed by other activities and appropriations.

Coordinated management of resource programs is achieved by assignment of practical management areas within the Bureau's District Office boundaries to an Area Manager. Technical specialists such as wildlife biologists, realty and recreation specialists along with engineers, technicians and administrative support personnel are available to assist the Area and District Managers in the management of the National Resource Lands. The program of continuing work for each resource category is discussed below:

Lands and Minerals Management

Realty Activities: This program provides for: maintaining public land records in the land offices; providing public land status and information on public land laws and regulations; processing lands and minerals applications for other Federal agencies, state and local governments, and private individuals and accomplishing Bureau-motion realty transactions such as exchanges. Activities include field examination, adjudication, and issuance of various types of leases, and permits.

A large portion of the Bureau's realty activities are concentrated in Alaska. The Alaska Statehood Act provided for selection of over 104 million acres by the State of Alaska of which over 77 million acres had been identified in January, 1972. The Alaska Native Claims Settlement Act (ANCSA) of 1971 provided the Native Villages and regional corporations with 40 million acres of selection rights. Additionally, ANCSA provided for other Federal agencies to withdraw up to 80 million acres for areas of National interest.

During Fiscal Year 1973 an estimated 9,000 lands cases will be closed. Fiscal Year 1974 efforts are planned to process 13,500 cases; the accelerated activity is primarily attributed to the ANCSA. At this time, there are over 90 million acres of unsatisfied State Selection Grants in Alaska and over 500,000 acres remaining to be selected by other Western States.

Land records improvement work will continue in FY 1974. This includes construction of new land status records in each State Office for replacing original documents as well as preservation of field survey notes.

Minerals Management

This program is oriented toward orderly and timely development of non-renewable mineral resources on the National Resource Lands as well as the Federal Outer Continental Shelf. The program consists of disposal of mineral resources by patents, mineral leasing, and material sales including free-use permits to governmental agencies. Regulations are implemented which ensure safeguarding of the public interest and physical environment by protecting the land surface during exploration and extraction operations.

In addition to the traditional exploration, mining, and drilling operations on the public lands and Outer Continental Shelf, increased emphasis and activity is being given to the development of oil shale, coal conversion and gasification, and geothermal steam in attempts to cope with increasing demands for energy sources. These new programs, accompanied by environmental protection responsibilities, require significant changes in the Bureau's organization and staff capability as indicated in the 1974 increase proposals.

Alaska Pipeline Inspection

This subactivity was established specifically to account for cost of all work associated with inspecting and monitoring the progress of the proposed Trans-Alaska oil pipeline. In accordance with Departmental policy and Congressional intent, the successful pipeline right-of-way applicant must reimburse the General Fund of the Treasury for those costs attributable to inspection and surveillance activities directly related to the pipeline. This includes this Bureau's costs as well as costs incurred by other Bureaus. Activities covered include those incident to issuance of the right-of-way and associated permits; enforcing construction and operation guidelines and stipulations; supervising actual construction; coordinating activities of all participating Federal agencies; evaluating overall environmental effects of the pipeline and attendant facilities; and conducting environmental and resource impact studies as necessary.

The final environmental impact statement on the pipeline was released on March 20, 1972. A preliminary injunction against permit issuance was lifted on August 15, 1972, but the case is now in the Court of Appeals. Assuming a favorable decision, the permit may be issued prior to FY 1974. The Bureau has continued to prepare for the start of construction pending the issuance of a permit.

Range Management

This phase of land management involves the application of physical and biological principles in the management of plant and animal species to: (1) increase production of desirable vegetation for wildlife and domestic livestock; (2) increase vegetative cover to improve soil stability; and (3) observe aesthetic considerations in management of habitat.

The intensive management required to achieve the desired vegetative cover and composition is accomplished through allotment management plans (AMP's). The AMP is developed in cooperation with the livestock operator and designed to accommodate the growth requirements of key plant species. Under this program, management objectives have been realized at an increasing rate. Success of the program is indicated by the backlog of over 600 firm requests by livestock permittees for intensive management plans as of June 30, 1972. Accomplishment in FY 1973 has been limited because a large part of the available manpower is required for overall administration of the Range program and maintenance of AMP's already in affect.

Accomplishments to date and an estimate of total AMP requirements are portrayed in the following tables:

Allotment Management Plans

Total Plans Completed 6/30/72	Acres	Estimated Total Plan Requirements	
1174	30.1 Mill.	Plans	Acres
Plans Implemented 6/30/72			
964	23.5 Mill.	8,300	133,000,000

Plans Completed -- Not Implemented 6/30/72

Plans	Acres
210	6.6 Million

Additional range management workload includes maintenance of appropriate use records and issuing 26,000 permits and leases annually. This workload presently requires approximately 56 percent of the total manpower in the range management activity. About 3.6 million cattle and horses and 5.9 million sheep and goats graze on public lands in the western States and Alaska plus 23 thousand reindeer in Alaska. Annual forage consumption by livestock from BLM lands is about 13.6 million animal unit months.

Forestry

This program includes forest management of the revested Oregon and California Grant Lands in western Oregon and forest management and development of Public Domain forest resources. The goal of the Bureau's forestry program is the multiple use and sustained yield of forest resources while protecting aesthetic values. Additionally, the forestry programs are designed to support the Housing and Urban Development Act of 1968 and are carried out in accordance with the National Environmental Policy Act of 1969.

Forest Management - western Oregon: The program provides direct employment for approximately 10,000 people in the private sector and supplies 17-20 percent of the log volume used annually in western Oregon.

A new management plan for the forests of western Oregon was adopted by Secretary Morton on March 23, 1971. This plan identified 1.8 million acres of 2.4 million acres as available for intensive practices to maximize wood yields. Another 200,000 acres are identified as commerical forest land, but cutting is restricted because of other values. The plan is unique in that it prescribes environmental protection measures and intensive forest production features in one document.

HIGH-LEAD LOGGING ON A BLM TIMBER SALE IN THE SALEM DISTRICT OF OREGON.

The following table shows volumes, sales prices and receipts in western Oregon for FY 1970 through FY 1972 and current estimates for FY 1973 and FY 1974. These include Oregon and California Grant Lands, Coos Bay Wagon Road Lands, and western Oregon Public Domain timber volumes:

	BLM Sales		Receipts	
FY	Million Board Feet	Sales Price[a/]	BLM	Forest Service
1970	1,662	$82,101,000	$52,531,000	$10,367,000
1971	1,235	51,913,000	60,350,000	8,274,000
1972	1,194	66,219,000	72,303,000	8,844,000
1973*	1,225	58,800,000	65,200,000	9,800,000
1974*	1,172	58,600,000	65,000,000	9,800,000

* Estimates

a/ Receipts vary because payments are made on cutting schedules, not at the time timber is purchased (see the table below).

The following tabluation shows the source of timber sales receipts by type of lands:

FY	O&C Land[a/]	Coos Bay Wagon Road Land	Western Oregon Public Domain	Total
1970	$58,804,000	$2,642,000	$1,452,000	$62,898,000
1971	63,734,000	2,616,000	2,274,000	68,624,000
1972	75,334,000	2,134,000	3,679,000	81,147,000
1973*	70,000,000	2,500,000	2,500,000	75,000,000
1974*	70,000,000	2,600,000	2,200,000	74,800,000

* Estimates

a/ Includes Forest Service receipts.

Forest Management - Public Domain: In FY 1974, sales totaling 70 million board feet will be concentrated mainly in California, Colorado, Idaho, Montana, eastern Oregon, Wyoming and Washington, since these states have the best potential for development of commercial forest lands. In the remaining states, forest management will continue at a protective level, yet one which allows meeting the current demand for forest products.

Because of the environmental impact which forest lands have on clean air, water production, wildlife habitat, recreational experiences, and other public values, environmental aspects of timber production are receiving greater consideration in forest management programs. As part of an intensive management program, a complete inventory of the public domain forest lands in Montana, Idaho, California, Colorado, Wyoming, and New Mexico is scheduled for completion in 1975.

Actual FY 1970 through FY 1972 and estimated FY 1973 and FY 1974 volumes, sales prices, and receipts for timber sold from Public Domain lands exclusive of western Oregon are as follows:

FY	Thousand Board Feet	Sales Price	Receipts
1970	125,000	$2,568,000	$2,121,000
1971	72,000	1,812,000	2,500,000
1972	51,000	1,620,000	2,372,000
1973*	97,000	2,040,000	2,368,000
1974*	70,000	1,470,000	1,990,000

* Volume to be offered and estimated prices and receipts.

Forest Development - Public Domain: The immediate objective of this program is to restore timber producing capacity to forest lands where it has been reduced due to logging, fire or other causes. Early establishment of cover protects watersheds, restores production, and enhances physical appearance. This effort also suppresses growth of undesirable species of no economic value and reduces fire hazard. The FY 1974 level of financing will permit 2,000 acres of reforestation, 1,000 acres of site improvement and about 800 acres of stand improvement.

Soil and Watershed Conservation

The Soil and watershed program has three primary objectives: (1) to determine condition and potential of watersheds by using trained personnel and systematic evaluation methods; (2) to protect and improve productivity of watersheds on the Public Lands; and (3) to establish and maintain acceptable standards of watershed management to control soil erosion and water yield. This program also provides technical data and capital investments in support of other resource management programs conducted on the Public Lands.

Effective land management and treatment practices are dependent upon knowledge of soil stability, water quality and quantity, and environmental considerations in determining the proper location and design of roads, location of rights-of-way, provisions for exploration, extraction, and rehabilitation of mineral deposits timber harvesting, recreation use and development, wildlife habitat, and rehabilitation of watersheds damaged by fire, flood and other events. Support of these activities requires the watershed program to:

(1) Determine need and use of a sufficient supply of usable water to permit the long-term use, management and development of public land resources.

(2) Design and apply management practices to improve water quality, quantity, and timing of yield, and avoid pollution of water flowing through or from Public Lands.

(3) Manage watersheds which are a direct source of domestic water to provide a controlled yield and quality for the user.

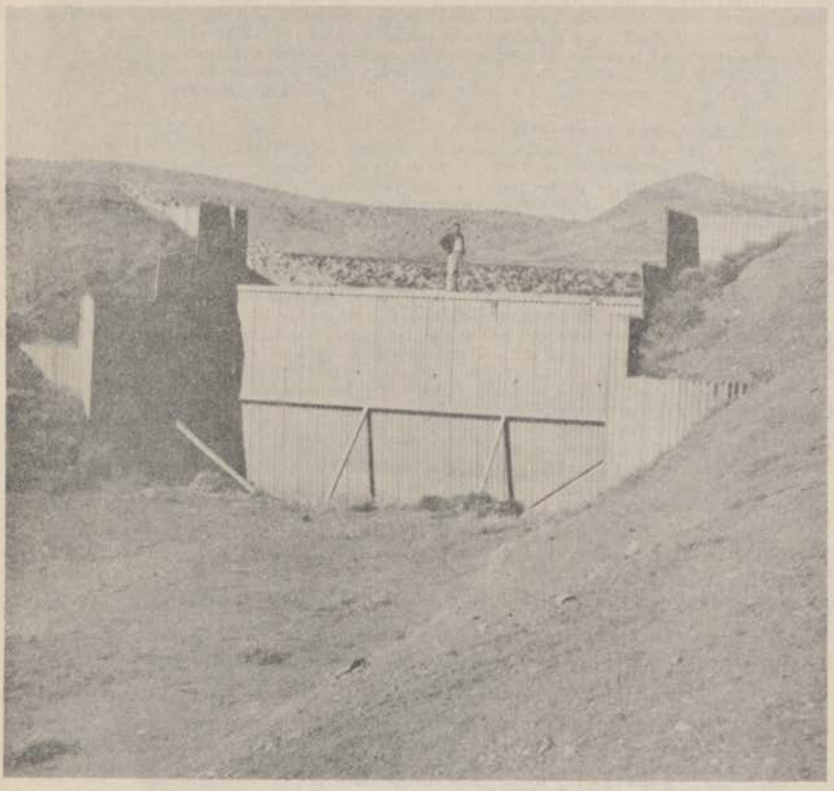
SEEDINGS HELP STABILIZE IMPORTANT WATERSHEDS AND PROVIDE FORAGE FOR DOMESTIC ANIMALS AND WILDLIFE

(4) Rehabilitate damaged watersheds to restore stability, productivity and proper hydrologic function.

In areas denuded of vegetation, artificial revegation and other soil conserving practices are required to accomplish desired results. Control of gully, streambank, and streambed erosion often requires special stabilization structures, riprap, sloping, and vegetating eroded banks.

The control of soil erosion and water productivity will include various practices now being carried out such as water retention and detention dams, contour furrowing, vegetative manipulation, and weed and pest control practices that affect water quality and quantity.

Watershed conservation program accomplishments and needs are reflected in the table on the following page.



DROP STRUCTURE TO PREVENT SILTATION AND EROSION

CONSERVATION ACCOMPLISHMENTS AND NEEDS OF LANDS UNDER JURISDICTION
of the
BUREAU OF LAND MANAGEMENT

	Units	Inventory of Total Needs 1/	Accomplishments 2/ 1937 - 1972	Planned 1973	Planned 1974	Remaining Work
Water Control Structures.....	Cu. Yds.	242,602,300	29,986,665	61,000	65,000	212,489,635
Other Conservation Practices 3/....	Acres	19,125,900	3,086,269	100	11,000	16,028,531
Undesirable Plant Control.....	Acres	121,900	72,465	3,035	5,000	41,400
Revegetation.....	Acres	14,798,000	3,653,437	23,495	4,000	11,117,068
Water Developments.....	Number	85,200	45,148	1,200	1,200	37,652

1/ Inventory of total needs was completed by the Bureau during 1964 and reflected the total needs of the public lands as then identified. The inventory amounts include those listed under "Accomplishments."

2/ Includes all sources; Soil & Watershed, Range Improvements, Fire Rehabilitation, P.L. 566, and Private.

3/ Includes contour trenches, pitting, furrowing, waterspreading, streambank protection, gully control, dune control, and deep tillage.

Fire Protection: Effective fire protection is dependent upon the early detection and timeliness of the initial attack. This requires adequate equipment and sufficient well-trained manpower to affect control of the fire and reduce damages.

In the past, fire protection activities for 400 million acres of public lands have suffered from inadequate equipment, lack of manpower and shortages of supplies. Fire suppression has also demanded personnel from other programs thus inhibiting planned accomplishments. To correct these deficiencies, the Bureau has completed, and is implementing, initial Normal Year Fire Plans within the limits of available resources.

Fire protection and preparedness programs at the Boise Interagency Fire Center and at other locations throughout the West and in Alaska are financed by this activity. The Fire Center is a specialized joint training and operational unit of the Bureau of Land Management, U.S. Forest Service, and the U.S. Weather Service. The Fire Center arranges backup suppression support consisting of fireline manpower, fire control overhead, and equipment for the Bureau, other Interior Bureaus, the U.S. Forest Service, and certain State Governments on a reimbursable basis.

The Bureau is developing an active program to provide professionally trained personnel, an improved communications system and radio network, better fire control training,and modernized fire equipment.Operation of the Bureau's communications network is primarily financed by this subactivity; however, other subactivities share in these costs in proportion to the benefits received.

"SMOKEJUMPER TRAINING"

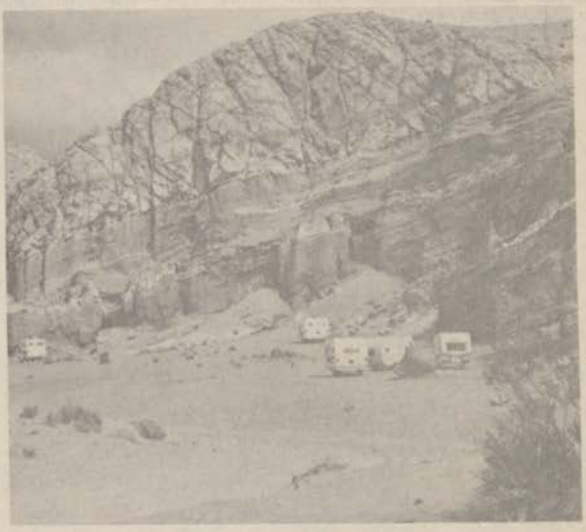
Recreation Wildlife

Recreation Management: Ever increasing numbers of people are using the public lands for a variety of recreation pursuits. Visitor use has increased to 50 million visitor days per year and is expected to exceed 80 million days by 1980.

A primary objective of the recreation program is to meet the growing demand for public recreation near large western population centers. Within a 40 mile radius of the 16 major population centers of the western United States, the Bureau manages 6 million acres of land, much of which has high recreation potential. Within 3 hours drive, 66 million acres of public land are available to residents of major urban centers for public outdoor recreation. Other important objectives include providing opportunities in areas of national significance such as in the California-Nevada-Arizona desert, primitive areas, and wild and scenic rivers, and protection and enhancement of historical and cultural features. Also, under present conditions of heavy use, added emphasis is given to visitor safety and the preservation and protection of the environment.

Legislative and Executive Orders that play a major role in establishing recreation priorities include: The Antiquities Act, Wild & Scenic Rivers Act, National Trail Systems Act, King Range National Conservation Area Act, E.O. 11593 (Protection and Enhancement of the Cultural Environment), and E.O. 11644 (Off-Road Vehicle Management).

This program includes recreation site inventory and investigation and inventories of National systems such as wild rivers, trails, and wilderness areas. Field examination, data, collection, access need determination, interpretive work and program direction for recreation planning are included. Use supervision involves a considerable workload as associated with off-road vehicles and intensive use areas.



BLM RECREATION SITE IN CALIFORNIA

Detailed planning such as feasibility studies, impact studies and preliminary site investigations prior to design and construction will continue to be an important function of the recreation management program. This program is coordinated with state, local, and other Federal agencies' recreation programs in order to meet public demand, minimize conflicts, and provide environmental contacts on the public recreation lands.

Wildlife Management: The Wildlife program in FY 1974 continues to emphasize inventory and analysis and management framework planning, including the public participation process. Habitat management plans are developed where the wildlife resource is a valuable consideration and in areas where the wildlife habitat is a problem needing immediate attention such as the habitat of endangered species. A total of 128 terrestrial habitat plans and 9 acquatic plans have been prepared to date.

DESERT BIGHORN SHEEP

The Bureau is continuing to emphasize programs to protect rare and endangered species on the public lands. The FY 1974 program will provide for habitat protection and improvement for five endangered species. This will include the black-footed ferret program, the first time a regional approach has been taken by the Bureau to inventory and protect the habitat of an endangered species. The proposal encompasses ferret habitat in the states of Montana, Wyoming, Colorado, New Mexico, Utah, and Idaho.

2. Cadastral Survey

Analysis by Subactivities

Subactivity	FY 1972 Amount Available	FY 1973 Amount Available	FY 1974 Estimate	Increase (+) or Decrease (-) 1974 Compared with 1973
Alaska.....	$2,843,305	$3,246,000	$3,471,000	+$225,000
Other States....	4,750,237	4,730,000	4,730,000	-----
Total.....	7,593,542	7,976,000	8,201,000	+ 225,000

2. Cadastral Survey: FY 1973, $7,976,000; FY 1974, $8,201,000; an increase of $225,000. This increase consists of the following:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Program	Explanation
(1) +$225,000	+4	$1,225,000	34	To expand Alaska Cadastral survey capability to facilitate the requirements of the Alaska Native Claims Settlement Act.

AIRBORNE SURVEY SYSTEMS ARE USED IN ALASKA

Cost Factors Involved in Increase

(1) Four permanent man-years at an average cost of $17,000, $68,000; Travel and per diem costs at an average annual cost of $5,000, $20,000; Rent, communications, supplies, materials and equipment, $17,000; Contractual training services for cadastral surveyors, $120,000.

Need for Increase:

(1) Alaska Native Claims, $225,000: $225,000 is proposed in FY 1974 for cadastral survey work required in the implementation of the Alaska Native Claims Settlement Act.

As required by the Act, surveys will be conducted "on areas selected or designated for conveyance to Village Corporations.... and areas selected or designated land occupied as a primary place of residence, as a primary place of business, and for other purposes, and any land to be patented under this act." The Native Claims

program will ultimately survey about 200,000 separate tracts and 40 million acres.

The Alaskan climate, terrain and cadastral survey methods require that the cadastral surveyor be well trained.

The increase for FY 1974 will provide for the development of course materials to (1) train surveyors to perform Alaska type surveys, (2) to refine techniques for airborne surveys, and (3) to evaluate application of inertial guidance and other new technology for Alaska surveys.

Program of Continuing Work

Cadastral Survey: BLM is the Federal agency responsible for the establishment of the boundaries of the public domain lands in the United States which are managed by BLM, National Park Service, Bureau of Indian Affairs, Forest Service, Bureau of Sport Fisheries and Wildlife, Bureau of Reclamation, etc. BLM attempts to meet this responsibility in an orderly, cooperative manner insofar as manpower and funding permit.

Current goals of the program are:

- Complete an estimated 2.1 million acres of original surveys and resurveys expected to be requested by other agencies by 1977.

- Do original survey or resurveys of 10.4 million acres in the western States, excluding Alaska, by 1977.

- Put surveys in support of BLM programs on a pipeline basis by end of FY 1978.

- Establish a formal corner search and evaluation program in forested areas with cadastral survey follow-up to rehabilitate existing corner evidence or reestablish lost corners by official resurvey procedure.

Cadastral survey is basic to all major resource programs and is the unique responsibility of BLM. It is needed for public land sales, exchanges and transfers; easement acquisitions; timber sales; rights-of-way actions; and land and timber trespass. The Bureau's cadastral effort has been relatively level since 1965 while population growth and, subsequent requests for western lands doubled the demand. Furthermore, the Forest Service remonumentation program and the need to establish National Park and Indian Reservation boundaries require considerable BLM effort.

The Cadastral program is operating on a demand basis, rather than on a well-planned survey schedule. This is inefficient and can lead to substantial public losses. Financial losses to the government occur because of doubtful old surveys, particularly in timber sales and trespasses.

Alaska: The Alaska Statehood Act granted Alaska 104 million acres of selection rights. In January 1969, Public Land Order 4582 withdrew all Alaskan lands from further selection pending settlement of Native Claims protests. At that time, the State had selected 25.6 million acres. The selected lands must be surveyed before patents can be issued. The Status of the state selection program as of November 1, 1972 was as follows:

Acres patented (Survey plats compiled and approved)	5.7 million
Patent issuance pending survey action	22.2 million
Field surveys completed, plats and records being prepared in office	10.9 million
Acres requiring field survey	23.7 million
Total acres selected to date	62.5 million

About 65 percent of Alaska's Cadastral Survey Program involves state selection work. The balance is devoted to special surveys to provide for title transfer under the various public land laws. These include native allotments and townsites, trade and manufacturing sites, etc., amounting to about 50,000 acres annually. Over 345 million acres remain unsurveyed in Alaska. The Native Claims Act will require cadastral surveys of much of this acreage.

Other States: Considerable benefits will accrue from improved surveys. It is estimated that over $30 million from timber and land values will accrue in California and Oregon alone from an efficiently-operating survey program. Long term benefits include more efficient management, better public relations, and prevention of further revenue losses to the government.

Cadastral survey is fundamental to any land-use application. Lands Classified for disposal cannot be disposed of unless surveyed, and land designated for Federal retention cannot be properly managed unless definitely identified. Much of the original survey was completed prior to 1910 and is deteriorating. Sixty-five percent of the base effort in FY 1973 will be directed to resurveying pre-1910 work and establishing corners which were never actually set, or permanently preserving decaying ones. Also, additional effort will be devoted to the growing need for oil and gas leasing maps on the Outer Continental Shelf.

A recent analysis of the intermediate survey needs in support of BLM resource management programs was conducted. Based upon foreseeable programs requiring cadastral support, land ownership patterns and condition of existing surveys (if known), the potential survey workload just to support BLM programs was established as follows:

	Miles of Survey	Number of Monuments	Man-years of Survey Effort
Known Survey Needs	323,000	641,000	23,293
Additional Survey Requirements depending upon condition of existing surveys	210,000	413,000	15,415
Total Potential Needs	533,000	1,054,000	38,708

Against the potential demand is a present annual capability of about 350 man-years of effort.

3. Firefighting and Rehabilitation

Analysis by Subactivities

	FY 1972 Amount Available	FY 1973 Amount Available	FY 1974 Estimate	Increase (+) or Decrease (-) 1974 compared with 1973
(a) Firefighting....	$20,003,829	$4,800,000	$4,800,000	---
(b) Rehabilitation..	588,577	600,000	600,000	---
Total.....	$20,592,406	$5,400,000 a/	$5,400,000	---

a/ Does not include a request of $19,000,000 in supplement funds to be transmitted separately.

3. Firefighting and Rehabilitation: FY 1973, $5,400,000; FY 1974, $5,400,000.

Program of Continuing Work:

Firefighting:

Funds will be used for emergency presuppression and suppression of fires originating on or jeopardizing the public lands.

The Bureau cooperates closely with other agencies in it's fire control efforts. Improved firefighting techniques, equipment and materials are constantly being tested for adoption. The National Fire Danger Rating System, infra-red imagery for detection and mop-up, high altitude thunderstorm detection, air-drop of water and chemical fire retardants,and the use of smokejumpers and aircraft are among the measures used to increase firefighting effectiveness.

Salaries of permanent employees used for fire suppression on an emergency basis during regular duty hours are budgeted in normal program work,hence are not included in this estimate.

The number of fires reached an all-time high of 2,936 in 1972. However, the 1,35 1,355,250 acres burned was only about 80 percent of the previous five-year acreage average.

Alaska: In 1972, there were a total of 648 fires burning 1,102,000 acres.

Lower 48 states: Nearly 2288 fires were reported in 1972 which burned approximately 253,250 acres. Idaho, Nevada and Oregon suffered above average losses.

Fire Rehabilitation: In this effort, the Bureau conducts emergency rehabilitation work in burned areas to reduce resource,and economic losses. Without adequate and timely rehabilitation following wildfires, exposed soil is vulnerable to wind and water erosion causing stream pollution by silt and debris. Watersheds may be permanently damaged resulting in reduced water retention and production capability. Prompt protection of the soil mantle by restoration of the vegetal cover maintains productivity and retards invasion of undesirable vegetation.

The requested funding level should provide an adequate program for a typical fire year. However, if more extensive damage occurs in a critical fire year, supplemental funding may be required to adequately protect soil and water resources.

4. General Administration

Analysis by Activity

FY 1972 Amount Available	FY 1973 Amount Available	FY 1974 Estimate	Increase (+) or Decrease (-) 1974 compared with 1973
$2,690,000	$2,984,000	$3,084,000	+$100,000

4. General Administration: FY 1973, $2,984,000; FY 1974, $3,084,000; and increase of $100,000 which consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
(1) + $100,000	-	$3,084,000	182	To meet increase administrative workload associated with increased program activity.

Cost Factors Involved in Increase

(1) Supplies, materials and equipment, $25,000; additional computer time and operating expenses, $75,000.

Need for Increase:

(1) The Bureau's administrative capability has not kept pace with the expansion of the resource programs. The increase is required to finance increased utilization of automatic data processes, and the conversion to the new common payroll-personnel automated system being developed in conjunction with the Bureau of Mines and the Bureau of Reclamation.

Program of Continuing Work:

The General administration activity includes the executive direction and administrative support functions consisting of financial management, personnel management, management analysis, procurement, and property management.

Emphasis is placed upon the use of automated systems to accomplish repetitious and routine support work such as payroll, maintenance of ledgers, accounts and equipment inventories, preparing monthly management reports, and maintaining current information on the progress of work programs and the status of operating budgets, and to provide management with necessary administrative support services. The objective is to provide adequate professional administrative support to all Bureau programs. Appropriations which receive common services from general administration will continue to be charged at the rate of five percent to the benefiting activity.

Management of Lands and Resources
Personnel Summary

	1972 Actual	1973 Est.	1974 Est.
Total number of permanent positions	3,271	3,309	3,563
Full-time equivalent of other positions.....	1,875	1,005	1,042
Average number of all employees.....	4,765	4,095	4,369
Average GS grade.....	9.0	8.9	8.9
Average GS salary.....	$13,444	$13,249	$13,250

ITEMIZATION OF ESTIMATE

Management of Lands and Resources

	Actual 1972	Estimate 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$88,110,017	$77,767,000	$91,347,000	$+13,580,000
Unobligated balance lapsing.....	132,075	---	---	---
Transferred to other accounts.....	411,908	298,000	---	-298,000
Transferred from other accounts.....	---	---	---	---
Appropriation.....	88,654,000	78,065,000	91,347,000	+13,282,000
Obligation by Objects:				
11.0 Personnel compensation.....	51,766,000	45,223,000	52,247,000	+ 7,024,000
12.1 Personnel benefits: Civilian employees..	5,662,000	5,098,000	6,647,000	+ 1,549,000
21.0 Travel and transportation of persons	3,943,000	3,723,000	5,145,000	+ 1,422,000
22.0 Transportation of things.....	2,400,000	2,292,000	2,375,000	+ 83,000
23.0 Rent, communications, and utilities	3,050,000	2,092,000	2,375,000	+ 283,000
24.0 Printing and reproduction.....	435,000	464,000	493,000	+ 29,000
25.0 Other services.....	12,737,000	10,532,000	12,850,000	+ 2,318,000
26.0 Supplies and materials.....	4,776,000	4,887,000	5,535,000	+ 648,000
31.0 Equipment.....	1,565,000	1,659,000	1,820,000	+ 161,000
32.0 Lands and structures	1,811,000	1,840,000	1,900,000	+ 60,000
41.0 Grants, subsidies, and contributions...	2,000	---	---	---
42.0 Insurance claims and indemnities.....	10,000	17,000	20,000	+ 3,000
Subtotal.....	88,157,000	77,827,000	91,407,000	+13,580,000
95.0 Quarters and subsistence charges....	-46,983	-60,000	-60,000	---
Total Obligations.....	88,110,017	77,767,000	91,347,000	+13,580,000

ALASKA NATIVE CLAIMS PROGRAM

Mrs. HANSEN. You have an increase of $1,355,000 and 52 positions for Alaska Native Claims work. Will you please give the committee a complete description of your work plan for fiscal 1974?

Will this level of funding permit you to fulfill your obligations under the act?

Mr. SILCOCK. It will in connection with the native claims work for 1974 which involves the assisting in the processing of the Native selections, working toward the village selections to be completed by 1974 or the end of the 1974 calendar year. We also must complete the additional necessary withdrawals in connection with about 2 million acres of miscellaneous withdrawals that have not been processed. There are some 9,000 Native allotment applications on hand, and we must examine each one to see if they qualify.

We are contemplating examination of some 4,500 of those in fiscal year 1974.

Mrs. HANSEN. You have 40 million acres to examine.

NATIVE CLAIM SURVEYS

How much of the mapping is completed?

Mr. SILCOCK. Only as it would tie-in to surveys that we have previously done on the ground on behalf of State selections.

Mrs. HANSEN. Let me put it another way.

How much of that 40 million acres have you surveyed to the degree that it would bear title responsibility?

Mr. SILCOCK. The bulk of that 40 million acres must be surveyed.

Mrs. HANSEN. This brings me to another point. How far behind are you on your surveys in Alaska? I think we discussed for the last several years that it will be the year 2000 before you ever finish in Alaska?

Mr. SILCOCK. We have been behind for a long time on surveys in Alaska from the standpoint of the Statehood Act.

Mrs. HANSEN. How far are you behind?

Mr. SILCOCK. Of the State selection we have surveyed, about 16 million acres; 5.7 million acres have been patented.

Mrs. HANSEN. That is the State selection. You have 40 million acres for Native claims.

Mr. SILCOCK. We have not started on the 40 million.

Mrs. HANSEN. When do you expect to get that completed?

Mr. SILCOCK. First of all, we are not in a position to move just yet because the villages have until 1974 to select their land and indicate that which they want.

Mrs. HANSEN. Don't you have to have some advisory input to assist the natives in their selection?

Mr. SILCOCK. This is part of the role of the State-Federal Land Use Planning Commission, to assist the Natives in their selection, as well as BIA and BLM.

Mrs. HANSEN. In other words, those Natives should be aware of what is under that land?

Mr. SILCOCK. That is correct. We are furnishing them data. We have set up a resource library in Anchorage.

Mrs. HANSEN. How can you furnish them data when the Geological Survey says in its justification that there is a lot of land where no one has the vaguest idea of what is under it?

Mr. SILCOCK. We are furnishing them with what data is available.

Mrs. HANSEN. Then it is not very much.

Mr. SILCOCK. That is correct.

Mrs. HANSEN. How can you be much assistance to the Natives when it is the blind leading the blind?

Mr. SILCOCK. This brings out the fact that there is a lack of information.

Mrs. HANSEN. This is what dismays me.

I am sure that the Office of Management and Budget must read these hearings. We have asked you time and time again about the adequacy of your program. You are one of the principal agencies in the United States involved in land classification.

Mr. SILCOCK. USGS is the main mapping agency in the Department. We are the main land survey agency.

Mrs. HANSEN. To have any title authority you have to have metes and bounds descriptions.

Mr. SILCOCK. We have to lay out the survey grid.

Mrs. HANSEN. That is right.

You cannot depend on photography, is that correct?

Mr. SILCOCK. No.

Mrs. HANSEN. You cannot depend on photography, either, if you are going to assist anybody in the knowledge of what is under the land.

Mr. SILCOCK. That is the different type of resource survey.

Mrs. HANSEN. I understand.

That is what the Geological Survey does.

Mr. SILCOCK. Yes.

Mrs. HANSEN. But they are behind also.

Mr. HORTON. Madam Chairman, may I interject here because I spent a year with the Commission prior to coming back to my present assignment. It is slightly misleading to say it is the blind leading the blind, because the Commission in the past year has undertaken what I would call the most intensive resource inventory program that has ever been put forward as far as I know in any State. It includes not only the geological mineral information, which is very important, but also the hydrologic, topographic, land formation, and biological data.

Mrs. HANSEN. How much of the 40 million acres has a complete report on it?

Mr. HORTON. The problem is that the 40 million acres have not been selected. There are 365 million acres of which about 100 million acres have been withdrawn for their consideration.

Mrs. HANSEN. Yes, but we are now in this process of making these selections. There are lands for State selection, there are Alaskan Native selections, and there are lands to be selected by the United States. It seems to me that before it is all done, we should have a knowledge of what that land contains. It would be very unwise not to have an inventory of our resources before we make these decisions.

Mr. HORTON. I could not agree with you more. This has been the primary objective of the Commission, to put forward a resource inventory to the maximum extent possible to be completed about the 1st of July. This includes areas that might be withdrawn for parks, refuges, wild and scenic rivers, and so on.

ALASKAN LAND CONVEYANCE

Mrs. HANSEN. When the Alaska Natives have made their selections, how firm are those selections going to be?

Mr. HORTON. They can only be tentatively recognized until they can be surveyed and title passed.

Mrs. HANSEN. That would lead into eternity.

Mr. HORTON. They don't have the option of changing their minds after 1975. So they are permanent as far as their selection process is concerned.

Mr. SILCOCK. There is a possibility—in fact, we are moving in that direction—to issue them an interim title. So once they have selected their lands, they could be issued an interim title.

Mrs. HANSEN. Do you know whether they have to have a firm title?

Mr. SILCOCK. We think this interim title will do it. This will grant them the land itself. All that would be left would be a survey, plat, and issuance of the final patent. It would be similar to the TA's that we issue the State now.

Mrs. HANSEN. The thing that I am getting at is that the 40 million acres for Natives' selection are going to have to involve some pretty firm land commitments. They are going to want to borrow against that land and build against that land.

Mr. SILCOCK. We see this as the only way to carry this forward in a reasonable time frame.

Mrs. HANSEN. I can just see where we are going to have an endless amount of legal work as a result. I think Mr. Horton agrees.

Mr. HORTON. I do agree. I think it is an enormous problem that we have to face realistically.

Mrs. HANSEN. You are not facing it realistically.

Mr. SILCOCK. On the other hand, we have to face this realistically, too, from the standpoint of getting the job done. By the stroke of a pen we passed a piece of legislation that suddenly gave them 40 million acres and you cannot survey it all at one-time.

ACCELERATED CADASTRAL SURVEY PROGRAM

Mrs. HANSEN. It seems to me that you should step up your cadastral survey program so that you get the work completed. How long has the BLM been making cadastral surveys?

Mr. SILCOCK. Since 1785 when they first started the cadastral survey work.

Mrs. HANSEN. That is the answer.

Mr. SILCOCK. Actually we have a schedule in mind, and you have appropriated funds to begin it. Our best hope is to step up our electronic airborne system of surveys. It is not the old system of the ground surveys, of walking across the swamps, with instruments and chain.

Mr. EVANS. Are you getting everything you need and originally wanted and asked for from OMB for these surveys, or are you being cut back?

Mr. SILCOCK. We are getting it as fast as we can gear up to do the job.

Mrs. HANSEN. You have never geared up because it has always been a few steps at a time. Isn't this correct?

Mr. SILCOCK. I think we are taking bigger steps. Our past record on the survey of the State selection program is an indication of what new technology can do.

Mrs. HANSEN. When do you feel that the last cadastral survey will be done in both the lower 48 and Alaska?

Mr. SILCOCK. The lower 48 States will never be done because there will be some lands that we will never want to survey.

For example, the inside of national parks. Of course, maintaining the survey grid, replacing lost corners, and the like, will always be required.

Mrs. HANSEN. Excluding those lands?

Mr. SILCOCK. We have a big workload ahead of us.

Mrs. HANSEN. How big?

Mr. SILCOCK. There are some 160 million acres of land in the lower 48 that need surveying involving about 38,700 man-years of work to do it. That is a 350-year job based on our present capacity. In Alaska we expect to have this survey job done in 1986 as far as the native claims work is concerned. It will be 1992 before we can complete the State land. So we are looking in a long time frame which also assumes adequate outyear funds and manpower.

Mrs. HANSEN. How much acceleration can you do with your new techniques?

Mr. SILCOCK. We can certainly increase it. With the system we have had and the small number of people we have on it, we have been doing a million acres to a million and a half acres a year. So increasing that as our plans call for to four or five field crews, would step up that accomplishment and surveys would start to fit together. We would be tying in against land that we had already surveyed for the State.

As we move down through the program, it would speed up.

Mrs. HANSEN. Don't you think the time has come to speed it up?

Mr. SILCOCK. We have. We have requested additional funds in fiscal year 1974 to do that.

Mr. HORTON. Madam Chairman, I think we have to keep the time perspective in mind. I think Mr. Silcock is saying that at this particular point in time the Bureau does not need and could not absorb additional funding for cadastral surveys for native claims.

The first selection on the village level will not be made until 1974. The regional corporations have until 1975 to make their selections.

Mrs. HANSEN. I was really referring to the entire cadastral survey problem.

Mr. HORTON. I am sorry.

Mrs. HANSEN. I do realize the problem with the 40 million acres. On the entire program it would seem to me it was time you increased your effort.

Mr. SILCOCK. It certainly is a key matter.

Mrs. HANSEN. Land is becoming the single thing that is of firm value.

Mr. SILCOCK. Competition for land is becoming greater all the time and therefore land ownership and identification is of key importance. Where is it, and who owns it.

AUTOMATION OF LAND RECORDS

Mrs. HANSEN. How are you progressing with the automation of your land status records? What benefits have you derived from this program?

Mr. SILCOCK. We have moved into the accumulation of information by automatic data processing on land records in Alaska as well as the available information about the resources available on these lands. We will be able to assist the public by identifying land status and the known resources tied to those various tracts.

It is progressing as well as could be expected.

FISCAL YEAR 1974 OCS PROGRAM

Mrs. HANSEN. You have an increase of $1,700,000 and 49 positions for Outer Continental Shelf leasing. We have had quite a discussion this morning on leasing. We will continue on this subject when the committee reconvenes at 1 o'clock. Please be sure to have a map of Alaska at that time.

AFTERNOON SESSION

FRONTIER OCS ACTIVITIES

Mrs. HANSEN. I would like to ask you about OCS leasing plans on the coast of Alaska, the west coast, the Gulf of Mexico, and the whole Atlantic coast. Do I understand that you are only doing preliminary explorations along the Atlantic coast now? You have made no determinations with respect to leasing there.

Mr. SILCOCK. That is right. It is just an evaluation and data collecting effort. As far as any leasing or operation of this sort, it is into the future.

Mrs. HANSEN And long before you get to that point, you will have public hearings and public discussions.

Mr. SILCOCK. We have to comply with NEPA. There will be environmental impact statements, and full public disclosure.

SUPER PORTS

Mrs. HANSEN. At the same time that you are performing your studies on possible leasing, are you performing studies on the super port proposals along the Atlantic coast, and also regarding refinery placement?

Mr. SILCOCK. I will ask Mr. Turcott to speak to that.

Mr. TURCOTT. Madam Chairman, we worked and helped develop a draft environmental impact statement for the administration on some possible legislation for deep water ports. It is my best conjecture that if and when the President issues his energy message, he may discuss deep water ports.

Mrs. HANSEN. Mr. Horton, do you have anything more to add to that?

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Mr. HORTON. No. I believe that the 102 statement has until recently been controlled by the Department of Transportation, but I am not sure. I understand that the Department did help assist in an early preparation. The responsibility for the 102 statement on superport development was just assigned to Interior last Friday.

Mrs. HANSEN. Do you know where the location is?

Mr. HORTON. For the periphery of the United States, wherever super tankers might enter, but primarily the east coast and perhaps the gulf, but not to exclude the ports of Seattle, San Francisco, and Los Angeles.

Mrs. HANSEN. The discussion in the newspaper was off Assateague. Is that where the discussion centers?

Mr. HORTON. That would be one location in the study. But they were looking at the entire U.S. needs for the transport of oil in super tankers.

NEW REFINERIES

Mrs. HANSEN. The second part of my question is about refinery locations in the East? They have been proposed in various sites in Maine and in various other areas been proposed.

Mr. HORTON. If there is a study on refinery locations it is separate from the super tanker study, I believe, but I am not sure. I have been out of the Department for about a year.

Mrs. HANSEN. Do you know of any studies that are going on?

Mr. TURCOTT. I don't know of any specific studies other than as we discussed them earlier today. Part of these studies that we are requesting funds for, on both the social and economic aspects of OCS leasing will naturally take into account the siting of refineries and the needs for refineries.

Mrs. HANSEN. It is very obvious that apparently a great many areas in the East do not want refineries, isn't this correct?

Mr. TURCOTT. Yes, from my general reading that is correct.

Mrs. HANSEN. So that your whole east coast is very limited?

Mr. YATES. In what?

Mrs. HANSEN. Limited in refinery locations.

Mr. TURCOTT. There are many refineries now, of course, in New Jersey and Delaware.

Mrs. HANSEN. But where you propose adding new refineries, this is where the problem comes about, isn't it?

Mr. TURCOTT. I think probably you have reference to——

Mrs. HANSEN. The State of Maine.

Mr. TURCOTT. Yes, ma'am. I was going to say in the State of Maine. This Bureau doesn't have anything to do with that at this point. That was for oil imports.

Mrs. HANSEN. But when you are performing your social and economic studies and so on, the impact of people and their antagonism to such affairs does come into it, doesn't it?

Mr. TURCOTT. Yes, ma'am.

LIMITED OCS AREAS IN THE GULF OF MEXICO

Mrs. HANSEN. You testified that you have reached the end of leasing in the Gulf of Mexico.

Mr. TURCOTT. I think I better clarify that.

I was using words of art before the recess, and we felt that there may be some misunderstanding there. At the end of fiscal year 1975 including the—1974 sale schedule and perhaps what is predicted for 1975—we will have about 5.4 million acres of high potential known geologic area left to lease within the 200 meters isobath. There remains vast acreages within the Gulf of Mexico within the 200 meter depth far exceeding that which has been leased to date but they do not have a high geologic rating for oil and gas.

Mrs. HANSEN. In other words, these would be uncertain locations?

Mr. TURCOTT. Yes.

The USGS does not have the data to give them a high potential geologic structure rating.

Mr. MCDADE. You have left me confused. You are saying you are not anywhere near maximum utilization of the gulf. Are you?

Mr. TURCOTT. Yes, we are.

Mr. MCDADE. Yes we are what? Near a maximum utilization?

Mr. TURCOTT. Within a year or two of maximum utilization of high potential known geologic structures.

Mrs. HANSEN. Within the 200 meters?

Mr. TURCOTT. Within the 200-meter isobath.

Mr. MCDADE. But the rest, when you say high potential, known, refers to the fact that there could be considerable tracts that you do not yet know to be high potential or don't have any information on, is that right?

Mr. TURCOTT. Yes, sir.

Mr. MCDADE. How much of the area that you talked about this morning would that cover? What percentage of the gulf, for example, within the 200-meter area?

Mr. TURCOTT. I am told that they only have good valid geologic data on up to 60 to 80 percent of certain areas of the gulf. Based on what we now know we have roughly 5.4 million acres of structurally favorable areas yet to go within 200 meters.

I am sorry if I confused the committee. I was using words of the art, which probably led to some misunderstanding.

Mrs. HANSEN. What is your average sales size and how many sales will you be able to make?

Mr. TURCOTT. We are very strongly considering increasing the size of all sales in the Gulf of Mexico to about a million acres per sale.

Mrs. HANSEN. Why are you going to increase it?

Mr. TURCOTT. To increase production, or the possibility of production.

Mrs. HANSEN. Then are you going to limit it to very big consortiums.

Mr. TURCOTT. That is one of the possibilities. These are some of the studies that have been going on with respect to size, timing and bidding procedures on OCS sales.

However, we are highly oriented toward increasing production to help alleviate the domestic energy shortfall.

Mr. SILCOCK. The leasing block would be of the same size. There would be a million acres in the sale, but it would not increase the size of the individual leasing blocks.

Mrs. HANSEN. What will be the average size of your sale?

Mr. TURCOTT. There would be a million acres per sale. The number of leasing blocks within each sale will increase. We award leases on a per tract basis.

Mr. MCDADE. Based on 5,000 acre tracts.

Mr. TURCOTT. Yes, sir. There will be more tracts to bid on.

Mr. SILCOCK. A million acres would give you about 200 tracts.

PACIFIC OCS

Mrs. HANSEN. Let us discuss the West Coast. What are your potentials there?

Mr. TURCOTT. As is well known there is a geologic structure near the Santa Barbara channel of southern California. In our appropriation request, we are seeking funds to enter into studies there for an environmental assessment team, pegged at $215,000. There will be some contract studies also let in that area to get data that we do not feel we can get in-house as readily.

Mrs. HANSEN. Who do you let your contracts with?

Mr. TURCOTT. It could be any number of these big consultant institutions.

Mrs. HANSEN. Such as?

Mr. TURCOTT. Foster and Associates is one example. Others might include A. D. Little or a university or a consortium of universities.

Mrs. HANSEN. What other areas besides Santa Barbara have potential?

Mr. TURCOTT. That is the most viable area we are looking at in the way of these studies insofar as the Pacific Coast of California is concerned. The only other part of the Pacific we are interested in at this time is in the Gulf of Alaska area.

THE ALASKAN OCS

Mrs. HANSEN. How much do you know about the Coast of Alaska?

Mr. SILCOCK. There have been some initial geologic studies by industry there. We called for nominations in 1968 in the Gulf of Alaska. There is some information available.

Mrs. HANSEN. What about beyond the Gulf of Alaska on other areas of the Alaskan coast?

Mr. SILCOCK. The Bering Sea. There has been some seismic work and some holes drilled on shore next to the Bering Sea.

Mrs. HANSEN. You have relatively no knowledge of what is on the Outer Continental Shelf there?

Mr. SILCOCK. Only from what they have gained from the seismic work onshore and what little has been done offshore.

EARTHQUAKE POTENTIALS

Mrs. HANSEN. You have an added problem of earthquakes in Alaska.

Mr. SILCOCK. That is correct.

Mrs. HANSEN. Throughout the entire area?

Mr. SILCOCK. This is correct.

Mrs. HANSEN. Suppose you started to do some drilling and you had an earthquake?

Mr. SILCOCK. That happened inland in the gulf area. In fact, they had the pipeline laid and it stayed intact and did not break.

Mr. LONG. Was the earthquake caused by the drilling, or was it coincidental?

Mr. SILCOCK. It was one of the things that occurs in nature. There was subsistence of 5 to 8 feet, and yet the pipeline still held intact.

Mrs. HANSEN. If you are drilling and have an earthquake, what happens to the oil?

Mr. HORTON. Madam Chairman, you realize that the seismic earthquake potential is as high from southern California to Washington. In fact, more so, than in the Gulf of Alaska. It is the linear extension of the San Andreas fault. As far as I know the potential is much less out in these basin areas, such as the Gulf of Alaska, and much greater inshore along the coast.

Mrs. HANSEN. Yes, I know.

Mr. HORTON. There have been earthquakes in the Santa Barbara Channel during drilling and production without any accidents, as far as I know.

Mrs. HANSEN. You could have quite a spill if you had an accident.

Mr. HORTON. Yes, certainly you could. But obviously an earthquake is a horizontal sheer whereas the drilling is vertical. So you are very unlikely to have any damage.

Mrs. HANSEN. It is difficult to explain this to the public, as you well know.

Mr. HORTON. It would be much safer not to drill anywhere.

Mrs. HANSEN. That is right.

Mr. MCDADE. On that point, you could very easily fracture the strata of the earth, even though the platform is in a horizontal position. The arms are reaching out enormous distances.

Mr. HORTON. That is right. But if you take any petroleum reservoir, the fact that you have one or two puncture holes going down it does not weaken the structure of the reservoir.

Mr. MCDADE. It is your position that if the earth strata was cracked by an earthquake, you would get it regardless of whether or not there was a puncture created by a drilling operation?

Mr. HORTON. Yes. I think the USGS can better amplify on this, but that is the concept.

Mr. WYATT. Has there been such a spill caused by nature recorded?

Mr. HORTON. It certainly leaks all up and down the petroleum provinces. But I know of no major rupture. Normally, these are at least 3,000 feet or more. Some of them are shallower.

GEOTHERMAL LEASING

Mrs. HANSEN. An increase of $200,000 and six positions is requested for geothermal leasing. You plan four geothermal lease offerings in fiscal year 1974. Would you give us the details on this?

Mr. SILCOCK. Yes: this increase in our geothermal program will be used to assist us in the adjudication of the grandfather rights, where existing valid interests exist on geothermal lands. It will also help us in analyzing our leasing tracts—tracts that we plan to lease—and assist us in developing plans under a multiple-use concept. This increase will be directed primarily to California, Nevada, and Oregon.

Mrs. HANSEN. Does leasing of geothermal land came under the same legal situation as the leasing of other mineral rights?

Mr. SILCOCK. It would depend if the mineral rights are reserved. If they are, the same thing may apply. This very question is now under consideration by the courts in a test case.

Mr. MCDADE. I have the report of the Public Land Review Commission on this point, and they say it does not. It has been held by the Department of Interior that geothermal steam has never been included in mineral reservations.

COMMERCIAL USE OF GEOTHERMAL STEAM

Mrs. HANSEN. That is why I asked the question. Who is doing the development in geothermal leasing?

Mr. SILCOCK. It would be individual operators, based on their purchase of the lease tracts.

Mrs. HANSEN. Are they doing it on an experimental basis?

Mr. SILCOCK. No; north of San Francisco in the geyser basins, they are doing it commercially; the private individuals.

Mr. MCDADE. Which companies?

Mr. HASTEY. Pacific Gas & Electric.

Mrs. HANSEN. Are they on public lands?

Mr. SILCOCK. I think it is on private lands.

Mr. MCDADE. Is that the only geothermal plant operating commercially in our country?

Mr. SILCOCK. It is the only one to my knowledge.

Mr. MCDADE. Are there others around the world that operate commercially?

Mr. SILCOCK. Yes.

Mr. MCDADE. Where?

Mr. SILCOCK. In Europe.

Mr. TURCOTT. New Zealand is the biggest developer.

Mr. MCDADE. Is there a long history of successful use of geothermal energy in those countries?

Mr. TURCOTT. Yes.

IMPORTANCE OF GEOTHERMAL RESOURCE

Mrs. HANSEN. How do the geothermal resources compare to the future of hydroelectric and coal?

Mr. SILCOCK. Geothermal steam will be important in certain areas. In other words, locally in certain sections of the West.

Mrs. HANSEN. But it is only limited to certain areas.

Mr. SILCOCK. That is right. It would not be economical to produce the energy there and try to transport it to the east coast.

Mr. TURCOTT. We have figures in terms of all energy resource consumption in the country, and those produced from the public lands. Even by 1985 the proportion of that from geothermal is negligible.

Mrs. HANSEN. Insert the total energy sources in the record and indicate what portion is attributable to geothermal potential.

[The information follows:]

National Energy Consumption

The following tables depict the composition of present energy production and consumption and that projected for 1985.

	1971 Consumption		1971 Domestic Production	
	Units	% Total energy use	Units	% Public Land Prod.
Oil & other liquid petroleum products	5.5 bil. bbls.	44.1	4.1 bil. bbls.	15.0
Gas	22 trillion cu. ft.	33.0	21.1 trillion cu. ft.	18.0
Coal	511 mil. tons	18.2	590 mil. tons	1.7
Nuclear	37.8 bil. kilowatt-hrs.	0.6	same as consumption	--
Hydro-electric	266.3 bil. kilowatt-hrs.	4.1	same as consumption	--
Total		100.0		

	Projected 1985 Consumption	
	Units	% Total energy use
Oil & other liquid petroleum products	9 bil. bbls.	43.5
Gas	27.5 trillion cu. ft.	24.3
Coal	0.9 to 1 bil. tons	18.4
Nuclear	1,130 bil. kilowatt-hrs.	10.1
Hydro-electric	470 bil. kilowatt-hrs.	3.7
Geothermal*	19-132 thous. kilowatt-hrs.	---
		100.0

Geothermal steam is not expected to produce more than 2% of our total energy by the year 2000; however, it may have important local impact. 1.0 million of the 1.8 million acres of known geothermal resource areas are public lands. 58 million of the 96 million acres of potential areas are public lands.

Mrs. HANSEN. Please insert in the record by fiscal year the amount of funds spent to date by BLM and Geological Survey for geothermal leasing.

[The information follows:]

GEOTHERMAL FUNDING

Program costs through fiscal year 1973 for geothermal steam are as follows:

	Fiscal year 1972	Fiscal year 1973
USGS	$704,000	$2,530,000
BLM	80,000	263,000
Total	784,000	2,793,000

Costs incurred prior to fiscal year 1972 were not differentiated and are not available.

SURFACE PROTECTION PROGRAM

Mrs. HANSEN. An increase of $550,000 and 24 positions is requested for surface protection. Give the details of this request.

Mr. SILCOCK. The surface protection funds will be used to initiate technical compliance examinations on all new permits, leases, and contract areas. This has to do with the leasing of coal, oil, and gas and other minerals.

Mrs. HANSEN. How about gravel and rock?

Mr. SILCOCK. That would be part of it.

Mrs. HANSEN. And sand.

Mr. SILCOCK. It would be sale of materials as well as leasible minerals.

Mr. EVANS. Is your $550,000 increase for surface protection contingent upon the enactment of proposed legislation, or are there substantial parts that can be carried out without a revision in existing law?

Mr. SILCOCK. Our surface protection program increase is not contingent upon enactment of legislation. Our surface protection efforts are being carried out in accordance with Departmental regulations, 43 C.F.R., implementing instructions, the Council on Environmental Quality guidelines, and the National Environmental Policy Act. These provide for the protection of all public land resources and the environment, as well as reclamation of land during and after exploration. Our surface protection program includes conducting technical examinations, developing and including protective stipulations, reviewing exploration and mining plans, performing compliance checks in conjunction with USGS, and reviewing surface restoration efforts.

Mr. MCKAY. Are you aware of the Forest Service SEAM program? There appears to be some similarities in the objectives of your surface protection activities and SEAM. Could you comment on that? Is there any overlap in the activities of the two programs?

Mr. SILCOCK. We are aware of the Forest Service's SEAM program also called the Surface Environment and Mining program. Our surface protection program for fiscal year 1974 will strengthen our coordination with the SEAM program. This program for research, development, and application of surface rehabilitation techniques has

the same objectives as Interior's surface protection program. There will be no overlap in our activities, since we have coordinated our efforts very closely together.

RECLAMATION OF THE LAND SURFACE

Mrs. HANSEN. You testified before us heretofore that all leases on the public lands had reclamation requirements.

Mr. SILCOCK. This is an area in which we are strengthening our reclamation requirements.

Mrs. HANSEN. How long have you had an enforcement effort in effect?

Mr. SILCOCK. It has been in since the time we have been issuing these kinds of leases.

Mrs. HANSEN. How long has that been?

Mr. TURCOTT. I think it is a matter of degree, Madam Chairman.

Mrs. HANSEN. How many leases do you have on public lands for strip mining and when did you begin to put in restrictions and reclamation provisions?

Mr. TURCOTT. Let me answer this way: There has never been one of these leases that involves the mining of a material or mineral that does not have some reclamation provisions in it.

In 1969 the Secretary promulgated title 43, part 23 of the regulations, which required a much more in-depth and intensive technical examination to develop stipulations for contracts and leases. It also provides a much greater degree of oversight and reclamation.

GAO AUDIT

Several months following issuance of the 1969 regulations, as the GAO has pointed out in its audits, we did not—regrettably—do too well, either in the technical examinations or in providing new stipulations for mining and for reclamation.

Mr. MCDADE. In how many different leases?

Mr. TURCOTT. I will have to get that material for you.

Mrs. HANSEN. We will put a summary of the GAO report in the record at this point.

[The information follows:]

COMPTROLLER GENERAL'S REPORT
TO THE CONSERVATION AND NATURAL
RESOURCES SUBCOMMITTEE
COMMITTEE ON GOVERNMENT OPERATIONS
HOUSE OF REPRESENTATIVES

ADMINISTRATION OF
REGULATIONS FOR SURFACE
EXPLORATION, MINING, AND
RECLAMATION OF PUBLIC AND
INDIAN COAL LANDS
Department of the Interior B-148623

DIGEST

WHY THE REVIEW WAS MADE

At the joint request of the Chairman and the ranking minority member of the Conservation and Natural Resources Subcommittee of the House Committee on Government Operations, the General Accounting Office (GAO) reviewed the Department of the Interior's administration of its regulations of January 18, 1969, concerning surface exploration, mining, and reclamation of public lands (43 CFR 23) and Indian lands (25 CFR 177).

GAO's review was limited to the administration of the regulations for coal resources. GAO also considered whether

--the Department was applying the regulations consistent with the mandates of the National Environmental Policy Act of 1969 and

--the regulations provided assurance that valuable resources were not being depleted without protection of environmental values.

GAO's review was made in Arizona, Colorado, Montana, New Mexico, North Dakota, and Wyoming and in the Department's headquarters offices in Washington, D.C.

Background

In January 1972 the Department estimated that 41 million acres of the 825 million acres of public land had coal deposits. Of the 41 million acres, 1.6 million were covered by prospecting permits or mining leases. The Department also estimated that 13.5 million acres of the 50 million acres of Indian lands had coal deposits. Of the 13.5 million acres, 700,000 were covered by coal prospecting permits or mining leases.

The Department's January 18, 1969, regulations do not provide specific technical requirements for exploration, mining, or reclamation activities. Such requirements are based on examinations (called technical examinations) of the effects that the proposed mining operations will have upon the environment and are included as special stipulations in permits or leases granted by the Department to the mining operators.

Permits and leases on public and Indian lands are administered by the Department's Bureau of Land Management (BLM) and the Bureau of Indian Affairs (BIA), respectively. The Department's Geological Survey is responsible for providing scientific and technical advice to both BLM and BIA.

Tear Sheet

AUG. 10, 1972

During the period January 18, 1969, to November 1, 1971, the Department issued 258 permits and 38 leases for coal exploration and mining on public and Indian lands. BLM had 529 permit and 115 lease applications pending at November 1, 1971; BIA had none.

FINDINGS AND CONCLUSIONS

Surface exploration, mining, and reclamation regulations

The Department's regulations, if properly implemented, should help in protecting environmental values.

Although the regulations have been established for more than 3 years, they were not being implemented effectively with regard to several significant areas. For the 65 permits and leases covered by its review (53 for BLM and 12 for BIA), GAO found that:

--The required technical examinations had not been conducted for 35 of the permits and leases. The purpose of a technical examination is to determine the effects that the proposed exploration or mining would have on the environment and to serve as a basis for formulating appropriate reclamation requirements. (See p. 12.)

--Some permittees were operating without approved exploration plans--an essential element of control in protecting the environment--and some plans had been approved without technical examinations. (See p. 14.)

--Some compliance and performance bonds covering the requirements, including reclamation, of leases or permits had not been obtained from the operators. The amounts of some of those that had been obtained were not sufficient to cover the estimated cost of the reclamation requirements of the permits or leases. (See p. 16.)

--Some of the reports required to be submitted by the operators to the Department at various stages of the operations on such matters as grading and backfilling, planting, and abandoning operations had not been submitted. (See p. 20.)

BLM has issued formal instructions to its field offices to implement the Department's regulations, but the Survey and BIA have not. GAO believes that the issuance of such instructions would assist field personnel in administering and implementing the regulations. (See p. 25.)

Documentation of the results of technical examinations, onsite visits, and other activities required by the regulations was not always prepared.

With regard to Indian lands, GAO believes that the Indian landowners were adequately consulted by BIA as to the actions proposed for permits or leases on their lands as required by the Department's regulations. (See p. 22.)

The Department requires an applicant to submit a $10 fee with each permit and lease application for coal exploration or mining. The fee was to recover the cost of processing the applications. Because personnel costs have nearly doubled since the amount of the fee was established and because the regulations now require a more comprehensive evaluation of the application than previously required, GAO believes that the adequacy of the fee associated with processing an application for a coal permit or lease should be appraised. (See p. 24.)

Implementation of National Environmental Policy Act of 1969

The Department's regulations require consideration of the ecological factors for coal permits and leases issued on public and Indian lands. To implement the environmental Act, the Council on Environmental Quality requires that each Federal agency prepare formal procedures for the preparation of environmental impact statements.

BLM's procedures do not comply with the Council's implementing guidelines because they do not outline the criteria to determine when and under what circumstances environmental impact statements should be prepared. GAO believes that BLM should revise its procedures to comply with Council guidelines. (See pp. 28 to 31.)

BIA has not developed any procedures for the preparation of environmental impact statements under the environmental Act, and GAO believes that BIA should develop procedures for the preparation of environmental impact statements for those cases in which the statements are required.

RECOMMENDATIONS OR SUGGESTIONS

The Secretary of the Interior should clarify the requirements of the Department's regulations by providing guidance as to

--the timing and scope of technical examinations and the submission and approval of exploration and mining plans,

--the required amount of performance bonds,

--the need for adequate documentation of the results of the activities conducted under the regulations, and

--the need for documented periodic reviews of the administration of the regulations. (See p. 27.)

The Secretary should appraise the adequacy of the fee associated with processing an application for a coal permit or lease. (See p. 27.)

The Secretary should also require BLM to revise its procedures to comply with Council guidelines and BIA to adopt procedures for the preparation of environmental impact statements for those cases in which the statements are required. (See p. 31.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

The matters in this report were discussed with Department officials who stated that appropriate actions would be taken by BLM, BIA, and the Survey to develop procedures which would clarify the requirements of the regulations and to require adequate documentation of the results of the activities conducted under the regulations.

Department officials agreed to make a study to determine the costs associated with processing applications for coal permits and leases and indicated that fees would be adjusted, if warranted.

BLM and BIA officials stated that they would issue procedures for preparation of environmental impact statements to meet the requirements of Council guidelines.

Mr. TURCOTT. May I be a little defensive?

Mrs. HANSEN. I assume that is what you have been all morning.

Mr. TURCOTT. We are still arguing a numbers game with GAO on their statistics. Nevertheless, I have made the admission that the regulations were not fully implemented but the GAO numbers are a matter for conjecture.

Mr. MCDADE. Conjecture?

Mr. TURCOTT. We cannot validate their numbers.

Mr. MCDADE. Can you tell me how many leases you have issued that do not meet the standards of the 1969 regulations the Secretary made?

Mr. TURCOTT. I will have to check on that.

Mr. MCDADE. Is it more than 50 percent of them?

Mr. TURCOTT. It could be. I'm not certain as to the retroactivity of the new regulations to older leases.

Mr. MCDADE. Is it 75 percent of them?

Mr. TURCOTT. I will have to check on the actual status.

Mrs. HANSEN. The GAO report says:

During the period January 18, 1969 to November 1, 1971, the Department issued 258 permits and 38 leases for coal exploration and mining on public and Indian lands. BLM had 525 permit and 115 lease applications pending on November 1, 1971, BIA had none.

Then it says:

The required technical examinations had not been conducted for 35 of the permits and leases.

Mr. TURCOTT. That is what the report indicates. However we don't feel it was 35.

Mrs. HANSEN. How many do you feel it was?

Mr. SILCOCK. Twenty-three of those would be BLM leases and permits.

Mrs. HANSEN. We have inserted the summary of the GAO report in the record, and now we want some answers from you.

Mr. TURCOTT. Yes. We have submitted our input to the Department for the final answer to GAO on this report. At this time all we can do is give you the Bureau response. Hopefully we can get the departmental response soon.

Mrs. HANSEN. In the Four Corners area there has been a great deal of controversy. What have you done to strengthen that contract to make sure we have adequate reclamation and control of pollution from the stacks?

Mr. SILCOCK. That is an Indian contract.

Mrs. HANSEN. That is purely an Indian contract? You had nothing to do with it?

Mr. SILCOCK. That is right.

Mrs. HANSEN. Did you give them any advice?

Mr. SILCOCK. I am not aware of being involved.

NEW COAL LEASING POLICY

Mrs. HANSEN. On February 17, 1973, Secretary Morton announced a new coal leasing policy. Describe how the current policy differs from the previous leasing policy.

Mr. SILCOCK. The new coal leasing policy looks at three goals: One, the environmental side, two, the need for production, and third, fair

market value return for the resource. We are taking a look at it in two categories: One, in the short term and one in the long term. In the short term we are talking about leasing coal for those who are in operation. If they have a mine, are working now and are in operation, we will lease coal to keep that operation going. Another phase of that short term would be leasing coal that was needed from a 5 to 10 year period for an immediate short term reserve. This would all be done with proper reclamation standards and only under an impact statement which would be prepared if it was determined that it was necessary.

ENVIRONMENTALLY ACCEPTABLE STANDARDS

Mrs. HANSEN. So the impact statement has to be made prior to the leasing?

Mr. SILCOCK. Madam Chairman, this again would go back to complying with the Environmental Policy Act where we make an assessment or analysis to see whether it would have a major impact on the environment.

If it did, then an impact statement would be necessary.

Mrs. HANSEN. Also you have development of a planning system to determine the size, timing, and location of future coal leases in order to meet energy needs most effectively.

Mr. SILCOCK. That is part of the long term look. A study to determine where we should be leasing coal, similar to what we do with the OCS, is beginning and will continue into fiscal year 1974.

Mrs. HANSEN. Very well.

NORTH GREAT PLAINS RESOURCE STUDY

Mr. EVANS. Describe for me the status of the North Great Plains Resources Study.

Mr. SILCOCK. The Northern Great Plains resource program was established as a Federal-State interagency study in July 1972. It is jointly managed under Interior's leadership by representatives of the Departments of Interior and Agriculture, the Environmental Protection Agency, the Old West Regional Commission and the States of Montana, North Dakota, South Dakota, Wyoming, and Nebraska. An outline of study plan has been prepared and circulated to a large number of Federal, State, conservationist, industrial, congressional and academic interests for review and comment. The plan provides seven work groups to study the implications of development alternatives in terms of water, air, mineral resources, surface resources, socioeconomic patterns and the regional and national energy situations. Work group leaders and participants have been designated and preliminary work plans now are being prepared for review during April 1973. Work is expected to start during May 1973.

Mr. EVANS. Where are the funds coming from to finance it?

Mr. SILCOCK. No special funding has been requested for the Northern Great Plains resource program. The work is being accomplished within related agency missions. This is expected to include some grant and contract support from the National Science Foundation and the Old West Regional Commission. As we have indicated, a substantial part of our inventory and planning program emphasis will be directed to the Northern Great Plains area will help develop adequate use and development plans on the public lands in this region.

Mr. EVANS. What plans do you have for development of resources pending completition of the study?

Mr. SILCOCK. The Bureau is implementing the Secretary's coal leasing policy which was announced February 17. The policy calls for the development and implementation of a system to determine the size, timing, and place of coal leases. We are currently working on this program along with the preparation of a programmatic EIS on coal leasing. When the system is implemented, it will provide a mechanism for holding Bureau-motion lease sales and provide considerable resource management flexibility. During the interim period, we will proceed cautiously with the issuance of further coal leases. Decisions will be made on a case-by-case basis in accordance with the lease criteria identified in the Secretary's new policy. These criteria will be applied to all coal leasing on Federal lands, not just in the Northern Great Plains resource area.

RECLAMATION PRACTICES

Mrs. HANSEN. Eighty-five percent of our coal reserves, the low-sulfur coal reserves, are in the public lands of the West. If you are going to undertake reclamation of that land, how are you going to do it without water?

You know as well as I do that the water in the West is very scarce.

Mr. SILCOCK. This is part of the problem, but also in connection with most of these coal operations there is water from the pit itself.

In fact, they have problems pumping the pit and doing something with that water so that it won't pollute the streams.

Mrs. HANSEN. What do you do about that?

Mr. SILCOCK. The water itself could be used for this reclamation work.

Mrs. HANSEN. But they have to have some processes developed to take the pollutants out.

Mr. SILCOCK. It would have to be treated before it could be put back in.

Mrs. HANSEN. Is that under consideration?

Mr. SILCOCK. It would be part of the stipulations that would be in a lease. Some of the newly found water is not polluted and can be used directly in rehabilitation work, or for that matter, other uses.

Mrs. HANSEN. Very well.

How much does this kind of a technique in the reclamation process involve cost-wise?

Mr. SILCOCK. It is not a costly figure.

Mrs. HANSEN. Then why has it not been done before?

Mr. SILCOCK. Even though it is part of the requirements, it has not been required to be done over the years, particularly the earlier leases and permits.

Mrs. HANSEN. You just explained why Congress has lost its patience. We would assume that the people who lease these lands that belong to all the people in the United States should have had some foresight, imagination, and judgment without having to be reprimanded and catechized by the Congress of the United States.

This has led to a great deal of anger and frustration I would say, on the part of Congress.

You, the technicians in the management of the public lands, should not have to wait until you are dragged by the heels to administer the

kind of controls over this land that will give us adequate reclamation and adequate protection. Isn't that true?

Mr. SILCOCK. In the past——

Mrs. HANSEN. The past is so bad I don't even want to talk about it.

Mr. HORTON. Madam Chairman, I am a newcomer here.

Mrs. HANSEN. I think it is a good thing.

Mr. HORTON. Certainly it is true that this administration and the past administrations have not done everything they could toward reclaiming the land. I live in that part of the country. The analyses before were primarily oriented toward economic concerns. How could you produce it with the least buck to get the most profit? It is true that the administering agencies, such as BLM and others in the Department of Interior must be responsive to the general policy guidelines that come from Congress. At this point in time the BLM does not have an organic act which spells out multiple use, sustained yield and environmental protection. So while the executive branch may well have been primarily at fault for this, nevertheless the administering agencies must look toward Congress for policy direction.

Mr. YATES. Why?

Mrs. HANSEN. Don't you think it would have been a good idea for the management to have come up here and said, we need these things to be done to manage our public lands?

Mr. HORTON. I am not apologizing for it. I do think you are right.

Mr. YATES. Why can't you put it in the leases without an act of Congress?

Mr. HORTON. They are now in the leases.

Mr. YATES. You still do not have an act from Congress, do you?

Mr. HORTON. The Forest Service has had this for quite some time. BLM doesn't have the Organic Act today which spells out the policies and guidelines under which they should operate.

Mrs. HANSEN. It has always seemed to be that a land management agency ought to develop the very best of techniques. This is the only way you are going to get the management and conservation of your public lands. Your agency is responsible for 450 million acres of U.S. land, isn't that correct?

Mr. TURCOTT. Yes.

Mr. HORTON. We are certainly trying to do much better now than we have in the past.

Mrs. HANSEN. I know. I just point out that it is kind of tragic that we have to wait for the wolf to eat up the first cow before we do anything.

IMPACT OF COAL MINING ON PUBLIC LANDS

Mr. YATES. May I ask a question of the Secretary?

You say you come from a part of the country where this has taken place.

What has happened in your part of the country? Have they reclaimed the land after stripping it?

Mr. HORTON. Mr. Congressman, that is an excellent point. The precise answer is that nothing happened until about 2 years ago because the large coal and oil companies leased it and did not develop it. There was no impact. There was no noticeable impact on the land whatsoever. The leases were being held in reserve for speculative purposes and

others. Until very recently there was no physical disturbance of the land that we can see.

Mr. YATES. Is there now?

Mr. HORTON. Within the last 2 years I am sure there is. It is still very much the same as it has been except in certain localized areas.

STRIP MINING

Mr. SILCOCK. Our records show about 8,000 acres have been strip-mined to date and that approximately 3,900 have been reclaimed. To be exact, 7,988 acres have been strip-mined and approximately 3,955 acres have been reclaimed.

Mrs. HANSEN. This is on public land.

Mr. SILCOCK. Yes.

Mr. YATES. In what period of time?

Mr. SILCOCK. This is what has taken place. I don't have the period of time.

Mr. MCDADE. Will you explain to me why you have that balance of reclaimed land?

Why is it unreclaimed?

Mr. SILCOCK. It could be in the process of being reclaimed or still under active mining operations.

Mr. MCDADE. Is it or is it not? Are you able to tell the committee today that there will not be any public lands unreclaimed because of the strip mining?

Mr. SILCOCK. I think we are able to say today. In all future leases we will be changing and adding to them to the point where there will be reclamation on all of those areas.

Mr. YATES. You mean prospectively into the future and nothing for the past?

Mr. MCDADE. Are you telling me there will not be unreclaimed strip-mined lands on publicly owned lands? You can answer that yes or no.

Mr. SILCOCK. I am sure we will be reclaiming all of the land or requiring it to be reclaimed, all that is possible.

Mr. MCDADE. Past and future.

Mr. SILCOCK. I am not so sure we can go back on some of those leases that have expired.

Mr. MCDADE. Do you mean to tell me that the Bureau let out leases that did not require reclamation on public lands?

Mr. TURCOTT. Most have some reclamation work. They do not have the more stringent requirements we now have.

Mr. MCDADE. How many acres do we have locked out?

Mr. TURCOTT. As the Director said, we have, and this is for coal only—3,955 acres reclaimed of a total of 7,988 acres. This applies to strip-mining practices for coal.

Mr. MCDADE. That is coal only?

Mr. TURCOTT. Yes.

COAL LEASING STATUS

May I talk to this business a little bit?

Mr. MCDADE. I wish you would, because we have asked you this before on public lands and we were given assurances that there were not problems.

Mr. TURCOTT. There are 524 existing coal leases issued by the Bureau at this point in time. This covers 780,000 acres. Most of this is in the northern Great Plains, northern Wyoming or portions of the Rocky Mountains, Colorado and Utah. The reserves off those lands equal about 20 billion tons of minable coal. Last year the production off this many leases—obviously not off all of them but only a few—was about 10 to 10½ million tons. In other words, that is what the Assistant Secretary said. Many of these leases were issued in a laissez faire policy going back to 1920 and even before.

If somebody wanted a coal lease and he was willing to apply for it, more than likely it was given to him.

There were boilerplate type stipulations added to the lease. Many of those were very general stipulations concerning reclamation. When any one of these leases goes into production, they have to get approval of a mining plan from the USGS. This has been going on since 1920. When they go into operation and development, they get an approved mining plan from USGS. Their technology and expertise on what to do and what not to do has been evolving over the years also.

So that when one says there has not been any reclamation done, there most certainly has. When we say what reclamation was done in the past compared to what we are going to require henceforth, there will be quite a bit of difference.

Mr. HORTON. Madam Chairman, to emphasize this point, this is the briefing that BLM gave me last Friday, in my own State there are now 188,000 acres under lease, but 175,000 acres of those 188,000 acres have not been developed for production. So while the leases have been in existence they have not been developed.

Mr. TURCOTT. On any of the leases that the Assistant Secretary mentioned that have not had this mining plan filed, when they file it with USGS, then very stringent mining plans and reclamation provisions can be put into the plan. The only thing that will stop the most stringent of reclamation plans might be some part of that lease itself, especially if it is quite old, where there will be a conflict. It is a matter of a case-by-case basis, although all may be subject to upgrading.

Mrs. HANSEN. How many of those are there?

Mr. TURCOTT. He had an acreage figure in the State of Wyoming.

Mrs. HANSEN. I know, but what proportion of these can you pick up and add your reclamation stipulations to?

Mr. TURCOTT. It is a substantial portion, if not all of them.

Mrs. HANSEN. Provide it for the record. I think the committee will be interested in knowing that.

[The information follows:]

IMPROVEMENT OF RECLAMATION REQUIREMENTS

Actually, higher reclamation stipulations can be added to all the outstanding leases. In response to the March 29, 1972 GAO report titled "Improvements Needed in Administration of Federal Coal-Leasing Program," the Department responded in part, "The first recommendation (p. 21) concerns the need for issuing guidelines to the mining supervisors for their use in enforcing reclamation and environmental requirements contained in most leases issued prior to January 18, 1969, the effective date of the Department Surface Exploration, Mining and Reclamation of Lands Regulations (43 CFR, pt. 23). The Department has taken the action suggested by GAO. The Geological Survey recently issued to its mining supervisors new written guidelines and instructions with respect to enforcement of reclamation and environmental requirements of leases

issued prior to January 18, 1969. In addition, regulations governing operations on coal leases, 30 CFR 211, are being revised to strengthen requirements for reclamation and environmental protection on all leases regardless of leases issue date. The new guidelines along with the revised regulations will place upon Government, mining supervisors, and lessees responsibilities for environmental protection and reclamation on older leases equally as demanding as their responsibilities under the January 18, 1969 regulations."

Mrs. HANSEN. I can imagine that some of these leases go back probably 30 years.

Mr. TURCOTT. Yes; farther than that.

Mrs. HANSEN. Maybe 40 or 50.

I want to know what part of those leases can be picked up and a new stipulation added for the reclamation procedures.

Mr. SILCOCK. It is quite simple. Those that have not gone into production are ones we have good control on.

Mr. YATES. Do you?

COAL LEASE PERIODS

Mr. MCDADE. Didn't you testify this morning that if the coalfield was not brought into being within 20 years that the lease was canceled.

Mr. TURCOTT. It may be canceled at that time or it may be renegotiated for good cause.

I think that is what the Director was leading up to. On any going coal lease, at the end of a 20-year period it is renegotiated. Then the new most modern, up-to-date terms will be put in, including reclamation.

Mr. WYATT. Isn't the fact of the matter that you have a lot of leases where the obligations on the part of the lessee have expired? They were entered into many years ago when the reclamation provisions were really minimal.

Mr. TURCOTT. Expired, sir? I don't get that distinction.

Mr. WYATT. The leases are not forever.

Mr. TURCOTT. No; 20 years.

Mr. WYATT. I assume you have some leases where the obligations of the lessees have expired.

Mr. SILCOCK. That lease was closed.

Mr. WYATT. Those are old leases where the reclamation requirements were very minimal by today's standards.

Mr. SILCOCK. That is right.

Mr. WYATT. The lessees under those leases have completed their obligations.

These lands are unreclaimed by today's standards. My question is, I wonder if you can furnish us, either for the record or with your testimony, what the acreage is that would fall under this category and what if anything is presently being done or is contemplated to be done with respect to those lands.

Mr. TURCOTT. The answer to this question is not readily available. Gathering of the data will require an on-the-ground inventory and is scheduled as part of our long-term portion of the surface protection program. This data will be provided to the committee when completed.

TOTAL MINERAL LEASES

Mrs. HANSEN. How many leases do you have in effect?

Mr. TURCOTT. 524 for coal.

Mrs. HANSEN. What other leases do you have?

Mr. SILCOCK. We have leases for oil and gas, coal, phosphate, potash, sodium, and other materials.

Mrs. HANSEN. Will you insert a list in the record?

[The information follows:]

LEASES IN EFFECT

Leases in effect as of June 1972 (are as follows): Coal, 524; oil and gas, 102,-249; phosphate, 131; potash, 129; sodium, 73.

PUBLIC LAND INVENTORY AND PLANNING

Mrs. HANSEN. An increase of $650,000 and 20 positions is requested for public land inventory and planning. Please explain what you intend to do.

Mr. SILCOCK. Our request for increase here is tied to the energy thrust. We will be developing our multiple use framework plans in connection with the future potential of energy development. Emphasis will be given to coal, primarily in the Northern Great Plains. There will be some planning in connection with our oil shale. Here we would be doing our management framework planning which is multiple use planning, bringing all the resources into play so that we can set out on a course of balanced use on those lands.

OIL SHALE TITLE CLEARANCE

Mrs. HANSEN. The committee discussed oil shale with you many times. You have had title problems on the oil shale lands. Are these all cleared up?

Mr. SILCOCK. No, ma'am.

Mrs. HANSEN. What percentage are done?

Mr. SILCOCK. We are still searching the records on oil shale claims.

Mr. TURCOTT. The percentages, where the county record microfilming has been completed are: Colorado 58 percent; Utah, 20 percent; Wyoming, 65 percent. The number of claims serialized and a case file developed, 13,000. The number of claims relinquished by the claimant, 2,000. The number of claims in process of adjudication, including appeals and pending court actions, 9,900. The total acreage cleared to date is 269,000 acres.

Mrs. HANSEN. How much remains?

Mr. TURCOTT. There are about 80,000 mining claims involved in the Federal oil shale lands.

Mrs. HANSEN. How many acres?

Mr. TURCOTT. I would have to multiply that.

A lode mining claim is 20 acres, if it is a full one. An association placer claim may cover up to 160 acres. The latter are more common in oil shale areas.

Mrs. HANSEN. Will you insert that in the record for us?
Mr. TURCOTT. Yes, ma'am.
[The information follows:]

STATUS OF OIL SHALE TITLE CLEARANCE

There are about 7,778,000 acres in the three States of Colorado, Wyoming and Utah that remain to be cleared as of this date. All the land in the proposed prototype leasing areas have been cleared or are in process of adjudication.

OIL SHALE LEASING PROGRAM

Mrs. HANSEN. What are your plans for the immediate future in the development of the oil shale lands?
Mr. SILCOCK. The oil shale program at the present time has progressed to the point where we are about to come out with our final impact statement.
Mrs. HANSEN. Do you suspect that the impact statement is going to be relatively adverse?
Mr. SILCOCK. We have had hearings in the three States of the West, both in the State capitols and in the field. We did get comments. We have modified the impact statement, taking into consideration those comments.

PROTECTIVE MEASURES

Mrs. HANSEN. What are you going to do with all the spent shale?
Mr. SILCOCK. There are very real problems as to the disposition of the overburden, as well as the spent shale. Experimental work is now going on.
Mrs. HANSEN. The first canyon you start filing will cause you problems and you know it.
Mr. SILCOCK. We have a study going on with the Colorado University on the reclamation of the spent shale.
Mrs. HANSEN. What type of reclamation are you going to be able to effect?
Mr. SILCOCK. We are researching feasible methods for the reclamation practices. There are some private studies going on now where they have mixed some top soil with spent shale, applied water and have seeding trials for grasses, legumes and other species, to determine what would be the best method of holding the spent shale in place once it is disposed of.
Colorado State University is carrying out a study for us now.
Mrs. HANSEN. Haven't you had a lot of adverse comments on filling up these canyons?
Mr. SILCOCK. There has been some adverse comment, yes.
Mrs. HANSEN. By whom?
Mr. SILCOCK. People in all walks of life have been concerned about it. Mostly the people representing the conservation interests. Water users are also concerned about the effect on the quality of downstream water.
Mrs. HANSEN. What is going to be the impact on the downstream water?
Mr. HORTON. Madam Chairman, let me point out in fairness to the BLM that the 102 statement for oil shale has been conducted largely

by another bureau. The BLM has participated to the extent of land reclamation. The leading edge in the Department has not been in the BLM. I totally agree with your second point.

Mrs. HANSEN. The Bureau of Mines and Geological Survey?

Mr. HORTON. Yes. Land and water are absolutely integrated and they have to be. Decisions on one inescapably are decisions on another. This was Secretary Morton's reasoning when he put the land and the water fields together.

Mrs. HANSEN. I believe he was correct.

Mr. TURCOTT. I think I can talk to this business of water pollution from oil shale workings in a general way. On the basis that the overburden or the spent shale will be somehow or other stockpiled in depressions, canyons, or gullies, let me say there will have to be very definite measures taken for controlling water pollution that seeps down through this material and then on out into streams. There are techniques for doing his.

There are all kinds of reservoirs, settling ponds and even chemical treatments of water possible before it is released into live streams. These are examples of the very technical kinds of water treatments that are going to be required in oil shale leases.

Mrs. HANSEN. I watched a program the other night about earthquakes in the Denver region. You will remember the chemical fluid injections that were causing earthquakes.

Mr. TURCOTT. Yes.

Mrs. HANSEN. Do you have the answers or will you have the answers before you start on any of this leasing?

Mr. TURCOTT. I have assured myself that the experts in this task force that the Assistant Secretary mentioned are either going to have these answers or some particular tract or area is not going to be leased. At least there will be answers to the extent that people of good judgment are willing to go ahead.

PROTOTYPE OIL SHALE LEASES

Mrs. HANSEN. When are you going to do your first leasing?

Mr. SILCOCK. The first leasing is planned as soon as the impact statement is filed and given adequate time for review. It should be this summer, if the Secretary decides to go ahead.

We have the six tracts that have been nominated, two in each State.

Mrs. HANSEN. What is the acreage involved?

Mr. SILCOCK. I think there are 5,120 acres per tract.

Mrs. HANSEN. In what States?

Mr. SILCOCK. Wyoming, Colorado, and Utah. There are two tracts in each State that have been nominated.

Mrs. HANSEN. Is this in an experimental stage?

Mr. SILCOCK. This will be a prototype project to determine just what is the best method of getting this shale oil out. Thus, the purpose of this is an evaluation, so it could be several years before we would move on into a full scale leasing program, depending on the outcome of the prototype leases.

Mrs. HANSEN. Depending on the evaluation of the environmental impact, and so on.

Mr. SILCOCK. From these prototype leases.

Mrs. HANSEN. Does anybody else have any questions on this?

Mr. McDade. I just want to go back to the coal leases for a moment. Are you still issuing them for 20 years?

Mr. Turcott. Yes, sir. Under the 1920 Mineral Leasing Act, they would be issued for 20 years.

Mr. McDade. Is that mandatory or discretionary?

Mr. Turcott. I believe it states in the law it is a 20-year lease, subject to renegotiation at the end of each 20-year period.

Mr. McDade. What is the rationale for putting a lease up for 20 years?

Mr. Turcott. With respect to coal, we feel that it takes anywhere from 5 to 9 years for people to really get a coal mine into operation. With some of the big mining machinery for strip mining, they can do it a little sooner today.

Actually, we feel in the issuance of coal leases that there should be at least 40 to 60 tons of coal reserved in the lease for any 1 ton of coal that is mined per year. This is in order to let the lessee have sufficient reserves to go on into a continuing business for at least 40 years for any one mine, or longer if his reserves last longer.

Mr. McDade. Are you contemplating any leases for 20 years, in fiscal 1974?

Mr. Turcott. It will all come under the new policy, announced a month ago by the Secretary, on coal leasing. If leased, it will be coal subject to immediate development or reserves, that are necessary for very short terms. It will be coal needed right now to keep a coal operation going, to keep the local economy going, or it is needed in the short term.

Mr. McDade. Are you telling the committee that there will not be any 20-year leases entered into in fiscal year 1974?

Mr. Turcott. No, sir, I will not say that. There probably will be. I am saying, under the Secretary's new leasing policy, we are going to move carefully.

Mr. McDade. I cannot see any justification for a 20-year lease myself. I find that very difficult to understand.

Mr. Turcott. In the coal mining business, as I understand it, 20 years is not adequate enough. The average runs between 40 and 60 years. Companies have to have this to amortize their investment, especially where we are adding the relatively expensive reclamation requirements.

Mr. McDade. I thought you said before in your testimony they were not very expensive.

Mr. Turcott. If they run $30 an acre as an average—which is what one big coal mine for the Pacific Electric Co. in Casper, Wyo., ran—it results in very high caliber reclamation. That is $30, which is $20 to $25 more than any one of these coal companies had to pay before.

Mr. McDade. I would be astonished if you could go to a private holder of coal to get a 20-year lease from them; I would be astonished if you could get a 20-year lease. I have seen many instances in hard coal mines where the leases are not anywhere like 20 years.

Mr. Turcott. Actually, in our coal leases, there is a 20-year initial term. Then if coal has been produced and the lessee wants to go on, it goes on indefinitely. It goes on as long as there is production.

Mr. Horton. I think the Congressman has a very good point.

I personally will have to research this. I think there is an excellent basis for his question. I certainly would want to make sure we are on firm ground. I would hope we could provide for the record not only a legal analysis where the 20-year term came from, but indeed a rationale why the 20-year figure got in there. I think we would all feel much better if we knew that.

Mr. McDade. I wish you would, Mr. Secretary. I did not realize we were leasing for that term, and I would like very much to have some answers on it. I just find it shocking myself that we would commit ourselves for 20 years on a sizable tract of land.

[The information follows:]

Basis for Length of Coal Lease Periods

The Mineral Leasing Act states, in part (30 U.S.C. 207): "Leases shall be for indeterminate periods upon condition of diligent development and continued operation of the mine or mines, except when such operation shall be interruped by strikes, the elements, or casualties not attributable to the lessee, and upon the further conditions that at the end of each 20-year period succeeding in date of the lease such readjustment of terms and conditions may be made as the Secretary of the Interior may determine, unless otherwise provided by law at the time of the exporation of such periods. The Secretary of the Interior may, if in his judgment the public interest will be subserved thereby, in lieu of the provision herein contained requiring continuous operation of the mine or mines, provide in the lease for the payment of an annual advance royalty upon a minimum number of tons of coal, which in no case shall aggregate less than the amount of rentals herein provided for. He may permit suspension of operation under such lease for not to exceed 6 months at any one time when market conditions are such that the lease cannot be operated except at a loss."

Mr. McDade. Do you have any figures on mines that have been leased but have been half-mined or a third mined out and left?

Mr. Silcock. We do not have it with us. I don't have that information.

Mr. McDade. Do you have a clause of any kind which requires a mine to be depleted of its ore before it is abandoned?

Mr. Silcock. Considering the investment made by the operator to develop the reserve, it is normally worked to it's economic limits.

Mr. McDade. Do you expect that to be the case?

Mr. Turcott. Yes, sir.

ROYALTIES AND RENTALS

Mrs. Hansen. What is the royalty on these leases?

Mr. Turcott. Again we have an AD and a BC.

There is a new modern policy approach to it and there is one that goes back to 1920.

Mr. Yates. Where does the new modern policy begin?

Mr. Turcott. In the mid-60's. From the mid-60's on up to the present we fix the royalty at 5 percent of the value of the coal at the first point of shipment. The 1920 Mineral Leasing Act with respect to coal has only a minimum 5 cents per ton statutory royalty figure. For some of the other minerals the law has a fixed percentage or dollar figure. Five cents is another one of these things that goes back many years ago. At that time that is about what the private companies were paying as a royalty and the Government used it. It is discretionary with the Secretary except for the statutory minimum.

Mr. YATES. That is 5 percent per ton?

Mr. TURCOTT. Yes, sir, since mid-1960.

Mr. YATES. That is not very much, is it?

Mr. TURCOTT. The rents vary from $1 to $3 per acre for the first 5 years.

Mr. YATES. What happens in the 6th year?

Mr. TURCOTT. In the 6th year it climbs to $5 per acre and each year thereafter to create an incentive for development. In some of the most modern-day leases—and most assuredly in the leases issued under the Secretary's new policy in the future—we will probably stick with the 5-percent royalty, but we are going to start a system of accumulative advance royalties starting the 6th year, to provide an incentive for development and to stop the speculation.

If they are going to get one of these leases, we want to have a system of advance royalties that will provide a financial incentive to get them into production. On these new leases, they may run an average of 50 years to allow amortization of the investment. Leasees will pay the advance royalty whether or not they produce. When and if they do produce, a credit against the actual royalty that they will pay in terms of the production will be made. Thus, we are going to require advance royalties whether they produce or not starting the 6th year.

Mr. YATES. From the statistics the Assistant Secretary gave us, there are 773,000 acres under lease, of which 708,000 are not productive.

What is the amount of money you get on the leases that are not in production, totally and per acre?

Mr. TURCOTT. It is the rental.

Mr. YATES. The rental is what?

Mr. TURCOTT. It is $1 to $3 in the first 5 years and it is $5 per acre starting the 6th year.

Mr. YATES. Is that for the old style leases, too?

Mr. TURCOTT. No.

Mr. YATES. What do you get under the old style leases?

Mr. TURCOTT. Those which have not gotten to the point where they are at the 20-year renegotiation stage—where rates can be up-dated—and are still one of the older leases, the royalty rate amounts to 10 to 20 cents per ton with a rent of 25 cents an acre the first year, 50 cents an acre the 2d, 3d, 4th, and 5th year, and a dollar an acre from the 6th year on.

Mr. YATES. Can you tell the committee how many of our leases, or how many of your 773,000 acres that are under lease are under the old style lease, the BC type of leases you testified to, or the AD leases?

Mr. TURCOTT. No, sir. That is like the previous question. This and other data base information is being prepared on an individual lease analysis basis as part of our data base for the system to determine the size, timing, and location of future coal leases. It will be continually up-dated. We will submit to the committee the initial analysis when it is completed.

Mr. YATES. How much do we receive annually as royalties for the leases?

Mr. SILCOCK. Approximately $10 million in 1971 on coal rents and royalties.

Mr. YATES. Is that pretty good compensation? $10 million out of 773,000 acres?

Mr. TURCOTT. I have 780,000 acres currently under coal leases.

Mr. YATES. I thought I got these figures from the Assistant Secretary, 708 out of production, and the difference between that and 773 is the number of acres that are in production.

Mr. TURCOTT. I was in the House oversight hearings and I used 780,000 all the way through.

Mrs. HANSEN. 780,000 acres are leased?

Mr. TURCOTT. Yes, ma'am.

Mrs. HANSEN. How many are in production?

Mr. SILCOCK. We don't have production in terms of acreage. We just have the tonnage, about 10 million tons a year.

Mrs. HANSEN. But you have no idea of what acreage this is coming out of.

Mr. SILCOCK. Approximately 10 percent of the total leased acreage is under at least partial development.

Mrs. HANSEN. 78,000 acres.

Mr. YATES. So we are realizing approximately $10 plus per acre for leased land.

Mr. SILCOCK. On that that is being mined. Not even every acre within the 10-percent figure is being mined. This is only those lease acreages in which some active work is now going on.

COAL PRODUCTION OUTLOOK

Mr. TURCOTT. There is one other interesting point to consider. We are doing some more studies on production, particularly future outlooks. The USGS has obtained some figures from companies involved in public land coal leases. Information indicates that on these 524 coal leases covering 780,000 acres which now produce about 10 to 10.5 million tons per year, will, by the end of the 5th or at least the 6th year ahead increase production to 56.5 million tons from just these existing leases. Considering what is coming on very quickly, it gives very strong support to the acceleration of our surface protection program. These are actual contracts. This isn't speculation. The USGS has querried leasees that have coal contracts with power companies in the Midwest, in the Southeast, and the South, and these leasees say "We are going to increase our operations this much." USGS predicts production to be 56.5 million tons a year in 6 years.

MINERAL LEASING PAYMENTS TO STATES

Mrs. HANSEN. I have a question to ask you in direct relationship to this. The States of Utah and Wyoming, Colorado, Arizona, and New Mexico. All are areas where the land is predominantly owned by the Federal Government. These are some of the poorest States in the Nation, as far as their ability to support schools and so on. What does the State get out of this whole program?

Mr. SILCOCK. Under the Mineral Leasing Act 37½ percent of receipts collected would go back to the State where it was produced. One exception is Alaska which receives 90 percent of mineral leasing receipts.

Mrs. HANSEN. You don't get very much for it and the State doesn't either.

Mr. SILCOCK. That is correct.

Mrs. HANSEN. I would think the States would be after you to increase rents and royalties.

Mr. SILCOCK. We have the fiscal year 1972 payment figures here by States on their share of mineral leasing receipts. For example, Wyoming gets $21 million. New Mexico gets $12 million. Utah gets $3.5 million. Alaska gets $7 million. That is everything that is sold, produced, or rented under the Mineral Leasing Act.

Mrs. HANSEN. Mr. McKay, how much of your State is in BLM public land ownership?

Mr. MCKAY. About 44 percent plus other agencies brings it up to about 72 percent total.

COAL POTENTIAL VERSUS EXISTING LEASES

Mr. YATES. You say you have a total of 780,000 acres of coal under existing leases.

Mr. TURCOTT. Yes.

Mr. YATES. How do you know this is all you have? Is it possible you may have more?

Mr. TURCOTT. Yes.

Mr. SILCOCK. This is what we have leased. This is all that is under lease.

Mr. YATES. How many acres are there where you think there is coal that isn't under lease?

Mr. SILCOCK. Two percent or less of the coal lands are under lease.

Mr. YATES. Less than 2 percent.

Mr. SILCOCK. That is correct.

Mr. TURCOTT. Eighty-five percent of the Nation's reserves of low sulfur coal are on the public lands administered by this Bureau in the West.

PUBLIC LAND OWNERSHIP

Mrs. HANSEN. What is your total public land ownership in the West?

Mr. TURCOTT. 180 million acres.

Mr. SILCOCK. Of course, that doesn't give you the complete picture. You see, there is also subsurface ownership in a lot of private lands in States such as Montana and Wyoming. The surface has passed from Federal ownership but the minerals are still reserved.

Mrs. HANSEN. I understand, but I am trying to get the size of this Western public land. I just don't think a State like New Jersey or Maryland or Maine realizes the size of the immense public land holdings in the West. I am sure they don't see the problems of the States out there.

Mr. SILCOCK. That is true.

Mr. WYATT. Madam Chairman, that is illustrated by the fact the Federal Government still owns some 90 percent of the State of Alaska, and I think it is something like 66 percent of the State of Utah, and 64 percent of the State of Idaho, 52 percent of the State of Oregon.

ADEQUACY OF INVENTORY AND PLANNING FUNDS

Mrs. HANSEN. Does this $650,000 in your fiscal 1974 budget provide sufficient funding for you to adequately protect the interests of the Federal Government in this connection?

Mr. SILCOCK. Under the priorities that are set out in the budget——

Mrs. HANSEN. That is all you can afford.

Mr. SILCOCK. This is all that we felt we could devote to this effort considering other programs which also require additional effort.

Mrs. HANSEN. If you were to have your complete wishes fulfilled on the needs, would you say that you would need more?

Mr. SILCOCK. Yes; I would say we would need more.

Mrs. HANSEN. How much more?

Mr. SILCOCK. I would say at least triple.

Mr. YATES. At least triple?

Mr. SILCOCK. Yes; to do the job within the required time frame of resource decisionmaking.

Mr. YATES. Can you tell us why?

Mr. SILCOCK. Because of the magnitude of the job to do, the vast area involved, the lack of basic resource information and so on.

Mr. TURCOTT. It is based on program needs from our field offices.

Mrs. HANSEN. This is all basic planning; isn't that correct?

Mr. SILCOCK. That is true. Inventory of resources and development of multiple use plans with emphasis on potential energy areas.

OIL SHALE PROGRAM

Mrs. HANSEN. Please insert in the record a tabulation by activity of the total funding for your agency in connection with development of oil shale lands for fiscal year 1972 and estimate amounts for fiscal year 1973 and 1974.

[The information follows:]

OIL SHALE FUNDING

[In thousands of dollars]

[Funding for our oil shale program by activity]

	Fiscal year—		
	1972 actual	1973 estimate	1974 estimate
Title clearance	630	650	650
Land use planning	40	435	435
Environmental analysis	50	100	75
Surface protection		40	60
Leasing management-coordination			30
Total	720	1,225	1,250

COMMERCIAL OIL SHALE OPERATIONS

Mr. MCKAY. Madam Chairman, do we have any economically feasible oil extractions from oil shale at the present time?

Mr. SILCOCK. Private enterprise has developed an extraction system. They are doing it now on a pilot basis.

Mr. MCKAY. I know they can extract some but can they do it on an economical basis?

Mr. SILCOCK. I am not sure. That information is generally kept within the industry, but we do know they have developed a process and are doing it on their private oil shale holdings.

Mr. McKay. That is where the economy part comes in, and where you get into ecology.

Mrs. Hansen. When you get into public lands you are going to have to wrap in the environmental considerations, and so on.

Mr. Silcock. This is where we will go to this prototype leasing study.

Mrs. Hansen. But on private lands they don't do this.

Mr. McKay. Are they now extracting oil? That is, is it out commercially now, taking out so many barrels a day or is it still just an experiment?

Mr. Silcock. They have developed a process, but whether they would consider it economically feasible to do it on an economical basis, we don't know.

Mr. Wyatt. They are not doing it commercially?

Mr. Silcock. They have a process there.

Mr. McKay. It hangs in the ecological part in what they have to do to reclaim it.

Mr. Silcock. This is on their private lands.

OIL SHALE ENVIRONMENTAL IMPACT STATEMENT

Mr. Wyatt. I have two quick questions on this subject. When do you expect you will have your general, overall EIS statement on oil shale? What is your best estimate?

Mr. Silcock. That should come out within the next 2 months.

Mr. Wyatt. Do you know now whether or not you are going to furnish or have you decided yet whether you are going to have to furnish EIS statements on every individual oil shale lease after your overall statement is once issued?

Mr. Silcock. This EIS statement that is coming out now considers the six leases.

Mr. Wyatt. The specific six leases?

Mr. Silcock. Yes.

Mr. Wyatt. Your answer is probably in the future for any lease or groupings of leases you are going to have to have individual statements.

Mr. Silcock. That is correct, but this is down the road quite a ways. This is a prototype program from which we expect to learn much.

Mr. Wyatt. But this is the way it looks at this point in perspective.

Mr. Silcock. It would have to, yes.

Mr. Wyatt. Thank you.

OUTLOOK FOR OIL SHALE TITLE CLEARANCE

Mrs. Hansen. In your opinion, when will you have resolved the various land claims in connection with the oil shale lands?

Mr. Silcock. We don't have the projection on that.

Mrs. Hansen. Is it 5 years, 10 years, 20 years? What is it?

Mr. Silcock. I would say it would be at least 5 years, because we have upwards of 80,000 claims to clear.

ENVIRONMENTAL ANALYSIS PROGRAM

Mrs. HANSEN. You will be 20 years, considering the speed with which you are going on some of your other programs.

You are requesting an increase of $600,000 and 20 positions for environmental analysis and statement preparation, for a total 1974 program of $900,000. Describe the details of this request.

Mr. SILCOCK. This environmental analysis like inventory and planning is primarily energy related. We wil be working on the oil shale areas in Colorado, Utah, and Wyoming. We will be working on the geothermal areas as well as working on environmental analysis for other resource uses. We estimate we will have at least 2,000 of those to make in the energy area alone. We will be reviewing at least 700 environmental impact statements of other agencies. We are working on 20 to 40 major environmental impact statements of our own including programatic statements, such as one for coal, oil, gas, timber and so on. This is where our major input will be directed in connection with our environmental analysis work.

ENVIRONMENTAL EDUCATION

Mrs. HANSEN. We have a letter from James Swan. He is very interested in the Federal environmental education program in Federal agencies. What are you doing in this regard?

Mr. SILCOCK. We have an educational program which is set up and being handled by the various States. We have set up study areas. We have gone to the teachers, taking classes out and talking about the environment. Education and teaching has included the high school and grade school. School system support and working with the local schools have been features of this effort.

Mr. WYATT. Madam Chairman, I wonder if that letter might be with reference to the Office of Education administering the Environmental Education Act.

Mrs. HANSEN. You will remember we put some money in last year's BLM budget for some environmental education.

Mr. SILCOCK. Yes; we estimate expenditures of about $200,000 in the 1973 fiscal year.

[Discussion off the record.]

Mr. SILCOCK. We also have a YCC program which is environmentally oriented. We had six camps last year and are scheduled to operate eight camps with 153 participants this summer. One of these is a small camp which will work exclusively on environmental study areas.

TRANS-ALASKA PIPELINE

Mrs. HANSEN. $8,176,000, an increase of $7,400,000, and 55 positions is requested for trans-Alaska pipeline. You propose that $7,400,000 shall be available only upon issue of right-of-way permits. In view of the recent court ruling delaying the pipeline, do you feel this level of funding in fiscal year 1974 is necessary?

Mr. SILCOCK. We feel it is necessary, Madam Chairman, so that in the event the permit is issued, we will have the capability to move forward and do the surveillance work. Both engineering and the environmental surveillance work in connection with the construction of the pipeline will be required immediately after the permit is issued. We have in our continuing program 1973 base, the $776,000 which is needed and is being used in connection with studies, surveillance of activities that are going on now, and analysis of possible route relocations that will be required to facilitate safe pipeline construction.

PIPELINE ROUTE

Mrs. HANSEN. On your map there will you show the committee what possible route changes there may be, and where they are?

Mr. SILCOCK. First of all, I will go to the general map of Alaska and then go to the specific map of the pipeline corridor. The pipeline starts here at Prudhoe Bay.

Mrs. HANSEN. It originates in State land.

Mr. SILCOCK. This is correct. The blue on the map is State lands.

Mrs. HANSEN. The two blue colors are State.

Mr. SILCOCK. The medium blue is State land which has been TA'd, the dark blue is patented land. This is where the wells are being drilled now. This is where the discovery well located at Prudhoe Bay. They are continuing to drill wells on this State land at the present time.

Mrs. HANSEN. As I recall, the State is responsible for those roads up in the State area.

Mr. SILCOCK. That is right.

Mrs. HANSEN. It is just that in the dark blue segment or does it extend in the light blue too?

Mr. SILCOCK. This gets into a grey area as far as final status is concerned.

Mrs. HANSEN. You had better have some understanding on that.

Mr. SILCOCK. In the light blue areas the State selection application is pending. The State has indicated to us that they want this light blue land. The medium blue lands are those we have TA'd it them. They have responsibility here. On application lands, there is somewhat of a joint responsibility because we have not passed title to the State yet in the form of TA.

Mrs. HANSEN. The line to my right goes up. That is the one that goes into Canada.

Mr. SILCOCK. That is a possible corridor for a gas pipeline into Canada. This was withdrawn at the time the Native Claims settlement was passed.

Mr. YATES. Why was that withdrawn?

Mr. SILCOCK. As a future potential corridor, a pipeline, or industrial corridor.

Mr. YATES. Probably a preferable one to the other?

Mr. SILCOCK. I wouldn't say it is preferable. It is a future potential corridor.

Mr. WYATT. Kind of a leading question.

Mrs. HANSEN. It all depends on whether you want Canada or the United States to get the money.

Mr. SILCOCK. The pipeline corridor moves on through here.

Mrs. HANSEN. Show the committee what areas are particularly susceptible in the permafrost.

Mr. SILCOCK. Let me take you from this general map to this other map which is in much more detail. Again this is Prudhoe Bay. Moving south is the Brooks Range. This is the North Slope, the Brooks Range here, the Yukon, Fairbanks, and the Alaska Range. Here is the Copper River Basin and then the coastal range or Chugach Range and Valdez is right here.

CRITICAL PIPELINE AREAS

Permafrost north of the Yukon in this area is not as critical because it stays colder. It doesn't thaw.

Mrs. HANSEN. In other words, the hot oil is not going to have a major impact.

Mr. SILCOCK. It would have less of an impact because it stays frozen. As you move south though you get into this area through Fairbanks and through here. This is very critical, because the active layer is deeper. By the active layer I mean the area down to where it stays permanently frozen. Up here it is probably 15 inches, in this area it is probably 18 inches and here in the south it may be as high as 2.5 feet down, which is warmer permafrost. The thaw is deeper in the summer, and so you would have greater problems in connection with slope stability and stability of the pipeline at that season.

PIPE CONSTRUCTION

Mrs. HANSEN. What is the width of the pipe?

Mr. SILCOCK. It is 48 inches in diameter so it is 4 feet across. The pipe itself is a half-inch-thick steel pipe.

Mrs. HANSEN. Made in Japan?

Mr. SILCOCK. Yes.

Mr. YATES. Is it really?

Mr. SILCOCK. It was the only place it could be purchased at the time, as I understand it.

Mr. YATES. They could have waited a little though, couldn't they?

[Discussion off the record.]

PIPELINE INSTALLATION

Mr. YATES. Is this proposed to lay on the earth, on the tundra?

Mr. SILCOCK. It depends on what is underneath the surface. Initially, when they started, they figured about 48 miles would have to be above ground. Now they have determined that over half of it would have to be above ground because the subsurface material is not stable enough. For example, on the North Slope the ground is 20 percent silt and 80 percent ice. Obviously you couldn't bury it because a hot oil pipeline would melt the soil structure. They have projected that over time some 300 feet on the side and perhaps 50 feet down would melt.

Mrs. HANSEN. The Soviet Union has an entirely elevated pipeline, do they not, across Siberia?

Mr. SILCOCK. They have a pipeline across Siberia. I don't know whether it is all elevated or not.

Mrs. HANSEN. I think you testified last year that at least the major part of it was above ground.

Mr. SILCOCK. I think this is correct.

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OIL TEMPERATURE

Mr. LONG. How hot is the oil?

Mr. SILCOCK. It comes out of the ground at about 140° to 160° of temperature. As they push it through the pipeline, once they get into full production, which would be 2 million barrels a day out the end of the pipeline here, it will heat up to over 200° because of the friction and the pressure. This is the problem with unstable ground.

BROOKS RANGE

Mrs. HANSEN. How about going through the Brooks Range? How do they manage that?

Mr. SILCOCK. Through the Brooks Range, once they get off of the lower flood plain here, the pipe will be buried, or could be buried, because a lot of it would be in solid rock. Burying it in the solid rock or gravel would provide a stable base.

CANADIAN PIPELINE ROUTE

Mrs. HANSEN. Your terrain going down into Canada, that crosses the State land again.

Mr. SILCOCK. Yes, coming east toward Canada. There isn't any more difficulty in the terrain on the proposed route as there is on this route to Canada. It is just a case of coming through the Brooks Range here or coming through this way. The alternate route parallels the Yukon River and the Porcupine River running east into Canada.

Mrs. HANSEN. In other words, you have almost the same terrain in Canada as you do in Alaska.

Mr. SILCOCK. On through Canada you get a much longer route of permafrost, and you have many more rivers to cross. The Yukon River is the only major river coming south to Valdez. But you have 12 major rivers going through Canada. The River crossings are one of the critical points of pipeline itself, because of the flood potential and scour. So we are told by the engineering profession.

Mrs. HANSEN. A certain amount of heat would go into that river too?

Mr. SILCOCK. There would be some heat but it is mainly scouring effect from floods that could damage the pipe. Some of these rivers going to Canada are over a mile in width. You have got some very critical problems there.

GAS PIPELINE ROUTE

Mr. YATES. The Canadians are going to build a gas pipeline, aren't they, along that route. They are going to have to cross the rivers.

Mr. SILCOCK. There are two routes that they talk about in connection with the Canadian corridor. One on one side of the river and one on the other. I think the gas line is up the west side of the McKenzie and the oil line up the east side.

Mr. YATES. The point I am making is that the construction of the gas pipeline would encounter the same problems as an oil pipeline in crossing rivers; would it not?

Mr. SILCOCK. In crossing rivers you would have the same problem. The permafrost wouldn't be as much of a problem because the gas will be cold. It wouldn't be hot as in the case of an oil pipeline.

Mrs. HANSEN. They will have the same problem with river flooding.

Mr. SILCOCK. Right, the flood problems on river crossings.

Mrs. HANSEN. When the Tanana went over its banks in Alaska, you had everything swept before it; isn't this correct?

Mr. SILCOCK. There was water spreading across that whole valley; that is right.

Mrs. HANSEN. It just wiped out everything there in the Fairbanks area.

Mr. SILCOCK. It certainly got treated with flood water in downtown Fairbanks.

NATIVE REGIONAL CORPORATIONS

Mr. YATES. What are those various names on the map of Alaska there? Are those organizations?

Mr. SILCOCK. These are the native regional corporations, like the Arctic Slope, the Bering Straits, and so on. There are 12 regional areas.

Mrs. YATES. Does each of them have its own region?

Mr. SILCOCK. Yes, sir.

Mr. YATES. And that is laid out on the map there?

Mr. SILCOCK. It is delineated as the black line. Do you see it here?

Mr. YATES. Yes.

Mr. SILCOCK. Here is the Bristol Bay area.

ENGINEERING INSPECTIONS

Mrs. HANSEN. $4.7 million of the total increase is for reimbursement of the Corps of Engineers. What type of work will they be performing for you?

Mr. SILCOCK. Under our projected agreement, they would be doing the design review, and also the engineering surveillance in the field. In other words, they would be doing initial engineering design review, and then carrying related inspections out in the field.

REIMBURSEMENT OF COSTS

Mrs. HANSEN. Do you still intend to require that all costs you have incurred in this activity will be reimbursed if the pipeline permit is issued? Is this requirement stipulated in the terms of the permit?

Mr. SILCOCK. Yes, it would still be a requirement.

Mrs. HANSEN. Carrying out the Solicitor's opinion?

Mr. SILCOCK. That is correct.

STATEMENT OF SECRETARY MORTON ON ALASKA PIPELINE

Mrs. HANSEN. Before we move on to the next item, I would like to insert in the record a copy of testimony given by Secretary Morton to the Joint Economic Committee on June 22, 1972. The testimony con-

cerns various issues relating to the Alaska oil pipeline and contains an analysis of the Canadian alternative.

[The information follows:]

STATEMENT BY THE HONORABLE ROGERS C. B. MORTON, SECRETARY OF THE INTERIOR, BEFORE THE JOINT ECONOMIC COMMITTEE, JUNE 22, 1972

Thank you for the opportunity to appear before this committee to discuss my decision to approve the proposed trans-Alaska pipeline.

Mr. Chairman, the United States urgently needs the oil from Alaska's North Slope in American markets to satisfy a growing gap between domestic demand and supply. We need that oil as quickly as an environmentally safe delivery system can be developed.

My decision is based on an exhaustive and unprecedented 3-year study of the ways to safely transport these valuable petroleum resources from the Alaska Arctic.

In this period, the Federal Task Force on Alaskan Oil Development, established by the President in May of 1969, has completed the following tasks:

(*a*) It has prepared a six-volume Environmental Impact Statement, which is thought to be the most comprehensive and detailed study ever conducted under the National Environmental Policy Act. Preparation of this statement required 18 months, and involved consultation with and contributions from over 20 Federal and State agencies.

(*b*) It has closely examined other alternatives, including possible Canadian routes, other transport systems, and other sources for the needed energy.

(c) It has prepared, in three detailed volumes, an analysis of the economic and security aspects of the system.

(d) It conducted a sweeping geologic and engineering analysis of the proposed pipeline system across Alaska.

(e) It has developed the strictest environmental and engineering stipulations ever drafted to safeguard a project of this nature.

(f) It has organized a professional Federal surveillance team to enforce the stipulations, to impose strict quality control of the system and to insure maximum environmental protection.

Three significant and separate groups of public hearings have been held on the proposed pipeline.

The first was held on August 29 and 30, 1969, by former Under Secretary Russell E. Train in Fairbanks, Alaska.

A second series of hearings, nine in number, was held by the House and Senate Interior and Insular Affairs Committees, and by the Fish and Wildlife Subcommittee of the House Merchant Marine and Fisheries Committee between August and December of 1969.

The third series of hearings, 7 days in length, in February of 1971, was held on the preliminary environmental statement in Washington, D.C., and Anchorage, Alaska. They resulted in over 12,500 pages of transcripts.

Mr. Chairman, the Department's examination of this project has been penetrating and thorough. After months of searching consideration, I am totally convinced that the decision to grant the trans-Alaska pipeline is in the highest public interest. I am convinced that my decision fully reflects the letter and spirit of the National Environmental Policy Act of 1969, to which we are deeply committed.

THE CANADIAN ALTERNATIVE

Perhaps the most frequent question is why didn't I pursue the Canadian alternative.

Many people asking this question are genuinely motivated by environmental concern. Others are motivated by regional, economic, and other interests. I have carefully weighed the environmental, economic, social and security considerations from a national, rather than a parochial perspective.

Let me explain briefly the status and the disadvantages of the Canadian alternative.

INFORMATION ABOUT THE CANADIAN ROUTES

Most immediately, no right-of-way through Canada has been established and thus there is no "Canadian Route". Our environmental impact statement examined six possible routes through Canada, but clearly there has been no single route

determined and quite obviously we have no set of detailed route studies comparable to our comprehensive TAPS analyses.

Contrary to the testimony of Mr. David Anderson, a Member of the Canadian Parliament, before your committee, the United States did formally request information of Canadian authorities to assist us in the preparation of the TAPS environmental statement. This information was requested in a U.S. aide-memoire of July 9, 1971.

The 30 environmental and social studies of northern pipelines being pursued by Canada were not announced in Canada by Minister Macdonald until April 18, 1972, 3 weeks after the publication of the TAPS environmental statement and 9 months after our request. Not one of the studies, as far as we know, has been completed and we have not received any substantive information from the Canadian Government on any pipeline route through their country.

RELATIVE ENVIRONMENTAL CONSIDERATIONS

While specific information on a Canadian route is not available, we have had enough general knowledge to reach some important conclusions.

There are two types of environmental impacts that must be considered in comparing the Alaskan and Canadian routes: unavoidable impacts and potential impacts. A major conclusion with respect to terrestrial impact is that because the Canadian route is longer, crosses more permafrost and more major rivers and necessitates much more gravel extraction, it involves a greater degree of unavoidable environmental damage than does the Alaskan route.

On the other hand, the Alaskan route involves a maritime leg to the west coast which is likely to involve small chronic discharges from the ballast treatment plant at Port Valdez. We were unable to determine the extent of environmental impact, if any, that might result from these discharges.

An Alaskan pipeline would have potential seismic risks along three zones in the southern half of the route. These zones have been identified and the system designed to accommodate the largest earthquake on record. The system is being engineered to withstand ground movements of from 5 to 20 feet, and all seismic zones will be continuously monitored to determine crustal movements.

In addition to these unprecedented seismic safeguards, containment dikes and remotely controlled block valves will further insure against environmental damage from the remote possibility of earthquake damage.

The marine leg of the Alaska route also involves potential pollution from oil tanker collisions and groundings, and from accidental spills during loading and unloading.

It is pertinent to observe here that the pipeline will have a throughput of only 600,000 barrels per day for the first 1 to 2 years of operation, then an increase to 1,200,000 barrels per day in the third year with 1,500,000 barrels per day planned by the sixth or seventh year. While the system is being designed for a maximum throughput of 2 million barrels per day it is uncertain when that capacity will be attained. Consequently, the number of ships entering Valdez and other west coast ports, and the accompanying risks of polluting accidents, will be proportionately reduced during the first 6 to 7 years of operation.

NEW AMERICAN INITIATIVE

Nonetheless, I am convinced that we must seize this opportunity to set new and exacting standards to govern the marine transport of American oil. This goal is worth accomplishing by itself; but if our standards can set an example for solving the broader problems of international oil movements, we will have accomplished a task of long range significance for mankind. I have discussed this matter with Secretary Volpe, and we are now studying the implementation of the following steps:

All tankers, foreign and domestic, operating in the TAPS trade will be prohibited from discharging oil into the ocean, including oil contaminated ballast, tank cleaning waste, or bilge effluent. The facilities at Port Valdez will not be allowed to deliver oil to tankers that have violated this prohibition. Newly constructed American-flag vessels carrying oil from Port Valdez to U.S. ports will be required to have segregated ballast systems, in corporating a double bottom, which will avoid the necessity for discharging oily ballast to the onshore treatment facility. All other tankers will be required to discharge oily wastes into the treatment facility at Port Valdez. That facility will be required to eliminate

as much from these wastes as technologically practicable. In no instance will the discharge exceed 10 parts per million of oil, and the standard will be upgraded as improved technology becomes available.

Vessel traffic systems will be required for Port Valdez and the west coast ports. These systems will incorporate traffic separation schemes and will be geographically situated so as to avoid the fishing grounds and ecologically sensitive areas off Canada, Alaska and our west coast. The Coast Guard will increase its staff and equipment as necessary to implement these schemes. Aids to navigation will also be modified as required to implement these systems.

New U.S.-flag vessel designs will be evaluated, looking toward improving their maneuverability with regard to stopping distance and turning characteristics.

All accidental discharges during loading and unloading will be eliminated to the fullest extent possible and if they occur, will be subject to substantial penalties. Coast Guard regulations scheduled to become effective late this summer as being reviewed to assure their adequacy for Alaskan operations. Construction specifications and required manning and equipment standards are also being reviewed to provide further insurance against accidental discharges during loading and unloading operations.

Contingency plans for cleaning up oil spills must be continually reviewed and proven to minimize the damage in the event any accidents occur. These will be kept current in the light of new technology to assure their maximum effectiveness. The Coast Guard will augment its personnel and equipment to insure a maximum capability in this regard.

A continuing environmental monitoring system will be required during the lifetime of oil movement in American coastal waters.

Discussion of the marine leg should not blind us to the grave environmental problems that would be involved along a Canadian route.

First, it is important to stress that the large number of river crossings constitute significant potential risks along a Mackenzie route. The wider the river crossing, the greater the risk to the environment of a pipeline system. The only crossing of as much as one-half mile width on the Alaskan route is at the Yukon River. At least 12 major river crossings of this width or greater are involved between Prudhoe Bay and Edmonton on a route up the Mackenzie River.

Second, guidelines adopted by Canada in 1970 require that oil and gas pipelines be located within a common corridor. However, a recent study by Canada's Federal Environmental Agency recommends that gas pipelines should be built in the west side of the Mackenzie River and oil pipelines on the east.

This study by the project leader of Canada's northern pipeline project indicates that for engineering and environmental reasons the two quite different types of lines should be constructed a considerdable distance apart. If the recommendations of this Canadian study are observed, then the environmental and economic savings from a common corridor are materially diminished. With your permission, Mr. Chairman, I would like to offer for the record, an account of the study prepared by Mr. C. T. Hatfield, Fisheries Service, Department of the Environment, Winnepeg.

Third, a Canadian oil pipeline alone, 3,200 miles in length, could require as much as 320 million cubic yards of gravel, involving over 1,000 excavation pits. The uncertain availability of this material and the impact of its extraction on the environment of the Mackenzie Valley constitute most serious questions.

I have not made these points in an effort to convince you or the American people that the Alaskan route is environmentally superior to a Canadian route. Rather, I have attempted to show that the environmental question is not as simple as some believe, and that we cannot avoid the tough environmental problems involved in this massive project by sweeping them under the rug of our Canadian neighbors.

In fact, it is by no means clear which route will produce more environmental damage over the long run, because no one can predict with certainty which potential risks will actually be realized. My authority does not run to Canada, so I can give no assurances with respect to a Canadian route similar to the exacting environmental stipulations and strict environmental surveillance that we have developed for Alaska.

DETERMINING THE NATIONAL INTEREST

While environmental concerns have been among our highest priorities, a project of this magnitude compels the consideration of the broadest framework of issues in determining the national interest. One of the most critical issues is the time frame in which oil can move to market.

CAUSES OF DELAY ON CANADIAN ROUTE

Selection of a Canadian alternative would involve substantial and unacceptable time delays. In my May 11 announcement, I estimated the delay to be 3 to 5 years; it might be even greater—possibly as much as 7 years. There is no objective justification for the view that the delay could be as short as 1 to 2 years.

1. Longer Line.—The first and most obvious point is that the Canadian route to Chicago would involve a 3,200-mile pipeline, four times as long as the Alaskan route of less than 800 miles. As a matter of logic, a longer line takes longer to build because of increased requirements for material, logistics, and manpower.

2. Drilling in Permafrost Terrain.—The second point is not so obvious, but it is equally important. During the past 3 years, the Department has required the drilling of 3,300 core holes in permafrost terrain, to ascertain optimum pipe location and construction modes. This drilling is essential both to the safe construction of any oil pipeline system in the Arctic and sub-Arctic, and to the preparation of adequate impact analyses. Since very little of this engineering feasibility work has been done for a Canadian oil pipeline route, the companies and the Canadian Government would be starting nearly from scratch. It is reasonable to assume that if 2 years were required to core-hole 700 miles of permafrost along the defined Alaska route, then at least 2 years and probably 3 would be required to drill the 1,200 miles of permafrost along a Canada route, which has yet to be chosen.

3. Environmental Statement.—While the Canadians have no National Environmental Policy Act, it is important to realize that any Canadian route would require the preparation of a comprehensive environmental statement because of the 300 miles in Alaska and the 900-plus miles south of the international border under U.S. jurisdiction. To comply with American law, this statement must provide a detailed examination of the entire 3,200 miles of the route. It would entail the careful drafting of a preliminary statement; the preparation of comments by Federal, State, and in this instance, Canadian authorities; the conduct of public hearings in both countries, and the careful assessment of all alternatives, before the final document could be completed.

A reasonable length of time to allow for this preparation is 18 to 24 months, realizing that an adequate study could not be finished until a route is selected, and the core drilling and other scientific and environmental studies completed.

4. Canadian Governmental Action.—The fourth point, the issuance of a Canadian permit, is somewhat delicate because it involves very good neighbors, but nevertheless it is important to understand this issue.

According to our best information, the Canadian Government has not been, and is not now, even prepared to accept an application for a permit. Minister Macdonald has explained to us that an application can be accepted by the end of the year. We received Alyeska's application on June 10, 1969, 3 years ago. There is little reason to believe that the Canadian Government will be able to resolve their environmental and native claims issues in any less time.

CANADIAN NATIVE CLAIM DELAYS

Our Congress solved the Alaska Natives' claims problem by adopting the Alaska Native Claims Settlement Act of 1971. It provided 40 million acres, an area larger than the State of Wisconsin, and nearly $1 billion. Canada is just beginning her consideration of this problem, and indeed it is pertinent to note that none of the 30 Canadian studies addresses this problem specifically.

I bring to your attention, and offer for insertion in the record, Mr. Chairman, press accounts of recent activities of Canada natives with the headlines "No Settlement—No Pipeline" and "Stopping the Pipeline Is Northern Native Cause." They indicate that native groups will "use every weapon at their disposal and are building an arsenal that will include everything from environmental protest to exercising a form of squatters rights" to achieve their aboriginal land rights.

My point here, Mr. Chairman, is that the Canadian native claim issue is now at an incipient stage, and time for its resolution must be properly considered. The American Congress took several years to determine and act upon this critical issue.

In view of the U.S. record, it would be unwise, and indeed ill serve the cause of social justice, to ignore the possibility of delay from Canadian native claims in the interest of expediting pipeline construction.

CANADIAN ENVIRONMENTAL DELAYS

Likewise, there are no grounds to assume that environmental groups in Canada will not demand of their Government an important voice and a most cautious and deliberate approach to a project of this magnitude.

As an example, the Canadian Arctic Resources Committee, an environmental group of scientific and northern experts, has recently recommended that exploitation of the Arctic should be delayed for approximately a decade to allow for the completion of basic research and environmental management procedures. It is certain that this Canadian group, among others, will seek a close participation in discussions for any proposed pipeline through Canada.

CANADIAN APPLICATION REQUIREMENTS

Finally, it is important to clearly assess the demanding requirements for filing a pipeline application in Canada. The Canadian National Energy Board requires in effect that a full project description accompany the application, together with a detailed map of the route and specific information regarding markets, reserves, growth trends, capital costs, accrued depreciation, throughput contracts, projected revenues and expense, construction schedules, and disclosure of financial matters.

For comparison, it took Alyeska 18 months to comply with our mapping requirements and 3 years to file a satisfactory project description.

Once an application might be filed an approved, further time must be allowed for the conduct of hearings, the review of comments and for parliamentary debate. These debates, certainly, would involve discussion and possible enactment of pending Canadian environmental legislation which in turn could have significant effects on the timing of a pipeline permit.

5. Financing. Let me turn now to problems whose solution would be as difficult as any of the engineering or administrative issues—the problem of financing.

The TAPS route is estimated to cost $2.8 billion for the pipeline and $1.7 billion for tankers—a total of $4.5 billion. Its costs have the advantage of being shared between the petroleum and maritime industries.

The cost of a Canadian oil pipeline is unknown but we estimated it at $6 billion. Canadian authorities have indicated that they must control 51 percent of any system through their country. We enter here, Mr. Chairman, a most uncertain and difficult area. Let me bring to your attention some questions of critical importance about the feasibility of a Canadian route:

1. Could the Canadian industry raise from their own money markets the $3.1 billion necessary for 51 percent of equity financing for an oil pipeline?

2. Could they raise an additional $2.2 billion necessary for 51 percent of a gas pipeline through Canada * * * making a total of over $5 billion of Canadian financial resources?

3. How long would these financial arrangements take, and can an application be filed before agreements are completed?

4. Would not agreements on financing and an elaborate corporate structure be necessary before route feasibility studies and a project description could start on a specific Canadian route?

5. How much of the throughput capacity would the Canadians demand and what effect would this have on raising American capital, and on the financial structure of American companies?

6. Would a pipeline system of shared capacity and ownership require treaty arrangements, and if so, how long would these take?

7. If the Canadians are given any percent of throughput, how long would trade negotiations over oil import quotas require?

The answers to these administrative and financial questions bear most directly on the time frame of a Canadian system. The great uncertainty of their resolution in time as well as substance makes it clear that our 3 to 5 year delay may well underestimate the actual time required. Under the most optimistic assumptions, I do not personally see how oil could flow through a Canadian system earlier than 1981.

IMPACT ON THE UNITED STATES

In concluding my statement, let me outline the more significant impacts that a Canadian route would have on the United States:

1. While the Canadians have offered to increase oil exports to us during the period of delay, it is most uncertain whether they can guarantee the equivalent of the TAPS capacity above the Canadian import increases which we have already assumed in our calculations.

2. If 50 percent of the capacity of the line were reserved for Canadian oil, royalty revenues to the State of Alaska and to Alaska Natives would be cut by 50 percent.

3. A Canadian route would deny to the United States the substantial employment benefits resulting from construction and operation of a pipeline in Alaska.

4. The denial of an Alaskan route, with the accompanying reduction of State and Native royalties, would most seriously affect the economy in the State of Alaska.

5. A Canadian route would deny to the United States and the State of Alaska the construction of a vital transportation artery to its own Arctic.

6. To the extent that a Canadian route involved shared capacity, the resource cost savings and balance of payments of the United States would be adversely affected.

7. A Canadian route would deny to this country the substantial benefits that otherwise will occur to our maritime industry.

TRANSPORTATION OF ARCTIC GAS

The Department's examination has indicated the growing need for gas in the United States and the economic efficiencies which would be realized by transporting Prudhoe Bay gas by a pipeline through Canada. Throughout our analysis, we have recognized the clear benefits that a Mackenzie Valley route would have for this gas and we welcome a close working relationship with the Canadian Government on this matter.

We also recognize the severe burdens that will be imposed on the Canadian economy should the funding of a $6 billion oil pipeline and a $4.3 billion gas pipeline, at 51 percent Canadian equity, be sought from their domestic money markets.

Because of the staggering, perhaps insuperable difficulties involved with financing both systems with Canadian capital, we propose that the trans-Alaska pipeline proceed now under American financing, and that we join together with Canada in pursuing a Mackenzie route for the gas.

It is pertinent to add here, Mr. Chairman, that U.S. gas pipeline companies advised the Department on May 4, 1972, that the adoption of a Canadian route for North Slope oil would be "disastrous" inasmuch as the construction of a gas line would be delayed until the mid-1980's. This delay, they indicate, would cast doubts on its economic feasibility. With your permission, I enclose for the record their comments on the Department's final environmental statement.

THE TAPS DECISION

Mr. Chairman, the nucleus of my decision to grant the Alaska route is based on the urgent need to bring North Slope oil and gas into the American marketplace as rapidly as possible. Our studies have clearly articulated the need for these petroleum resources, and the costs of delay. The trans-Alaska route presents the only feasible means of transporting Arctic oil within an acceptable time frame. This route avoids the delays and uncertainties inherent under Canadian control and Canadian law. District V provides an important American market where the full capacity of the pipeline is needed and can be readily absorbed.

Every year of delay will increase the gap between our demand for crude oil and production from secure sources.

Every year of delay increases our vulnerability to arbitrary price changes and supply interruptions.

Every year of delay will materially weaken our bargaining positions in the continuing negotiations with oil producing and exporting countries, and add complications to our foreign relations.

By the far reaching steps that Secretary Volpe and I announced today to combat marine pollution, and by the unique stipulations and enforcement that we have developed for the Alaska pipeline, its cautious construction and operation will proceed under the most rigorous environmental protection.

Mr. Chairman, the Alaska route is right for the interests of the State of Alaska and of Alaskan Natives.

It is right for our shipbuilding, maritime, banking, and petroleum industries.
It is right for the interests of American labor.
And it is right for the economic security and the national interest of this country.
This completes my statement and I am happy to answer questions from the committee at this time.

WILD HORSES AND BURROS

Mrs. HANSEN. You are requesting an increase of $300,000 and 10 positions for the protection of the wild horses and burros. Will you give the committee a general picture of the additional responsibilities that the public law placed on your Bureau?

Mr. SILCOCK. Yes; this piece of legislation has placed the responsibility on us to manage the wild horses and burros that are on the public lands. To carry out this work we need to make a complete inventory of our major concentration areas. We need to begin training for law enforcement in connection with the implementation of the act. There is a problem of the determination of ownership and how we go about permitting removal of the privately owned animals. We have a joint advisory board set up between the Forest Service and the BLM to administer their responsibilities. This board is organized and they have just completed their second meeting in Denver. They have reviewed our proposed regulations, both those of the Forest Service and BLM. They reviewed our environmental impact statement. Now we are in the process and will be ready to publish that as the proposed final rulemaking in connection with the implementation of this law.

Also, the funds will be used to support cooperative agreements with private, national, State, and local groups interested in the wild horses and burros.

ILLEGAL CAPTURE AND ENFORCEMENT

Mr. LONG. How many wild horses and burros do you estimate are captured illegally per year?

Mr. SILCOCK. No cases of illegal capture of wild free-roaming horses or burros are known; however, it must be assumed that a very small number of illegal captures do occur. Public Law 92–195 provides for the removal of unbranded claimed horses and burros under the branding and estray laws of the State in which the animal is found. A major question relative to the interpretation of the act is whether the Bureau or State officials have the authority to adjudicate questionable claims to unbranded horses or burros. This situation is involved in the Idaho case.

Mr. LONG. What type of enforcement activities do you plan to prevent this illegal capture?

Mr. SILCOCK. All Bureau employees have been instructed to investigate reported violations and take appropriate action through the U.S. Attorney and Department of Justice. The Bureau is authorized arrest authority in this specific instance by the act. However, no delegation of this authority and responsibility has been delegated to field personnel because of inadequate funds and manpower and the requirement to properly train such employees in law enforcement activities. We plan to obtain the required training for a limited number of employees during fiscal year 1974.

Mr. LONG. What progress have you made in your investigation of the herd of about 60 wild horses in southeastern Idaho which was

rounded up and sold for slaughter as reported in the Washington Post of March 5, 1973?

Mr. SILCOCK. The Bureau of Land Management and the Forest Service have conducted a detailed investigation into this incident. The results of this investigation are receiving comprehensive review by the administrators of both agencies and their legal counsels. Whether or not the Federal wild horse laws were violated depends primarily on ownership of the horses under Idaho law. If it appears that any Federal laws may have been violated, we will refer the matter to the Department of Justice for appropriate action.

SOIL AND WATERSHED MAINTENANCE

Mrs. HANSEN. You have an increase of $200,000 for soil and watershed maintenance. What does that give you as a total base?

Mr. SILCOCK. The maintenance program with $200,000 increase would be $1.32 million.

Mrs. HANSEN. Do you think it is adequate?

Mr. SILCOCK. We have been constructing water facilities on the public lands for many years. We have a considerable number of projects that are in need of maintenance. But under the constraints of our budget, this is the relative priority that we assigned to it.

OFF-ROAD VEHICLE MANAGEMENT

Mrs. HANSEN. You are requesting $300,000 and 14 positions for management of off-road vehicles. What are the details on this?

Mr. SILCOCK. We estimate there are 4 million vehicles that use the public lands. To carry out the executive order which specifies that we take action to protect the resources and promote public safety in connection with this off-road vehicle use, additional funds are required.

Mrs. HANSEN. In yesterday's Star some of your customers say you are not doing enough. Others say you are doing too much.

The writer says that in his experience off-road vehicle riders are not responsible enough to be allowed access to anything and are exceedingly destructive. He goes on and says,

> They are hoodlums, motorcycle gangsters of the Hells Angels type who threaten anybody who remind them that they are wrecking private or public property.

Mr. SILCOCK. You can see we are between a rock and a hard place. We are moving ahead with our planning process which would provide us an opportunity to review the resources and identify and indicate areas where off-road vehicles would be prohibited. These would be closed or restricted use areas.

We plan to designate areas where they can use public lands for off-road vehicle pursuits.

We hope by taking into consideration the public views and encouraging public participation we will be able to identify the critical areas so that we can protect the resources that would be lost if we do not do something.

CONTROL OF OFF-ROAD VEHICLE USE

Mr. MCKAY. Could you describe briefly what efforts are being made to control the use of off-road vehicles?

Mr. SILCOCK. Efforts to control ORV use are through a program of public education and issuance of ORV recreation use permits involving 25 or more participants. The education program is largely one of meeting with ORV organizations to discuss problems and develop an understanding of our ORV management needs and objectives. Recreation use permits will include stipulations for safety, resource protection, and routes and areas of use.

Mr. MCKAY. What is being done to police areas restricting ORV's?

Mr. SILCOCK. Without authority or capability to enforce existing ORV restrictions and proposed ORV regulations there is little that is or can be done to police ORV use at this time. Eight rangers in the California desert and other employees do what they can through limited public contact to direct unorganized ORV use. The 14 new positions in fiscal year 1974 program will help to improve the management posture of the Bureau. But it will still be limited until enforcement authority is provided through legislation.

Mrs. HANSEN. Who does the cleanup after these people after they have scootered all over the public lands?

Mr. SILCOCK. In connection with the organized events which operate under a permit, this is part of the permit stipulations; they would clean it up.

Mrs. HANSEN. How about just the casual user?

Mr. SILCOCK. This is the problem that we are faced with all over the West, that is, the casual use and the sanitation problems connected with it.

There is not a requirement that they clean it up because we have no mechanism of reaching the individual.

Mrs. HANSEN. Most of them do not cleanup, do they?

Mr. SILCOCK. I think there has been a change in the attitude of the public using the public lands. Through our Johnny Horizon program and our general education programs we see what we hope is an attitude change. This is what will have to take place in order to maintain a healthy state of the public lands.

FOREST MANAGEMENT PROGRAM

Mrs. HANSEN. Let us turn to your forestry activity.

Your BLM sales for western Oregon in 1970 were 1,662 million board feet. In 1974, you have 1,172 million. What is the change there?

Mr. SILCOCK. Several years ago the Bureau developed a new forest management plan for western Oregon. In that plan, as the Secretary put it into effect, he provided for a stepdown to reach the allowable cut. It was spread over a 3-year period of time to reach that cut. This is what we are finally reaching in 1974. The 1974 fiscal year will be based on a forest management plan with an allowable cut of 1,172 million board feet for western Oregon.

Mr. LONG. You state on page 32 of your justification that your fiscal year 1974 request will permit 2,000 acres of reforestation, 1,000 acres of site improvement, and about 800 acres of stand improvement on public domain lands. How do these figures compare to those for each of the last fiscal years?

Mr. SILCOCK. They are comparable to the last 5 years.

Mr. LONG. Is any of the planned reforestation, natural seeding such as letting the seeds fall from other trees and hope they grow or is it all actual planting of seeds and small trees.

Mr. SILCOCK. All the silviculture methods used for timber harvest are designed to take advantage of natural seedfall since progeny from local seed sources have the best chance for survival and growth. However, reforestation surveys are made after harvesting and if the area doesn't meet the reforestation stocking standards within a short period it is planted. In the Douglas-fir region a good natural seedfall occurs approximately once every 4 to 7 years. In other words we take advantage of natural seeding but don't base our reforestation program upon it. All of the reforestation acreage budgeted is that area where seedlings will be planted.

BLM AND FOREST SERVICE PROGRAMS

Mr. MCKAY. Please outline the things that you do that the Forest Service does not do and the things you do the same. Also, do you have joint administration on any areas?

Mr. SILCOCK. Our resource management programs are quite similar as they are applied to the separate lands under each agency's administration. This includes such things as timber, watershed, range, wildlife, and recreation management. Some of the functions which BLM does that is not undertaken by the Forest Service include maintenance of original land status records in all States which now or at one time contained public land, the administration of the mineral estate on not only BLM but other Federal and private lands where mineral rights have been reserved to the United States and the establishment and maintenance of the public land survey grid. There is no joint administration of surface estates although many of our management programs are closely coordinated. Of course, the BLM has management responsibilities on the OCS which does not involve the Forest Service.

TIMBER EXPORT FROM BLM LAND

Mrs. HANSEN. How much of your BLM timber is exported?

Mr. SILCOCK. We have the authorization from the Secretary to export some 60 million board feet.

At the present time less than 5 percent of that volume is being exported.

Mrs. HANSEN. You are not really exporting very much?

Mr. SILCOCK. We are not contributing very much to the export market.

Mrs. HANSEN. How about substitution? Do they get your BLM timber and substitute and export their own timber? When a bidder comes in, is he able to export more because he has access to BLM timber?

Mr. STORMS. We understand from industry there is some substitution occurring.

Mrs. HANSEN. How much?

Mr. STORMS. I have not heard any quantification of it in terms of volume. It does have some domino effect in the timber sales process.

Mr. LONG. Would the chairman yield?

Mrs. HANSEN. Yes.

Mr. LONG. People have come to me recently to ask me to support moves to prevent further export of logs. You say there is very little exported from public lands.

Mr. SILCOCK. From the public lands we administer, yes, there is very little. It was about 5 million board feet in 1972, the highest export volume we have had in recent years.

Mr. LONG. What do you mean "you administer." Is there much exported from any public lands?

Mr. SILCOCK. The Forest Service is the major contributor to the forest industry.

Mr. LONG. There is a lot from them?

Mr. WYATT. There is 5 million from BLM lands out of a total of almost 3 billion exported last year.

Mr. LONG. So you are not an important factor.

Mrs. HANSEN. The question I asked is whether a company can bid on BLM timber, which is nonexportable, and then export its own? Does BLM allow this?

Mr. SILCOCK. This could be done.

It is a type of substitution that could take place.

Mrs. HANSEN. What kind of regulations or limitations could you have that would nullify that practice?

Mr. SILCOCK. This would require some kind of regulations or limitation as to what a private individual did with his own private timber.

Mr. STORMS. There is authority in the so-called Morse amendment to impose substitution regulations but those have not been implemented.

Mrs. HANSEN. Why not?

Mr. STORMS. About 3 years ago there were hearings as to their need and the nature of the regulations. There was total disagreement among the industry as to the kind of regulations needed and whether or not they were to be regulated.

Mrs. HANSEN. I have news for you, that industry does not usually agree on anything.

Mr. STORMS. I understand in the last few months they are.

Because of the exceptional difficulty of designing it so it could be enforced, it caused them to hold off at that time.

Mrs. HANSEN. Mr. Wyatt, do you have a question at this point?

Mr. WYATT. I am going to save most of them for the details under the O and C grant lands if I may.

I don't have a lot there. We have been getting a great deal of criticism in the Northwest for cutting Federal domain timber.

TIMBER SALE VOLUMES

It is a fact that your figures in 1970, the total BLM sales of all land administered by BLM, which would include, I assume, some forest service lands, was 1.662—billion board feet; is that right?

Mr. SILCOCK. Yes.

Mr. WYATT. I think Mrs. Hansen pointed out in 1974 it is 1,172 million board feet, which is a reduction of nearly one-third in this period

of time in the cutting from O and C timber lands, or in sales from O and C timber lands. Is that correct?

I don't ask you to verify my percentage.

Mr. HASTEY. It is a little misleading.

In fiscal year 1969 we sold a little over a billion board feet. We had a large carryover from 1969 to 1970. The 1970 figure is inflated by close to 300 million board feet. In terms of new sales for the year it would be more like 1.3 billion board feet.

Mr. STORMS. There are two things. One is the carryover and secondly the impact of the Ox Bow Fire.

Mr. WYATT. 1971 was perhaps the more typical year.

Mr. STORMS. Yes.

Mr. WYATT. That is 1,235 million board feet.

Mr. STORMS. Yes.

Mr. WYATT. So in fact the sales have gone down in the last several years.

Your public domain sales on the top of page 32 of the justification, exclusive of western Oregon, within terms of thousand board feet, 1970, 125,000 compared to 70,000 in 1974, is that correct, in sales volume?

During this period of time have the efforts for recreational values, wildlife, watershed protection, those other purposes for which we manage the public domain forests—have the dollar volume of expenditures increased during the same period of time?

Mr. SILCOCK. I would say yes, they have.

We have increased our management.

Mr. WYATT. I think your justifications reflect these increases.

Mr. SILCOCK. Yes.

Mr. WYATT. Madam Chairman, I will reserve any further questions until we get to page 63.

Thank you.

Mr. EVANS. Last year you submitted testimony indicating a large backlog in your reforestation program. Does your budget request for forest development in the public domain represent management on a sustained yield basis?

Mr. SILCOCK. As a basis for an intensive forest management program, a complete inventory of public domain forest lands was initiated in Montana in fiscal year 1971. The field work in Montana is completed. The forest inventory is now in progress in the State of California, Colorado, and Wyoming, and will soon be starting in Idaho, eastern Oregon, and New Mexico. The entire job is scheduled for completion in fiscal year 1976.

The level of cutting and reforestation on the public domain is now at a satisfactory level pending completion and analysis of the forest inventory. As in western Oregon, the inventory will help identify a sustained yield level of cut and will identify the reforestation and other forest development measures necessary to support annual timber production.

QUALITY OF O. & C. TIMBER MANAGEMENT

Mrs. HANSEN. Just as a passing comment, isn't it true that the O. & C. lands are one of the better managed areas of public domain as far as the forests are concerned?

Mr. SILCOCK. We think so.

Mrs. HANSEN. Because you have had money to put back into management.

Mr. SILCOCK. And we have put it back into management, reforestation, and so on.

Mr. WYATT. You cannot name a better managed federally owned or operated forestry, in fact, can you?

Mr. SILCOCK. I cannot say, but I think that is right.

Mr. WYATT. You can modestly say it.

Mr. SILCOCK. We are proud of what we are doing in Western Oregon.

Mr. WYATT. I think it is recognized. I think the chairman has mentioned that you have had reasonable resources to put into intensive management.

Mr. SILCOCK. We are looking ahead and trying to do a better technical job. There are ways and means of doing better management.

Mr. LONG. The GAO recently published a study of "Additional Actions Needed To Minimize Adverse Environmental Impacts of Timber Harvesting and Road Construction on Forest Land" (Mar. 20, 1973). The report states that "Neither agency [Bureau of Land Management nor U.S. Forest Service] has established national requirements that project planners obtain and use expertise of resource specialists in the detailed planning of each project * * *. Field employees of the two agencies stated that this assistance would be desirable but that their agencies lacked the necessary funds to obtain the expertise." How much money are you requesting for fiscal year 1974 to obtain this expertise of resource specialists? Is this an increase over the fiscal year 1973 appropriation?

Mr. SILCOCK. The 1974 budget in western Oregon will support six fisheries biologists, six soil scientists, one hydrologist, four wildlife biologists, and one geologist, in addition to the normal complement of specialized foresters and engineers. These specialists will be directly involved in the timber sales program of western Oregon, at an estimated cost of $275,000, which represents a $20,000 increase from fiscal year 1973.

Mr. LONG. This report also discusses a BLM road located on a very steep side slope across areas with evidence of previous slides and soil movement. A soil specialist inspected the area and recommended that the road not be built there. However, the road was constructed, and about 500 to 600 feet of the roadbed slid down the slope. Much of the material went into a fishbearing creek. "Reasons for not following the specialist's advice were not documented in the project files." Why wasn't the advice of the specialist followed? This was the Dunn Ridge area in the Eugene, Oreg., district.

Mr. SILCOCK. The Dunn Ridge mainline road was constructed under a Bureau of Public Roads contract before resource specialists were employed at the district level. So far as is known, construction of this access road did not create soil or watershed problems. However, subsequent construction under a timber sale contract of a spur road off the Dunn Ridge mainline resulted in soil erosion, mass soil movement, and some degradation of water quality.

The district soil scientist inspected the proposed spur road location during the spring of 1970 and recommended that an alternate location be selected. His advice was fully considered by planning specialists,

but no other feasible location for the proposed road could be found. It should be understood that in some of the rugged country of western Oregon, there is little flexibility in where to locate roads. In view of the satisfactory experience with the Dunn Ridge Road, the decision was made to build the spur road, based on the advice of other resource specialists, including foresters and engineers.

RECREATION MANAGEMENT

Mrs. HANSEN. You state that within a 40-mile radius of the 16 major population centers of the Western United States, the Bureau manages 6 million acres of land, a high recreation potential. That is where you receive a great deal of your 50 million visitor-days per year; is that correct?

Mr. SILCOCK. That is where a lot of our recreational pressure comes from.

Mrs. HANSEN. Do you want to insert in the record your 16 major population centers you serve?

Mr. SILCOCK. We will be happy to furnish that for the record.

[The information follows:]

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Population Centers

The sixteen major population centers which have easy access (within 40 miles) to approximately 6 million acres of BLM-managed land, much of which has high recreation potential, are as follows:

PUBLIC LAND AREAS ADJACENT TO MAJOR URBAN CENTERS

	Within 40 Miles (Acres)	From 40 to 120 Miles (Acres)	
Arizona			
Phoenix	576,000	5,069,000	
Tucson	184,000	1,520,000	
California			
Bakersfield	27,000	1,001,000	
Los Angeles	95,000)		
San Diego	93,000)	5,480,000	
San Francisco-Oakland	108,000	475,000	
Fresno	46,000	1,341,000	
Sacramento Stockton	92,000	90,000	
Colorado			
		1,394,000	(Colorado)
Denver	38,000	58,000	(Wyoming)
Nevada			
Las Vegas	2,868,000	21,317,000	
New Mexico			
El Paso	600,000	4,860,000	
Albuquerque	199,000	4,135,000	
Oregon			
Portland	113,000	2,150,000	(Includes Salem)
Utah			
Salt Lake City	829,000	10,811,000	
Washington			
Seattle-Tacoma	3,000	262,000	
Spokane	---	133,000	
Total Acreage	5,871,000	60,060,000	

KING RANGE NATIONAL RESOURCE CONSERVATION AREA

Mr. McKay. Are there any special expenses involved in maintaining the King Range Conservation Area?

Mr. Silcock. Yes, there are. They include development of a management plan for presentation to Congress and subsequent development and operation of the area. There is also a program of acquistion of inholdings without which it would not be possible to manage the area as intended in the act.

Mr. McKay. Has BLM had to acquire any private lands for that area?

Mr. Silcock. We have purchased 473 acres at a cost of $200,000 and exchanged to acquire another 920 acres. There remain approximately 17,000 acres for acquisition within the 50,000 acre area.

SOIL, WATERSHED AND RANGE LAND STATUS

Mr. Evans. Describe the condition of the range as a multiple use resource serving grazing, watershed, wildlife, hunting and fishing as well as mineral resource development.

Mr. Silcock. Range lands are not in as good a condition to provide multiple use benefits as they are capable. For example, a survey made in the early 1960's disclosed that only 15 percent of range lands were in good or excellent condition, 53 percent was in fair condition and the remaining in a lower status. About 50 percent of our watersheds are in less than satisfactory condition, which is a major factor in the quality of water in the Western United States. Forty percent of our wildlife habitat is also classed as being in less than satisfactory condition. I might add that public land wildlife now generates about 16 million visitor-days of hunting, fishing and appreciative use annually. About 49 to 50 million visitor-days for all recreation pursuits was logged in fiscal year 1972.

These same lands contain vast quantities of mineral resources. It is estimated that 30 percent of mineral production comes from public lands of all types. Although relatively undeveloped at present, these lands also contain half of the Nation's known coal and geothermal steam reserves, oil shale and the like. This represents a general profile of conditions at the moment.

Mr. Evans. I understand that under the watershed program, land has been sprayed with herbicides and then planted with grasses such as crested wheatgrass. This has destroyed wildlife habitat while making more lands available for grazing. One animal that has been forced to move to higher and higher elevations, I am told, is the big horn sheep. Is the true purpose of this program watershed protection or the creation of more grazing lands? What precautions are being taken to protect the wildlife?

Mr. Silcock. There are many instances where spraying has been done for the purpose of increasing livestock forage while at the same time benefiting watersheds. You refer to a situation that in doing this the big horn sheep have been affected; possibly your reference is to the Morgan Creek area of Idaho where some extensive measures have been taken to reduce competition for forage between mule deer, cattle grazing, and the wintering of big horn sheep. This area consists of

approximately 50,000 acres of natural resource lands of which 8,000 were sprayed with herbicides in smaller tracts over a period of several years. There was no seeding in this sprayed area since the native grasses only needed the moisture used by the sagebrush to successfully reclaim the area. In this same general area, there were 300 acres chained and seeded to crested wheatgrass to provide spring forage for deer in an effort to reduce competition between the deer and big horn sheep. There were other measures taken such as fencing and management systems for the livestock to enhance the wildlife habitat. Although spraying was done to provide livestock forage, initially, it was done with the long-range plan in mind to provide substitute forage for the wintering big horns.

This area has been quite controversial and the State director of Idaho is working closely with the Idaho University in evaluating the work being done and asking for suggestions for improvement.

RARE AND ENDANGERED SPECIES PROGRAM

Mr. LONG. Please describe your programs to protect endangered species on public lands.

Mr. SILCOCK. The program to protect endangered species is twofold in nature. One way is through our planning system which identifies endangered species populations, nesting grounds and food supplies to the extent they are known. This information is then considered and appropriate protection is given to species whenever land use proposals are made which might have adverse effects on them. The other part of the program, involves working cooperatively with the States, other Federal agencies, and the private sector to gather additional data, develop propagation plans, and improve habitat. To date, management plans and modest programs have been initiated for the Mexican duck in New Mexico and Arizona, pupfish in Nevada, tule elk in California, trout species in Nevada, and the golden eagle and prairie falcon in the birds of prey area of Idaho and other Western States.

CADASTRAL TRAINING PROGRAM IN ALASKA

Mrs. HANSEN. You have an increase of $225,000 for cadastral survey. This is for the Alaska cadastral survey?

Mr. SILCOCK. This is a special request for an increase to be allocated to Alaska to develop a training program there for cadastral survey crews in Alaska. It will involve the Native people as well as other candidates to train them in the airborne system of surveys.

Mrs. HANSEN. Do you employ Alaskan Natives in your programs?

Mr. SILCOCK. Yes, wherever we can.

In the fire fighting, cadastral surveying, airplane mechanics, and the like.

Mrs. HANSEN. Is this request sufficient to make some progress in Alaska?

Mr. SILCOCK. We think it will.

Mrs. HANSEN. How much progress?

Mr. SILCOCK. We have a big job to do, as we have discussed. We feel that this will help us get started on the training program which is necessary to provide skilled people for the survey work ahead.

Mrs. HANSEN. How much of your work is devoted to oil and gas leasing maps for the Outer Continental Shelf?

Mr. HASTEY. About $50,000, Madam Chairman.

GENERAL ADMINISTRATION

Mrs. HANSEN. You have an increase of $100,000 for general administration. Can you give me an example of one major management improvement effected in your agency during the last year.

Mr. HASTEY. One of the things we have developed recently is what we call an exception report. We have problems getting to top management some of the problems in terms of program accomplishment in our bureau. We have developed a fairly concise ADP report that allows top management to find out what our problems are, and where there are major deviations from our planned work.

For example, how are we progressing on our planned recreation construction, timber management and all other program work. It allows top management to readily review problem areas in work accomplishments.

CONSTRUCTION AND MAINTENANCE

Mrs. HANSEN. Insert justification pages 46 through 57 in the record at this point.

[The pages follow:]

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Construction and Maintenance

Appropriation, 1973		$7,965,000
Unobligated balance from prior years		739,000
Transferred to Department Operations, Office of the Secretary		-200,000 a/
Total available for obligation		8,504,000
Decreases:		
Construction of buildings and recreation facilities	$5,233,000	
Maintenance of buildings, recreation facilities and roads	3,271,000	
Subtotal		8,504,000
Increases:		
Construction of buildings and recreation facilities	2,835,000	
Maintenance of buildings and recreation facilities and roads	3,765,000	
Total available for obligation		6,600,000
Less: Unobligated balance from FY 1973		-300,000
Budget Estimate, 1974		6,300,000

a/ Transfer of Johnny Horizon Program to Office of the Secretary under the authority of Reorganization Plan No. 3 of 1950 (43 U.S.C. 1451).

Construction and Maintenance
Analysis by Activities

Activity	Amount Available 1973	Fiscal Year 1974 Estimated Total Available	Unobligated Balance from 1973	Budget Estimate	Total Available 1974 compared to total available 1973	Page Ref.
1. Construction.....	$5,233,000	$2,835,000	-$100,000	$2,735,000	-$2,398,000	48
2. Maintenance.....	3,271,000	3,765,000	- 200,000	3,565,000	+ 494,000	53
Total	8,504,000	6,600,000	- 300,000	6,300,000	- 1,904,000	

1. CONSTRUCTION

Analysis by Subactivities

Subactivity	Fiscal Year 1974 Amount Available 1973	Estimated Total Available	Unobligated Balance from 1973	Budget Estimate	Total available 1974 compared to total available 1973
Buildings	$2,186,000	$1,635,000	$-100,000	$1,535,000	$- 551,000
Recreation Facilities	3,047,000	1,200,000	---	1,200,000	1,847,000
Total	5,233,000	2,835,000	-100,000	2,735,000	-2,398,000

1. Construction: Fiscal year 1973, $4,580,000; Fiscal year 1974, $2,735,000; a decrease of $1,845,000 exclusive of carryover funds. This program provides for the construction of (a) buildings and (b) recreation facilities.

(a) Building Construction: Fiscal year 1973, $1,936,000; Fiscal year 1974, $1,535,000; a decrease of $401,000 exclusive of carryover funds. The 1974 building construction program consists of the following:

Location	Type of Building	Prior Years	Request FY 1974
1. Roseburg, Oregon	District Office Complex	$ 800,000	$ 525,000
2. Anchorage, Alaska	Upgrading Anchorage District Complex	100,000	700,000
3. Idaho & Alaska	Completion of work in Progress	522,000	200,000
4. Bureauwide	Survey and design of Future Buildings	---	110,000
TOTAL		1,422,000	1,535,000

MODERN FACILITIES SUCH AS THIS AREA OFFICE AT FARMINGTON, NEW MEXICO ARE NEEDED TO REPLACE NUMEROUS OLD, OUT-DATED BLM STRUCTURES WHICH ARE INEFFICIENT TO OPERATE AND MAINTAIN

A description of the building construction projects proposed for FY 1974 follows:

1. Roseburg District Office Complex

This is a continuation of the project initially funded in FY 1973 and will provide a District Office for 96 permanent and about 20 temporary employees. The District Office complex will be located on a five acre site adjacent to the Roseburg Veteran's Hospital. Transfer of the site from the Veteran's Administration to BLM has been accomplished and a contract for the final design is being awarded in 1973.

The FY 1974 funds coupled with the carryover amount from FY 1973 will provide for constructing the District Office building, a public and employee parking area and landscaping.

2. Anchorage Warehouse Construction

The Bureau's present warehouse in Anchorage has an 8 1/2 foot ceiling, is not adequate for warehousing purposes, and is needed for office space. The FY 1974 request will provide a 20,000 sq. ft. warehouse which would adequately accommodate present program needs plus the expanding needs of cadastral survey, realty services and fire control activities resulting from the Alaska Native Claims Settlement Act. The requested amount also include provision for bulk aircraft fuel storage; site preparation and utilities; and fencing of the warehouse yard. Future plans call for converting the present warehouse to office space and surfacing of the warehouse yard and aircraft apron.

3. Completion of Prior Year Projects

These funds are requested to cover estimated cost overruns on various Alaska pollution control projects ($130,000) and the Shoshone, Idaho District Office ($70,000). Increases in construction costs have been partially responsible for this situation. The overrun on the Alaska pollution control projects primarily is the result of two factors:

- inadequate provision for the increased staffing requirements resulting from the Alaska Native Claims Settlement Act in the preliminary designs of waste disposal systems for Alaska administrative sites.

- emergency construction of a sewage lagoon to serve Bureau facilities in Anchorage, Alaska in accordance with the reprogramming action approved in fiscal year 1972.

The $150,000 estimate for the Shoshone, Idaho District Office complex in the fiscal year 1973 budget was made several years ago, and needs to be updated to reflect current construction costs. Approximately an additional $70,000 is needed to complete the planned structure.

4. Survey and Design or Miscellaneous Building - All States

The funds will provide the survey and design of future District Offices, warehouse and radio repeater buildings. Some of the high priority areas needing design and pre-construction analysis are: Craig Warehouse, Craig Colorado; Shoshone Yard and Warehouse complex, Shoshone, Idaho; Elko Administrative site and fire complex, Elko, Nevada; Rawlins Warehouse and sign shop, Rawlins, Wyoming; Miles City Warehouse and office addition, Miles City, Montana and numerous radio repeater building required for improving the Bureau's communications system.

(b) Recreation Facility Construction: FY 1973, $2,644,000; FY 1974, $1,200,000, a decrease of $1,444,000, exclusive of carryover funds. This proposed construction program will help to reduce the imbalance between the actual use of the public lands for outdoor recreation and the number of facilities available to accommodate this use.

The Bureau's FY 1974 projection of facility oriented public land recreation use is estimated at 16 million visitor days. At the beginning of FY 1974 BLM's facilities will have the capacity to handle 2.2 million visitorsor 14% of the estimated 16 million visitor days annually. Based on past recreation use trends, it is estimated that by 1978 the public lands will attract 23 million visitor days of facility oriented use. To accommodate this demand will require another 40,000 family units by 1978.

BLM CAMPGROUND IN CALIFORNIA'S KING RANGE

Without basic recreation facilities, the land surface is abused, streams are polluted, trash is scattered, wildfires result from fires built in hazardous areas and lack of sanitation facilities create hazards to health. Unless steps are taken to provide new facilities and correct present sanitation and health problems, the sanitation and protection problems of the public lands will grow to unmanageable proportions.

The proposed FY 1974 construction program is planned in areas of high unaccommodated visitor use and where improved management of the overall recreation resources are needed. The total program is shown in the following table.

Recreation Construction, FY 1974
Projects

State	County	Project	Cost Estimate	Family Units	OTU Capacity
Arizona	Mohave	Virgin Canyon	$ 300,000	-	-
California	Alpine	Indian Creek Reservoir	160,000	65	275
Montana	Granite	Garnet Ghost Town	40,000	5	20
Nevada	Clark	Red Rocks Visitor Center	300,000	-	700
All States		Completion of work in progress	200,000	-	-
All States		Survey and design of future sites	200,000	-	-
Totals			1,200,000	70	995

Virgin Canyon - Arizona

This is a joint project between the Arizona State Highway Department and the Bureau of Land Management and is located along Interstate Highway 15 near the border of Arizona, Utah, and Nevada.

In 1974, when I-15 is opened, it is estimated that the average daily traffic will be 10,000 vehicles of which 80% will be tourist traffic. The Arizona Highway Department is presently constructing an interchange to serve a rest area located near the Virgin Canyon Recreation Lands. Because of the ideal climatic conditions in the area, not only will the rest stop area be utilized, but the surrounding public lands will also be used for camping, picnicking, sightseeing and other outdoor recreation activities. Without proper management and facilities, uncontrolled use will exist in the area resulting in sanitary and litter problems as well as the destruction of many scenic values of the Virgin Canyon Recreation Lands.

The proposed joint program is designed to control and manage the use in the whole area by providing sanitation and camping facilities and jump-off point for extensive use of the area.

The FY 1974 construction request will provide a water distribution system, power transmission lines and an interior road net. Future construction will provide 117 family units, comfort stations, and other facilities for the use of recreationists.

Indian Creek Reservoir - California

This project was initially funded in FY 1972 and is located at Indian Creek Reservoir in Alpine County, California. The program proposed in FY 1974 will complete the project at a highly popular water-based recreation attraction by providing a boat ramp and interior hiking trails. Also to be included in the FY 1974 program but funded from the Public Lands Development Roads and Trails Appropriation is the surfacing of the interior roads and parking areas.

Garnet Ghost Town - Montana

In FY 1974 funds will be used to help achieve the ultimate goal of restoring, preserving, protecting, and interpreting one of the best remaining typical western ghost towns. The FY 1974 program will include the survey and design of a fire protection system and visitor contact station, and the construction of 5 picnic sites plus historic building purchases, relocation, and stabilization.

Red Rocks Visitor Center - Nevada

This project was initially funded in FY 1973 and is located 15 miles from downtown Las Vegas. The completion of the basic visitor center will serve a resident population of 300,000 people in a 40 mile radius. The current estimate is 600,000 visits to the Red Rocks area annually. The main attraction of the Red Rocks area is its proximity to Las Vegas and its spectacular geologic formations.

The combined funds made available in FY 1973 and FY 1974 will provide a visitor center building, service utilities, public parking and sanitation features. This center has been designed to serve four purposes:

1. To introduce the visitor to the area and provide him with information on the natural features of the area.

2. To provide the closest and most comprehensive interpretive area of natural history for the Las Vegas urban center.

3. To provide a multitude of visitor services to the users of the Red Rocks recreation lands and adjacent areas.

4. To protect the Red Rocks recreation lands from misuse by having a more informed, more responsive visitor.

Completion of Work in Progress

Rapidly rising costs of construction have made initial cost estimates of work insufficient to complete several developments. The increased pace of construction of recreational facilities has also required greater contract supervision by BLM. Unforeseen contingencies and project modifications have also had an impact on available construction capabilities. The funds requested in this category will allow the Bureau to complete work on a number of sites and facilities according to original plans and schedules.

2. MAINTENANCE

Analysis by Subactivities
Fiscal Year 1974

Subactivity	Amount Available 1973	Estimated Total Available	Unobligated Balance from 1973	Budget Estimate	Total available 1974 compared to total available 1973
Buildings	$ 458,000	$563,000	$25,000	$ 538,000	$+105,000
Recreation	1,338,000	1,561,000	75,000	1,486,000	+223,000
Roads	1,475,000	1,641,000	100,000	1,541,000	+166,000
Total	3,271,000	3,765,000	200,000	3,565,000	+494,000

2. Maintenance: Fiscal year 1973, $3,185,000; fiscal year 1974 $3,565,000; an increase of $380,000 exclusive of carryover funds. The increase requested for 1974 consists of the following:

	Increase (+) or decrease (-) Amount	Positions	Total Program Amount	Positions	Explanation
(a)	+$80,000	---	$538,000	9	To provide an adequate level of maintenance for Bureau-owned buildings, related structures and grounds
(b)	+150,000	---	1,486,000	19	To increase maintenance capability at high use and newly developed recreation sites.
(c)	+150,000	---	1,541,000	41	To provide additional maintenance capability for BLM roads and trails.
	+380,000		3,565,000	69	

Cost Factors Involved in Increase

(1) Maintenance supplies, materials and equipment, $30,000; contractual maintenance services $50,000.

(2) Six man years of temporary labor at an average annual cost of $9,000, $54,000; maintenance supplies, materials, and equipment, $40,000; contractual maintenance services, $56,000.

(3) Six man years of temporary labor at an average annual cost of $9,000, $54,000; materials, supplies and equipment, $56,000; contractual maintenance services, $40,000.

Need for Increase:

(a) Building Maintenance: The requested increase of $80,000 in FY 1974 will help the Bureau to meet acceptable building maintenance standards and goals for a building space of 1,200,000 square feet in 944 existing structures. It will provide for up-grading maintenance on existing structures as well as the care and upkeep of new facilities scheduled for construction in FY 1973.

The present building maintenance program needs to be increased in order to have a safe and healthy environment in which Government employees may work and serve the public. Increases in costs for maintenance services, materials, and wages have resulted in a decrease in actual maintenance accomplished on structures at past years funding levels. This is compounded by the fact that many BLM operated buildings are in a deteriorated state, having been built as early as the 1930's. In some cases, BLM buildings do not meet minimum national health and safety codes.

In addition to direct maintenance of buildings, other features require increased emphasis such as parking lots, outdoor storage areas, loading docks, fences, and grounds. Improved levels of maintenance will correct unsafe and poor working conditions, help extend the useful life of all affected structures and enhance their utility and appearance for the public which they are intended to serve.

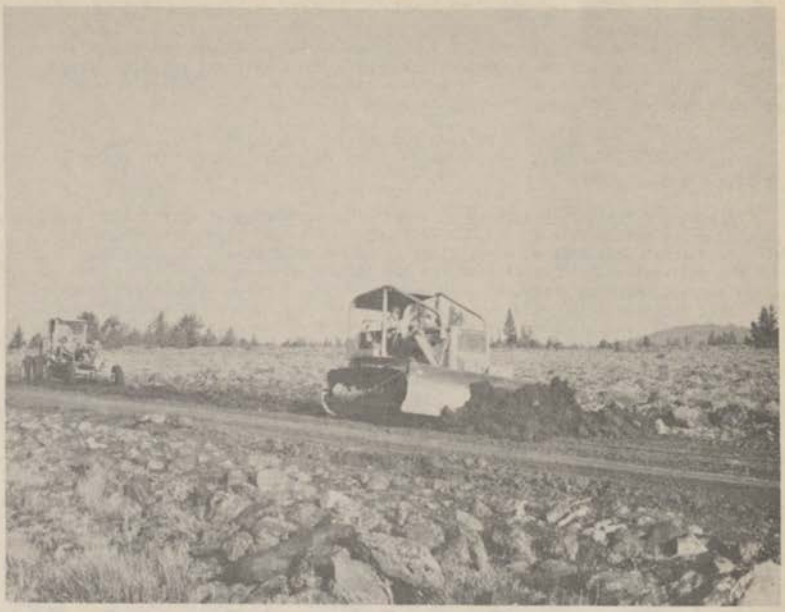
(b) Recreation Maintenance: The FY 1974 program proposes an increase of $150,000 to help assure adequate maintenance of the Bureau's 152 existing public domain developed sites which includes 11 new sites in the FY 1973 construction pro-program.

The funding level for recreation facility maintenance has not and is not keeping astride of requirements for constructed facilities and rising costs of wages and materials. Each year, increasing demands are made upon the public lands to provide recreational opportunities to the rapidly growing population in the western states. The total visitor use on the public domain, estimated at 50 million visitor days in FY 1973, is expected to exceed 80 million visitor days by 1980. Intensive use (facility oriented) is estimated to 15 million visitor days in FY 1973. If all recreation facilities, including those to be constructed in FY 1973, were used to capacity for the entire season, they would accommodate only approximately 14% of the anticipated FY 1974 intensive use. As a result of these deficiencies, the sheer number of people using the relatively few developed sites require accelerated maintenance schedules to keep pace with the need for clean-up and repair, and provide safe, and attractive facilities for the public.

The new special fund appropriation for recreation development, operation and maintenance, derived from recreation user fees, will also help provide necessary added maintenance capability.

(c) Road Maintenance: The FY 1974 program proposes an increase of $150,000 to help maintain approximately 6,900 miles of roads and trails on a periodic schedule. This increase will continue our efforts to reduce the huge maintenance backlog on the 47,000 miles of existing roads.

Use of the public lands road system continues to increase each year. Much of the Bureau's road system is in poor condition and poses serious safety problems because the roads are increasingly used by visitors who are unfamiliar with local conditions. Also, inadequately maintained roads have an environmental impact which far exceeds the immediate land they occupy. Erosion, caused by poor drainage or improper grades, can influence water quality for many miles downstream. Poorly maintained roads also result in heavy rutting, land slides and other degradations of outdoor surroundings.



ROAD MAINTENANCE ON THE PUBLIC LANDS

As little as 20% of BLM's road system is maintained in some states. Roads built by the CCC's in the late 1930's have deteriorated to the point where they must be replaced; the current road maintenance and road construction capability is insufficient to upgrade these unsafe roads and road structures.

Maintenance Requirements
for Roads
on the Public Lands

	Miles	Maintenance Costs
1. Roads Improved by Grading or Draining:		
a. Total miles to maintain	12,000	$4,850,000 1/
b. FY 1973 budget	4,500	1,251,000
c. FY 1974 proposed budget	5,150	1,391,000
2. Other Roads Used by the Public:		
a. Total miles to maintain	35,000	$7,000,000 1/
b. FY 1973 budget	1,500	140,000
c. FY 1974 proposed budget	1,720	150,000

1/ Estimated cost to achieve adequate road maintenance standards.

Program of Continuing Work: The Bureau's maintenance efforts will be directed toward insuring that, insofar as possible, facilities are adequately cared for in order to: (1) provide for the safety of employees and the visiting public, (2) extend the useful life and utility of existing structures and other capital investments and, (3) enhance the efficiency of resource management and related administrative functions.

Building Maintenance: In FY 1973 the Bureau will maintain BLM-owned buildings and related structures and grounds to keep them safe, attractive and convenient for public use.

Recreation Facility Maintenance: Periodic maintenance of recreation sites providing the public with some 3,370 individual family units will be continued at a rate which will keep pace with increasing use pressures. In addition, efforts will continue to be directed to the cleanup of undeveloped sites, roadsides and waterways on the public lands. The Johnny Horizon anti-litter campaign will also continue to receive emphasis in FY 1974 to enlist public support and direct contributions in the cleanup and maintenance of our public land environment.

THE PUBLIC PROVIDES VALUABLE ASSISTANCE IN CLEANING UP UNDEVELOPED SITES ON JOHNNY HORIZON COUNTRYSIDE CLEANUP DAYS

Road and Trail Maintenance: Approximately 6,900 miles of roads and trails will be maintained on a periodic schedule. Frequency of maintenance will be governed by the volume of public use, the nature of use and the relative levels of investment in these transportation facilities.

Construction & Maintenance
Personnel Summary

	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions	100	85	85
Full time equivalent of other positions	81	81	93
Average number of all employees	160	160	172
Average GS grade	9.0	8.9	8.9
Average GS salary	$13,444	$13,249	$13,250

ITEMIZATION OF ESTIMATE

Construction and Maintenance

	Actual 1972	Estimate 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$4,343,636	$8,204,000	$6,300,000	+$1,904,000
Unobligated balance available start of year.....	- 255,228	-738,592	-299,592	-439,000
Unobligated balance available end of year.....	738,592	299,592	299,592	---
Appropriation.....	4,827,000	7,765,000	6,300,000	+ 1,465,000
Obligation by Objects:				
11.0 Personnel compensation.....	$1,754,000	$1,826,000	$1,828,000	+$ +2,000
12.1 Personnel benefits: Civilian employees...	165,000	174,000	174,000	---
21.0 Travel and transportation of persons....	125,000	100,000	134,000	+34,000
22.0 Transportation of things.....	212,000	218,000	220,000	+ 2,000
23.0 Rent, communications, and utilities.....	24,000	26,000	26,000	---
24.0 Printing and reproduction.....	83,000	100,000	100,000	---
25.0 Other services.....	588,000	880,000	850,000	-30,000
26.0 Supplies & Materials.	416,000	655,000	550,000	-105,000
31.0 Equipment.....	130,000	195,000	195,000	---
32.0 Lands & Structures...	854,000	4,040,000	2,233,000	-1,807,000
Subtotals.....	4,350,000	8,214,000	6,310,000	-1,904,000
95.0 Quarters and Subsistence Charges.....	-6,000	-10,000	-10,000	---
Total Obligations.....	4,344,000	8,204,000	6,300,000	-1,904,000

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JOHNNY HORIZON PROGRAM TRANSFER

Mrs. HANSEN. The Johnny Horizon program was transferred in July 1972 to the Office of the Secretary. What was the rationale for this transfer?

Mr. SILCOCK. The program was originally launched in the Bureau. The Department felt it was a very effective program and to make it more effective they thought it should be made a Department-wide effort.

It was set up under the Department with a departmental coordinator. All Interior agencies are contributing to the program. It is now oriented toward our Nation's Bicentennial in 1976.

UNOBLIGATED AND UNEXPENDED BALANCES

Mrs. HANSEN. Please insert in the record a tabulation of your unobligated and unexpended balances by project as of June 30, 1972, and as of January 31, 1973.

This tabulation should indicate the year in which funds were appropriated for each project.

[The information follows:]

The following is the Unobligated and Unexpended balance for the Construction and Maintenance Appropriation.

Construction

As of June 30, 1972

Building Construction

State	Project	FY Budgeted	Unobligated	Status
Alaska	Pollution Control	1972	$ 80,000	Additional preliminary engineering and design is required to accommodate needs resulting from the Alaska Native Claims Act.
	Anchorage Sewage Lagoon Repair	1972	50,000	Project redesigned to handle impact of Native Claims Act.
California	Fire Buildings	1972	200,000	Funds from supplemental appropriation received too late in fiscal year to design facility and make award. Carried over to FY 1973.

Recreation Construction

Alaska	Pollution Control	1972	$ 25,000	Projects not designed until late in fiscal year. Projects to be awarded early in FY 1973.
Arizona	Lower Colorado River Complex (Empire Landing & Squaw Lake)	1972	130,000	Error on low bid held up award of Squaw Lake until FY 1973. Deficient specification caused re-advertisement of Empire Landing. Contract awarded in FY 1973.
Idaho	Skoomchuck Pollution Control	1972	13,000	Project held up because agreement between BLM and the State of Idaho as to the method of disposal was not reached until the end of FY 1972. Project to be designed and constructed in FY 1973.

Nevada	Rocky Gap Campground	1972	107,000	An environmental protest resulted in BLM's decision to develop an environmental impact statement before continuing project. Project is planned for construction in FY 1973.
Wyoming	Big Atlantic City	1972	48,000	Error on low bid held up award until FY 1973.

As of January 31, 1973

Building Construction

Alaska	Pollution Control	1972, 1973	$230,000	Total project being re-evaluated as a result of the Alaska Native Claims Act. One phase, utilizing the remaining unobligated balance, will be awarded in May 1973.
California	Fire Buildings (Ravendale, Cedarville)	1972	180,000	Projects designed first half of FY 1973. Projects to be awarded May 1973.
Idaho	Shoshone District Office Building	1973	130,000	Project being designed. Building to be awarded June 1973.
Nevada	Las Vegas Office Complex	1973	350,000	Building to be awarded June 1973.
Oregon	Roseburg Office Complex	1973	650,000	Project being designed in FY 1973. Additional funds will be required in FY 1974 to fund the first phase of the project.
	Miscellaneous Fire Building	1973	110,000	Design completed and projects ready for award June 1973.

Recreation Construction

Alaska	Pollution Control	1973	$120,000	Projects to be advertised and awarded when weather permits.
	Tangle Lakes	1973	190,000	Site selected by state under Statehood Act. Project will be deferred.

	Cripple Creek	1973	70,000	Designed to be completed March 1973 and award for construction June 1973.
Arizona	Lower Colorado River Complex (Senator Wash)	1973	360,000	Project to be awarded May 1973
California	Barstow Way Station	1973	300,000	Project being designed. To be awarded for construction May 1973.
Idaho	Skoomchuck Pollution Control	1973	13,000	Project to be awarded June 1973.
	Salmon Dam	1973	90,000	Project being designed. To be awarded for construction June 1973.
Montana	Holter Lake	1973	120,000	Project to be awarded June 1973.
Nevada	Red Rocks Recreation Area	1972, 1973		
	Rocky Gap		237,000	Project to be awarded June 1973.
	Visitor Center	1973	200,000	Project being designed in FY 1973. Additional funds will be required in FY 1974 to construct project.
Oregon	Pollution Control	1973	80,000	Project to be completed by June 1973.
Utah	Pony Express	1973	35,000	To be awarded June 1973.
	Little Sahara	1973	210,000	Project being designed. Will be awarded June 1973.
Bureauwide	Survey & Design	1973	156,000	To be used to design projects scheduled for construction in 1974.

MAINTENANCE

As of June 30, 1972

Building	0	
Recreation	$ 1,400	Carried over to FY 1973.
Road	84,300	Carried over to FY 1973.

As of January 31, 1973

Building	$185,000	Total remaining balance in Maintenance activities to be obligated by June 30, 1973.
Recreation	650,000	
Road	808,000	

UNPAID OBLIGATIONS

As of June 30, 1972

$1,102,000

As of January 31, 1973

$ 977,000

TOTAL UNEXPENDED BALANCE

As of June 30, 1972

$ 1,840,700

As of January 31, 1973

$ 6,451,000

CONSTRUCTION DECREASE

Mrs. HANSEN. Please explain the $1,465,000 decrease for this appropriation.

Mr. HASTEY. This was a matter of priorities in developing our total budget.

Mrs. HANSEN. Who determined you the priorities?

Mr. HASTEY. We had some additional guidance from OMB. We felt a need to emphasize the program objectives in energy areas so it was necessary that we allocate our resources toward these higher priority programs.

Most projects we have on schedule for 1974 are essentially completion of ongoing projects rather than new starts.

Mrs. HANSEN. I have never noticed you making any new starts of any kind.

LEASE-PURCHASE BUILDINGS

Mr. HASTEY. We have been able to improve our office structures working through GSA on lease-purchase contracts. This has helped quite a bit. It takes care of a portion of the problems in our office buildings, some of which are in pretty bad shape.

Mrs. HANSEN. You are not generally in highly settled areas. You have a lot of small areas where it is not possible to rent or lease.

Mr. HASTEY. Yes. It is surprising that in a place like Rawlings, Wyo. we were able to go in a lease-purchase contract.

ROSEBURG OFFICE CONSTRUCTION

Mrs. HANSEN. $1,535,000 is requested for building construction. You show Roseburg district office for $525,000. Is this the completion?

Mr. HASTEY. Yes, as far as the actual district office is concerned.

Mrs. HANSEN. What will happen if you do not receive the funds?

Mr. HASTEY. We won't be able to go with the structure. The $800,000 from fiscal year 1973 will not be enough to go with the contract.

Mrs. HANSEN. Is this for furnishings, or is this the completion of the building?

Mr. HASTEY. When we put together our budget, as we did in fiscal 1973, we made our estimate almost 2 years prior to the construction date. Our directions are not to include inflationary factors. When we get to the point of actually building, we find many times we do not have adequate funds to go with the contract. In the case of Roseburg and also Shoshone, we do not have adequate funds to go with the contract without coming to you for additional money. These things are on the design table now and we should be able to go with contracts in July with the additional funding.

Mrs. HANSEN. It could wait.

Mr. HASTEY. In Roseburg we are in very difficult shape.

We have over 100 employees, and they are crowded into an old converted warehouse. We need new facilities there. We have tried to go the lease-contract, lease-purchase route but it is not available.

Mrs. HANSEN. I have news for you. We have a lot of projects in various phases of construction in the various parts of our budget. The

Office of Management and Budget has determined that some were not top priority. So now we are looking for impoundment items, also.

You are requesting $700,000 for Anchorage. What are you going to do with that?

ANCHORAGE DISTRICT COMPLEX

Mr. HASTEY. This is to develop new warehouse facilities and other improvements at our complex in Anchorage, Alaska. This is a two-phase operation.

Once we develop new warehouse facilities, we want to convert the old existing warehouse space, which is not suitable for warehousing because of its low 8-foot ceiling, into office space.

With the increased work and additional people we now have in Alaska such as those related to native claims, fire protection, and the Alaskan pipeline, we are pretty well crowded.

OTHER BUILDING CONSTRUCTION WORK

Mrs. HANSEN. Idaho-Alaska, $200,000. What is this for?

Mr. HASTEY. Part of that is for Shoshone. The other part is to continue with the pollution abatement projects we have scheduled in Alaska.

Mrs. HANSEN. You are requesting funds for survey and design of future buildings. That is a hopeless cause since you will never receive the funds to build them.

Mr. HASTEY. Hopefully this $110,000 will help us to improve our cost estimates so that we do not have to come around a second time to get additional funds.

RECREATION FACILITY CONSTRUCTION

Mrs. HANSEN. $1,200,000, a decrease of $1,444,000, is requested for recreation facility construction. You say you have the capacity to handle only about 14 percent of the estimated 16 million facility oriented visitor-days. In light of this, what is the rationale for requesting a decrease?

Mr. HASTEY. This is a matter of priorities.

Mrs. HANSEN. This certainly will be of no help to our pollution control needs. Why was this cut?

Mr. HASTEY. It is very difficult to answer that.

Mrs. HANSEN. Has the Office of Management and Budget ever been in the sage lands of the West?

Mr. HASTEY. Yes; a few of them have.

Mrs. HANSEN. You have been letting your facility needs go and we are getting public complaints about the lack of facilities.

You will be faced with a dilemma. Either you will have to make areas off limits to people or let the use go uncontrolled.

Mr. HASTEY. This is true. In most areas there are no facilities at all. Many areas are receiving heavy uncontrolled use. We are trying to minimize this in certain locales with portable toilets and garbage cans.

Mrs. HANSEN. I sometimes think that the Office of Management and Budget ought to be taken out into Wyoming and told to wander around.

An increase of $380,000 is requested for maintenance. That is not much of a program. What will it take care of?

Mr. HASTEY. $80,000 will bring the maintenance of existing buildings up to what we think is an adequate level for the time being.

Mrs. HANSEN. How many buildings is that?

Mr. HASTEY. We have 1,200,000 square feet of space in about 944 existing structures. Our total level of $538,000 is adequate for fiscal year 1974 to maintain the structures.

Mrs. HANSEN. Then you have some road maintenance?

Mr. HASTEY. Yes, an increase of $150,000, which will bring the total level to $1.5 million.

Mrs. HANSEN. How many miles of roads do you have to maintain?

Mr. HASTEY. This is only sufficient to maintain about 6,900 miles annually out of a total road network of around 40,000 miles.

Mrs. HANSEN. What are you going to do with the rest of it, use it at your own risk?

Mr. HASTEY. Catch as catch can or else we block it off. Some is on a 3-year cycle so we could pick up 18,000 to 20,000 miles of maintenance over a 3-year period. We do a minimal amount of maintenance. Many of our roads are in a serious condition, particularly in the fall of the year when the hunters go out on wet, unsurfaced roads.

PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS

Mrs. HANSEN. Insert justification pages 58 through 62 in the record at this point.

[The pages follow:]

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Public Lands Development Roads and Trails

Contract Authority and Liquidation Program

	Contract Authority Available	Obligations	Net Unpaid Obligations, Prior Year	Obligations	Expenditures	Net Unpaid Obligations Carried Forward
			Fiscal Year 1972			
Public Lands Development Roads and Trails (Total).....	$20,864,405	$3,590,245	$1,158,549	$4,748,794	$3,671,480	$1,077,314
			Fiscal Year 1973			
Public Lands Development Roads and Trails (Total).....	17,274,160	4,313,000	1,077,314	5,390,314	3,500,000	1,890,314
			Fiscal Year 1974			
Public Lands Development Roads and Trails (Total).....	12,961,160	4,000,000	1,890,314	5,890,314	4,000,000	1,890,314

PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS

Liquidation of Contract Authorization

Analysis by Activities

Activity	Actual 1972	Estimate 1973	Estimate 1974	Increase or Decrease
Public Lands Development Roads and Trails.....	$3,200,000	$3,265,000	$4,000,000	+$735,000

Status of Appropriation for Liquidation of Contract Authorization

	1972	1973	1974
Appropriation.....	$3,200,000	$3,265,000	$4,000,000
Unexpended balance brought forward.....	882,953	411,473	176,473
Total Available.....	4,082,953	3,676,473	4,176,473
Less: Expenditures.....	3,671,480	3,500,000 a/	4,000,000 a/
Unexpended balance....	411,473	176,473	176,473

a/ Estimated

Need for Liquidating Cash Appropriation: The Public Lands Development Roads and Trails program derives its obligating authority from the contract authority contained in the various Federal Aid Highway Acts; however, an appropriation of liquidating cash is required to make contract payments.

Since the first time that contract authority was provided in the Federal Aid Highway Act of 1962, the cumulative liquidating cash appropriation has been less than the cumulative amount of programmed budget authority. This approach is possible because of the time lag which usually occurs in construction projects between the date of contract obligation and the subsequent date of disbursement of funds to make progress payments under the contract.

The accompanying table shows the relationships among contract authority, the amount of programmed new budget authority (NBA), and the appropriation of liquidating cash.

RECAPITULATION OF PUBLIC LANDS DEVELOPMENT ROADS AND TRAILS STATUS OF NBA AND LIQUIDATING CASH APPROPRIATIONS

Fiscal Year	New Budget Authority Authorized by the Federal Aid Highway Acts (in $1,000's)	Programmed New Budget Authority (in $1,000's)	Liquidating Cash Appropriation (in $1,000's)
1963	2,000	-----	-----
1964	4,000	2,000	760
1965	2,000	2,500	2,500
1966	2,000	2,000	2,000
1967	3,000	2,000	2,000
1968	5,000	3,000	2,600
1969	3,500	3,320	3,500
1970	5,000	4,000	3,500
1971	5,000	2,500	3,500
1972	10,000	4,000	3,200
1973	-----	4,313	3,265
1974 Request	-----	4,000	4,000
Total	41,500	33,633	30,825

Unprogrammed Contract Authorization at end of FY 1974 - $7,867 thousand
Unfunded Contract Authorization at end of FY 1974 - $10,675 thousand

AN ADEQUATE ROAD SYSTEM IS ESSENTIAL FOR MANAGEMENT AND PROTECTION OF THE PUBLIC LANDS.

Planned Use of Contract Authority - FY 1974. The Bureau obligation program will permit road grading of 45 miles and road surfacing of 57 miles, and for the Bureau's sign program. The estimate also includes funds to accomplish survey and design and acquire easements for future roads and trails.

An adequate road and trail system is essential to the public use and proper management and protection of 450 million acres of public land administered by the Bureau. Most of the land is presently accessible only by primitive roads and many millions of additional acres are completely inaccessible because of lack of easements across surrounding private lands.

Most of the existing Bureau road system consists of primitive roads which do not adequately service the Bureau's resource and administrative needs. Furthermore, these roads often pose a serious safety hazard to the using public, many of whom are not properly equipped or familiar with local driving hazards. Expanded use of the lands for recreation and other purposes is aggrevating public safety problems.

Of the 36 thousand miles of existing roads which are classed as primitive, approximately 32 thousand miles are in need of up-grading. In addition, another 21,300 miles of added construction and surfacing has been identified to serve the long term management needs of the public lands. Of the estimated 13 thousand miles of trail requirements, only about 5 thousand miles presently exist.

Construction standards vary from single-lane graded dirt roads for fire control to double-lane surfaced roads to meet multiple resource needs and intensive recreation access.

A summary of the programmed authority for FY 1974 by State is as follows:

Alaska	$ 26,000
Arizona	213,000
California	697,000
Colorado	254,000
Idaho	292,000
Montana	45,000
Nevada	351,000
New Mexico	336,000
Oregon	272,000
Utah	170,000
Wyoming	70,000
Survey & Design & Easement Acquisition (All States)	1,274,000
TOTAL OBLIGATION PROGRAM	4,000,000

Public Lands Development Roads and Trails
Personnel Summary

	1972 Actual	1973 Est.	1974 Est.
Total number of permanent positions	83	83	83
Full-time equivalent of other positions	32	32	32
Average number of all employees	115	115	115
Average GS grade	9.0	8.9	8.9
Average GS salary	$13,444	$13,249	$13,250

ITEMIZATION OF ESTIMATE

Public Lands Development Roads and Trails

	Actual 1972	Actual 1973	Actual 1974	Increase + Decrease -
Program and Financing:				
Total obligations	$ 3,590,245	$ 4,313,000	$ 4,000,000	$ -313,000
Unobligated balance available start of year	-10,864,405	-17,274,160	-12,961,160	+4,313,000
Unobligated balance available end of year	17,274,160	12,961,160	8,961,160	-4,000,000
Unfunded balance, start of year	11,140,000	17,940,000	14,675,000	-3,265,000
Unfunded balance, carried forward	-17,940,000	-14,675,000	-10,675,000	+4,000,000
Appropriation to liquidate contract authorization	3,200,000	3,265,000	4,000,000	+735,000
Obligations by Objects:				
11.0 Personnel compensation	$1,416,000	$ 1,420,000	$ 1,427,000	$ + 7,000
12.1 Personnel benefits: Civilian employees	119,000	122,000	123,000	+ 1,000
21.0 Travel and transportation of persons	135,000	110,000	145,000	+35,000
22.0 Transportation of things	73,000	74,000	75,000	+ 1,000
23.0 Rent, communications, and utilities	9,000	10,000	10,000	-----
25.0 Other services	69,000	70,000	71,000	+ 1,000
26.0 Supplies & Materials	90,000	105,000	105,000	-----
31.0 Equipment	25,000	50,000	50,000	-----
32.0 Lands & Structures	1,654,000	2,352,000	1,994,000	-358,000
Total Direct Obligations	3,590,000	4,313,000	4,000,000	-313,000

UNOBLIGATED AND UNEXPENDED BALANCES

Mrs. HANSEN. Insert in the record your unobligated and unexpended balances of June 30, 1972, and January 31, 1973.

[The information follows:]

The following is the unobligated and unexpended balances for the "Public lands development roads and trail" appropriation.

As of June 30, 1972:	
Unobligated balance	$17,274,160
Unpaid obligations	1,077,313
Less unfunded contract authority	16,694,472
Unexpended balance (appropriation)	1,657,001
As of Jan. 31, 1973:	
Unobligated balance	15,413,590
Unpaid obligations	789,620
Less unfunded contract authority	12,949,405
Unexpended balance	3,253,805

STATUS OF PLDRT FUNDS

Mrs. HANSEN. Is any of this request contingent on passage of the 1973 Highway Act?

Mr. HASTEY. No, ma'am. We presently have about $12 million in reserve contract authority. With the $4 million proposed in fiscal year 1974 we will still have about $8 million in contract reserves.

Mrs. HANSEN. Do you plan to use it?

Mr. HASTEY. Not under the 1974 budget. This will be left in reserve the way the budget is presented now.

Mrs. HANSEN. It is a no-year fund, isn't it?

Mr. HASTEY. Yes, ma'am; although there is an expiration date on Federal Highway Act moneys.

Mrs. HANSEN. When?

Mr. HASTEY. Two years after the end of the year that was authorized in the act.

Mrs. HANSEN. Why didn't you move some of this over to pay for the Alaska pipeline?

Mr. HASTEY. We would have a problem with the legal authority to move from one appropriation to the other, particularly between Federal Aid Highway Act funds and those in our regular appropriations.

Mrs. HANSEN. I don't know. OMB doesn't seem to have any legal problems.

ROAD CONSTRUCTION IN UTAH

Mr. MCKAY. The appropriation for construction of public roads in Utah is $170,000. How does that compare with last year's appropriation? How does that figure compare with the needs for roads in fiscal year 1974?

Mr. SILCOCK. The fiscal year 1974 construction fund is $170,000 in direct project work plus an additional $44,000 in survey and design. In total this is $97,000 less than the fiscal year 1973 available funds for Utah road construction. The decreases are due to the completion of the Little Sahara Road grading. An additional $450,000 over and above

what is presently budgeted represents Utah's total program request for fiscal year 1974. This follows the trend of all BLM States which have identified total fiscal year 1974 road construction needs of $13 million.

O. & C. LANDS

Mrs. HANSEN. Insert justification pages 63 through 76 in the record.
[The pages follow:]

92-148 O - 73 - pt. 1 - 59

Department of the Interior
Bureau of Land Management
Oregon and California Grant Lands

Estimated appropriation, 1973		$17,500,000
Unobligated balance from prior years (included in this unobligated balance, $345,773 for Forest Service)		964,293
Total available for obligation		18,464,293
Decreases		
Construction and acquisition (included in this amount is $2,459,773 for Forest Service)	$8,382,773	
Forest development, protection and management (includes $86,000 for Forest Service)	7,565,000	
Operation and maintenance	2,516,520	
		-18,464,293
Increases		
Construction and acquisition (included in this amount is $2,555,000 for Forest Service)	6,614,000	
Forest development protection and management (includes $100,000 for Forest Service)	8,100,000	
Operation and maintenance	3,450,000	
Total available for obligation		18,164,000
Less: Unobligated balance from prior years		664,000
Budget Estimate, 1974		17,500,000

Oregon and California Grant Lands
Analysis by Activities

	Amount Available 1973	Fiscal Year 1974			Total Available 1974 Compared to Total Available 1973	Page Ref.
		Estimated Total Available	Unobligated Balance from prior year	Budget Estimate		
1. Construction and acquisition	$ 8,382,773	$ 6,614,000	$-586,000	$ 6,028,000	$-1,768,773	65
2. Forest development, protection and management	7,565,000	8,100,000	- 10,000	8,090,000	+ 535,000	72
3. Operation and maintenance	2,516,520	3,450,000	- 68,000	3,382,000	+ 933,480	74
Total	18,464,293	18,164,000	-664,000	17,500,000	- 300,293	

JUSTIFICATION

Appropriation Title

Oregon and California Grant Lands - $17,500,000

Under this title an amount equal to 25% of the gross receipts from sales of timber and other products on the revested Oregon and California Railroad Grant Lands is appropriated for the construction, acquisition, operation and maintenance of access roads and other improvements, and for forest management, reforestation, and protection of the BLM administered lands in western Oregon.

The estimate for FY 1974 for this appropriation is $17,500,000, no change from 1973 exclusive of carryover funds.

1. Construction and Acquisition - $ 6,028,000

The FY 1974 estimate of $6,028,000 is a decrease of $1,533,275 below FY 1973 exclusive of carryover funds. The program is for construction of access roads and recreation facilities in western Oregon.

The analysis of new budget authority, total availability, and the obligation program follow in tabular form on the following page.

A SUSTAINED YIELD OF WESTERN OREGON TIMBER HELPS MEET THE NATION'S GROWING DEMAND FOR FOREST PRODUCTS.

1. Construction and Acquisition Activity, Analysis by Subactivity and Agency

Agency	Amount Available FY 1973	Fiscal Year 1974			Total Available 1974 Compared to 1973	Page Ref.
		Estimated Total Available	Unobligated Balance From FY 1973	Budget Estimate		
(a) Access roads:						
1. Bureau of Land Management	$4,334,000	$3,118,000	$300,000	$2,818,000	$-1,216,000	
2. Forest Service	1,908,034	400,000	104,000	296,000	-1,508,034	
Subtotal, Access roads	6,242,034	3,518,000	404,000	3,114,000	-2,724,034	
(b) Recreation facilities						
1. Bureau of Land Management	1,589,000	941,000	80,000	861,000	- 648,000	
2. Forest Service	551,739	2,155,000	102,000	2,053,000	+1,603,261	
Subtotal, Rec. facilities	2,140,739	3,096,000	182,000	2,914,000	+ 955,261	
Activity total	8,382,773	6,614,000	586,000	6,028,000	-1,768,773	

(a) Access Roads $3,114,000

The amount of $3,114,000 includes $296,000 for the Forest Service. The BLM amount of $2,818,000 is a decrease of $1,136,089 compared to the amount available for 1973 exclusive of carryover funds. These funds will be used for survey and design, rights-of-way agreements, and acquisition of easements as well as construction, improvement, and acquisition of roads and bridges in support of the management of the O&C revested lands in western Oregon.

The access road system must be planned sufficiently ahead of actual sales to provide access to undeveloped areas of mature, over-mature, decadent, and scattered salvage timber stands to insure a well-balanced schedule of timber harvest. Access affords bidding opportunities to all prospective timber buyers.

During FY 1974 the BLM portion is planned to accomplish 8 miles of surfacing and 19 miles of grading. Rock production for road repair and surfacing and construction of bridges and culverts is also included.

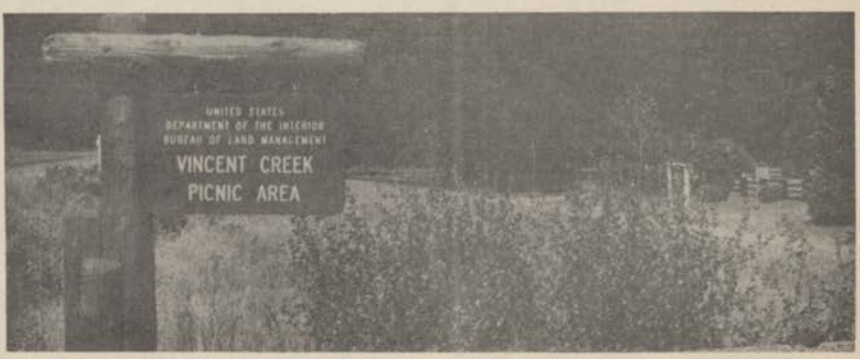
The Forest Service road construction amount of $296,000 is a decrease of $1,420,053 over FY 1973, exclusive of carryover funds.

(b) Recreation Construction - $2,914,000

The estimate includes $861,000 for BLM recreation construction, a decrease of $588,692 over the amount available for 1973, exclusive of carryover funds. The Forest Service recreation construction amount is $2,053,000, an increase of $1,611,559 over FY 1973 exclusive of carryover.

Access roads have opened many previously remote areas with high recreation value. Increasing use of these areas by the public creates fire and pollution hazards which endanger both the resources and the using public. The recreation construction program attempts to minimize or eliminate these hazards by providing potable water and sanitary picnic and camping facilities in carefully selected areas.

Analysis indicates that western Oregon will have a facility supply deficit of 390,000 one-time-use (OTU) capacity by 1976. Approximately 80,000 additional OTU's of camping and picnicking capacity will be needed to meet the recreation demands of 1976. The state, counties and other Federal agencies are developing facilities to help meet this demand. The FY 1974 program will provide approximately 75 family units, together with related improvements, at the Swift Water Recreation site in Douglas County. Funds are also provided for necessary improvements to the water and waste disposal system at the Wildwood site in Clackamas County, and for the survey, design, contract administration and associated planning functions for future O&C recreational developments.



Details of the construction and acquisition program are shown in the following tables:

OREGON AND CALIFORNIA GRANT LANDS
Fiscal Year 1973 Program
Construction and Acquisition

Availability:		
Unobligated balance as of 6/30/72, brought forward (included in this unobligated balance is $302,279 for Forest Service)		$ 821,498
Estimated warranted authorization, FY 1973		7,561,275
Less: Unobligated balance, end of year FY 1973		-585,773
Available for 1973 program		7,797,000
Utilization:		
Bureau of Land Management:		
Planning, reconnaissance	$ 395,000	
Acquisition	300,000	
Recreation construction	1,509,000	
		2,204,000
Federal Highway Administration:		
Surveys	200,000	
Road construction	3,139,000	3,339,000
Forest Service:		
Construction of roads	1,804,000	
Recreation construction	450,000	
		2,254,000
		7,797,000

Detail of Road Construction Program, BLM Lands, FY 1973

Road System	Project Name	Miles	Type	Cost Estimate
Glendale	Cow Creek	8	Grading, Bridge & Surfacing	$1,200,000
McKenzie	Horn Butte	6	Surfacing	200,000
Yellow Creek	Yellow Creek Ridge	12	Surfacing	300,000
Bridges and culverts				250,000
Rock production				1,189,000
Survey and design				200,000
Subtotal (FHWA)				3,339,000
Planning and reconnaissance (BLM)				395,000
Road and easement acquisition (BLM)				300,000
Total FY 1973 obligation program (includes carryover funds)				4,034,000

Detail of Recreation Construction Program, BLM Land, FY 1973

Project	County	Cost Estimate	Family Units	OTU
Pollution Control	All O&C Counties	$ 73,000	Modification and conversion of sanitary facilities	
Wildwood	Clackamas	176,000	Modification of water and sewer system	
Shotgun	Lane	535,000	27	300
Swift Water	Douglas	400,000	75	450
Rogue River Trail	Josephine	53,000	Construction of four foot bridges	
Total		1,237,000	102	750

In addition to the funds identified above, the remaining sum of $272,000 is for survey and design, recreation inventory and analysis, and coordination and planning for future recreational demands in western Oregon.

OREGON AND CALIFORNIA GRANT LANDS
Fiscal Year 1974 Program
Construction and Acquisition

Availability:		
Unobligated balance, beginning of FY 1974		$ 586,000
Estimated warranted authorization, FY 1974		6,028,000
Available for FY 1974 program		6,614,000
Utilization:		
Bureau of Land Management:		
Planning, reconnaissance	$400,000	
Acquisition	300,000	
Recreation construction	941,000	
		1,641,000
Federal Highway Administration:		
Surveys	150,000	
Construction of roads	2,268,000	
		2,418,000
Forest Service:		
Construction of roads	400,000	
Recreation construction	2,155,000	
		2,555,000
Total 1974 program		6,614,000

Detail of Road Construction Program BLM Lands FY 1974

Road System	Project Name	Type	Miles	Amount
Rock Creek	Bob Butte	Grading & Surfacing	8	$1,000,000
Columbia	Scaponia	Grading	11	80,000
Bridges, culverts, and misc. structures				538,000
Rock production				350,000
Survey and design				450,000
Subtotal (FHWA)				2,418,000
Planning and reconnaissance (BLM)				400,000
Road and easement acquisition (BLM)				300,000
Total obligation program, BLM lands				3,118,000

Detail of Recreation Construction Program BLM Land, FY 1974

Project	County	Cost Estimate	Family Unit
Swiftwater	Douglas	$450,000	75
Shotgun	Lane	30,000	Contract administration
Wildwood	Clackamas	116,000	Modification of water and waste disposal systems
Total		596,000	75

In addition to the funds identified above, the remaining sum of $345,000 contains $265,000 to be utilized for survey and design, recreation inventory and analysis and coordination and planning for future recreational demands in western Oregon. The balance of $80,000 is to be used for the construction of water and sanitation facilities to solve environmental and public safety problems at existing recreation sites.

2. Forest Development, Protection and Management - Analysis by Subactivity and Agency

Subactivity and Agency	Amount Available 1973	Estimated Total Available	Unobligated Balance from FY 1973	Budget Estimate	Total Available 1973 Compared to 1972	Page Ref.
(a) Forest protection:						
Bureau of Land Management	$1,000,000	$1,000,000	---	$1,000,000	$ ---	
(b) Forest development:						
Bureau of Land Management	2,827,000	2,882,000	---	2,882,000	+55,000	
Forest Service	86,000	100,000	---	100,000	+14,000	
(c) Forest management:						
Bureau of Land Management	3,652,000	4,118,000	10,000	4,108,000	+466,000	
Total	7,565,000	8,100,000	10,000	8,090,000	+535,000	

3. Operation and maintenance (ALL BLM) - Analysis by subactivity

(a) Roads	2,046,000	2,950,000	60,000	2,890,000	+904,000	
(b) Recreation facilities	470,520	500,000	8,000	492,000	+29,480	
Total	2,516,520	3,450,000	68,000	3,382,000	933,480	

(2) Forest Development, Protection,and Management $8,090,000

The FY 1974 estimate of $8,090,000 is an increase of $576,884 over FY 1973 exclusive of carryover funds. The program provides for the protection of western Oregon forests, reforestation,and rehabilitation practices, timber stand improvement and a variety of forest management functions oriented toward the orderly harvest of timber crops.

(a) Forest Protection - $1,000,000

The estimate of $1,000,000 is the same as the FY 1973 amount. BLM contracts for fire protection on approximately 2.4 million acres of O&C and public domain forest lands in western Oregon. These contracts are negotiated with the State of Oregon, the Forest Service,and Clackamas County on a rate per acre which reflects each agency's costs for fire suppression and fire prevention in past years. The Bureau will also continue to contribute to presuppression and control measures through the removal of snags, slash disposal, fire-break construction, fire law enforcement and fire investigations on Bureau administered lands.

(b) Forest Development - $2,982,000

The estimate of $2,928,000 represents an increase of $116,020 over the FY 1973 amount, exclusive of carryover funds. BLM programs account for an increase of $58,526 with a increase of $57,494 in Forest Service work.

Bureau of Land Management

The purpose of this program is to insure maximum timber production which is reflected in the level of the annual allowable cut. This is accomplished in part by pre-commerical thinning which involves the removal of trees from immature, overstocked stands of timber. This practice gives the residual trees more room for growth and development and will produce commerical sized timber in a shorter period of time with more useable wood volume than would otherwise be realized.

TREE PLANTING ON O&C LANDS

Site and stand improvement, stand conversion, reforestation, and genetic improvement are also part of this program. These practices are all conducive to bringing denuded forest lands with little or no natural regeneration & unproductive hardwood stands into full timber production. Site treatment involves the removal of brush and other obstacles from potential timber producing sites to permit planting of desirable tree species. Genetic improvement of commerical tree species helps provide superior seed and planting stock. These practices together with commerical thinning and mortality salvage operations make up the Bureau's western Oregon intensifed forest management program. Through study and analysis, each practice has been found to be both environmentally and economically feasible. The best possible combination or mix of practices is determined through computerization which also permits allowable cut projections far into the future based on varying levels of intensity and mix of development practices.

The small increase in the forest development program will be utilized for additional reforestation, timber stand improvement, and fisheries habitat improvement work in accordance with intensified forest management programs.

Forest Service

The Forest Service program of $100,000 is included in the forest development total of $2,982,000. The FY 1974 program is a small increase of $14,000 over 1973 on an obligation program basis. This provides for reforestation and stand improvement work on those O&C lands which are under Forest Service jurisdiction.

(c) Forest Management - $4,108,000

The estimate of $4,108,000 is an increase of $460,000 over the amount available in FY 1973, exclusive of carryover funds. The increase is necessary to maintain a level forestry program in a situation of rising management costs including pay raises enacted for prior years, which heretofore were partially offset with carryover funds. This program when combined with Forest Management, western Oregon in the Management of Lands and Resources Appropriation, provides for the layout, measurement, appraisal, sale,and administration of the total allowable cut in western Oregon. This cut is determined from periodic inventories which are correlated with the principles of multiple-use to develop a sustained yield timber harvest.

3. Operation and Maintenance $3,382,000

The amount of $3,382,000 is a increase of $956,391 over the amount available for FY 1973, exclusive of carryover funds. This program provides adequate maintenance of access roads and recreation facilities on Bureau lands in western Oregon.

(a) Roads - $2,890,000

The amount of $2,890,000 is a increase of $923,729 over FY 1973 availability, exclusive of carryover funds.

These funds provide maintenance for approximately 6,800 miles of timber access roads. These roads must be kept in usable condition to insure an even flow of logs to the mills, particularly during the rainy season when inadequately maintained roads rapidly deteriorate. Washouts are costly both in repairs and in the economic loss suffered by the mill operator and the logger.

WESTERN OREGON ROADS ARE MAINTAINED TO STANDARDS REQUIRED FOR USE BY HEAVY LOGGING TRUCKS

In FY 1973, the O&C road maintenance program was partially funded by a prior years surplus of Public Land Administration Act user collections. This surplus will not be available in FY 1974. Therefore, the FY 1974 increase is needed to: accommodate the increasing public use of the O&C road system, and offset the reduction caused by the lower level of Public Land Administration Act funds available in FY 1974. In addition, $5,000 of the requested increase will be used for acquisition of a 3 acre road maintenance administrative site near Eugene, Oregon. This site is need for storage of materials and equipment used by FHWA maintenance crews who maintain BLM roads under this subactivity.

(b) Recreation Facilities - $492,000

An amount of $492,000 is an increase of $32,662 over the amount available in FY 1973, exclusive of carryover funds. The O&C areas are often near population centers and are receiving more recreation use every year. Visitor days at western Oregon recreational facilities are increasing every year and the trend is expected to continue through the 1970's. The increasing demand comes largely from metropolitan areas of California and other surrounding states as well as additional pressures from in-state residents.

Heavy use increases the maintenance effort. This program provides adequate services such as disposal of garbage, servicing sanitation facilities, keeping drinking water safe and general repair and maintenance of facilities.

The $32,662 increase will be used to maintain new recreation facilities to be completed in FY 1973, to meet increasing use pressures at established campgrounds and to up-grade sites where pollution poses a threat to the local environment and public health.

Personnel Summary

Bureau of Land Management	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions	361	361	361
Full-time equivalent of other positions	70	70	70
Average number of all employees	414	414	414
Average GS grade	9.0	8.9	8.9
Average GS salary	$13,444	$13,249	$13,250

Allocation Accounts	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions	142	114	95
Full-time equivalent of other positions	18	16	14
Average number of all employees	134	121	102
Average GS grade	7.9	7.8	7.8
Average GS salary	$12,225	$11,880	$10,001
Average salary of ungraded positions	9,835	9,993	10,001

ITEMIZATION OF ESTIMATE

Oregon and California Grant Land (receipt limitation)

	Actual 1972	Actual 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$20,479,000	$17,800,000	$18,164,000	$+364,000
Unobligated balance available, start of year.....	-2,497,000	-964,000	-664,000	+300,000
Unobligated balance available, end of year...	964,000	664,000	-----	-664,000
Appropriation.....	18,946,000	17,500,000	17,500,000	---
Obligations by Objects:				
11.0 Personnel compensation.....	$6,106,000	$6,182,000	$6,204,000	+ 22,000
12.1 Personnel benefits: Civilian employees.....	518,000	498,000	500,000	+ 2,000
21.0 Travel and transportation of persons.....	344,000	272,000	360,000	+ 88,000
22.0 Transportation of things.....	627,000	650,000	650,000	-----
23.0 Rent, communications, and utilities.....	198,000	200,000	203,000	+ 3,000
24.0 Printing and reproduction.....	5,000	5,000	5,000	-----
25.0 Other services.....	3,863,000	3,774,000	3,570,000	-204,000
26.0 Supplies and materials.....	752,000	766,000	756,000	-9,000
31.0 Equipment.....	103 000	129,000	105,000	- 24,000
32.0 Land and structures....	7,965,000	5,326,000	5,813,000	+487,000
Subtotal.....	20,481,000	17,802,000	18,166,000	+364,000
95.0 Quarters and subsistence charges....	-2,000	-2,000	-2,000	-----
Total obligations.....	20,479,000	17,800,000	18,164,000	+364,000

O. & C. FUND REQUEST

Mrs. HANSEN. Your request is at the same level as last year, $17,500,000. You estimate a decrease of 19 positions in your allocation accounts. Will you please explain this?

Mr. HASTEY. Yes, ma'am. Starting last year we have had quite a decrease in our road construction account in the O. & C. grant land fund. This decrease has an impact on the number of Federal highway people required.

ROAD CONSTRUCTION DECREASE

Mrs. HANSEN. Is your decrease in the roads going to have any affect on the sale of timber?

Mr. HASTEY. It may affect the quality of the management. It will make it a little more difficult to get some of the mortality salvage and some of the sub-commercial timber stands.

Mr. HANSEN. Then this isn't very good economy is it?

Mr. HASTEY. No, ma'am. We plan to do some road construction under timber sales but it does prevent us from getting into some of the mortality salvage areas.

Mrs. HANSEN. Will you insert in the record how many acres you have that are faced with a mortality problem?

Mr. HASTEY. Yes, ma'am.

Mrs. HANSEN. And what the value of those acres is timberwise.

[The information follows:]

INACCESSIBLE MORTALITY SALVAGE

The following highlights the mortality salvage problem areas due to lack of access:

WESTERN OREGON

15,000 acres containing approximately 200 million board feet of thinning and morality salvage material valued at $12 million.

PUBLIC DOMAIN AREAS

About 34,000 acres containing a salvage volume of approximately 100 million board feet valued at $2 million

Mrs. HANSEN. Are there any questions?

Mr. WYATT. I would just like to emphasize the questions that you have asked, Madam Chairman. What you are really saying is that the decrease in the road money here certainly cuts into the quality of the intensive management that you have done on the O. & C. lands, which has made your management so successful. Isn't that fair? Can you do the same job of management with this kind of budget division?

Mr. STORMS. Your categorization is correct certainly in the long term. If this is a year or two proposition its impact won't be too adverse.

Mr. WYATT. You play catchup ball later.

Mr. STORMS. Right. In the long term it would certainly be in the manner you describe.

TIMBER SALE ROAD CONSTRUCTION

Mr. WYATT. When you are talking about the change in the financing of the road construction, you are talking about shifting more of the burden to the sales purchaser, are you not?

Mr. HASTEY. Right.

Mr. WYATT. The Forest Service has been forced to do this this year in a massive way. There has been a huge shift from the Forest Service. They have already testified at these hearings that this certainly will reduce the amount of sales, the amount of board feet that they can sell. Is this true in your situation, where you have marginal sales involved?

Mr. STORMS. Not in the short term. If it is extended over 2 or 3 years it could.

Mrs. HANSEN. I have news for you. When OMB starts a short-term wave, it goes a long-term length. That is my experience.

Mr. WYATT. Let me ask this. Is there anything in the OMB's discussions with you that would indicate that this is short term? I think it is a new policy that they intend, as long as they are there to make permanent. Have they given you any indication that this is just a temporary emergency, because of the Federal budgetary situation this year?

Mr. HASTEY. No; they haven't. Of course, the level of the O. & C. fund is based on receipts. When we put the budget together we expected about the same receipts in 1973 and 1974 which accounts for the same new budget authorities in each fiscal year. When you are dealing with this appropriation you always run that risk that a level status or drop-off in receipts will cut down on your investment program, particularly where more management and development funds are required. We have one thing going for us in western Oregon. Over the years, we have developed a pretty fair road system. I don't think we are in the same situation that the Forest Service is.

Mr. WYATT. But the fact is that OMB—I won't ask for any comment on this—is asking you to do, to an extent, the same thing they asked the Forest Service to do. That is to get the purchasers to assume the road costs. You do have salvage and sales that are marginal. In some cases adding the road costs will make those unbiddable at any place. I would like, Mr. Director, to say before we leave this subject that I would like to commend the Bureau of Land Management once more for the high type of management that you have done here, because you have demonstrated it is possible for public officials to well manage public forest lands and return to the Treasury more money for the additional dollars invested, and I commend you for an excellent job done during this past year.

INCREASE TREND IN TIMBER RECEIPTS

Mr. HASTEY. I would like to add one thing about receipts. In the O&C, based on the last 7 months, it appears that our fiscal year 1973 receipts are probably underestimated to the extent of $5 to $10 million. The additional stumpage prices paid and higher rate of timber being moved out of the woods all indicate a probable increase in fiscal year 1973 receipts. Rather than the $70 million estimate we are looking at an $80 million estimate in fiscal 1973.

RANGE IMPROVEMENTS

Mrs. HANSEN. Insert justification pages 77 through 78 in the record.

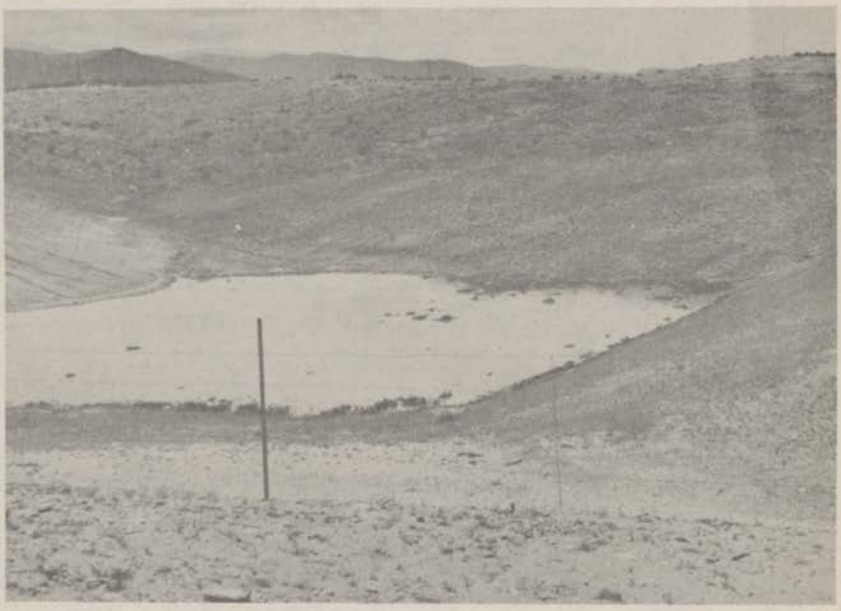
[The pages follow]

RANGE IMPROVEMENTS

Amount Available 1973	Fiscal Year 1974			Total available, 1974 compared to total available, 1973
	Available	Unobligated Balance from Prior Year	Budget Estimate	
$2,846,000	$3,376,000	---	$3,376,000	$+530,000

Range Improvements, an annual, indefinite appropriation, is derived from the Range Improvement Fund established by Law (43 U.S.C. 315). Included also are receipts from Bankhead-Jones Farm Tenant Act lands transferred from the Department of Agriculture by various Executive Orders. The increase for 1974 results from the increase in grazing fees for the grazing year beginning on March 1, 1973, a portion of which is designated in the Act as the Range Improvement Fee.

The objective of this program is to support range management on deteriorated and declining range lands, to restore and sustain forage production, and to complement the watershed treatment and wildlife habitat improvement programs. Lands valuable for forage production are usually also valuable upland watersheds and important wildlife winter ranges or habitat areas.



STOCKWATER RESERVOIR

Program of Continuing Work: In FY 1974 the plan of work includes the construction of a about 730 miles of fence and 615 water developments and maintenance of existing range improvements. These added improvements will aid implementation of multiple-use management plans for lands which are important for forage production, watersheds, and wildlife habitat. Land improvements resulting from these efforts will provide additional forage for livestock and wildlife. Continued effort is planned for maintenance of the existing range improvements.

Personnel Summary

	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions.....	44	44	44
Full-time equivalent of other positions....	32	32	32
Average number of all employees.....	73	73	73
Average GS Grade.....	9.0	8.9	8.9
Average GS salary.....	$13,444	$13,249	$13,250

ITEMIZATION OF ESTIMATE

Range Improvement (receipt limitation)

	Actual 1972	Estimate 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$2,484,284	$2,846,119	$3,376,000	+$529,881
Unobligated balance available, start of year.....	- 93,281	- 132,119	---	+ 132,119
Unobligated balance available, end of year.....	132,119	---	---	---
Appropriation.....	2,523,000	2,714,000	3,376,000	+ 662,000
Obligations by Objects:				
11.0 Personnel compensation.....	$795,000	$819,000	$819,000	---
12.0 Personnel benefits: Civilian employees...	67,000	70,000	70,000	---
21.0 Travel and transportation of persons....	43,000	37,000	47,000	+ $10,000
22.0 Transportation of things.....	113,000	116,000	120,000	+ 4,000
23.0 Rent, communications and utilities.....	3,000	4,000	4,000	---
25.0 Other services.....	236,000	243,000	250,000	+ 7,000
26.0 Supplies and materials.....	389,284	417,000	579,000	+ 162,000
31.0 Equipment.....	31,000	40,000	40,000	---
32.0 Lands and Structures.	807,000	1,100,000	1,447,000	+ 347,000
Total Obligations.....	2,484,284	2,846,000	3,376,000	+ 530,000

GRAZING FEE SCHEDULE

Mrs. HANSEN. You raised your grazing fees on March 1, 1973. What is your current fee and how much was it raised?

Mr. SILCOCK. The current rate is 78 cents which includes a raise of 12 cents which became effective March 1.

Mrs. HANSEN. Have you had any objection to this?

Mr. SILCOCK. Some, but, it is pretty well accepted, by industry.

Mrs. HANSEN. This is more in line with the inflationary measures at the present time, actual cost figures.

Mr. TURCOTT. Yes.

Mr. MCKAY. There was a plan to bring grazing fees into line with those on private lands by raising them over a period of time. What is the status of that plan? Is it proceeding on schedule?

Mr. SILCOCK. The grazing fee increase is on schedule.

BLM grazing fees were increased in 1969 from 33 cents to 44 cents per AUM, 9 cents for the annual 10-year increment and 2 cents to reflect current market value increase. A moratorium on a fee increase was in effect for the 1970 fee year in consideration of the Public Land Law Review Commission. The 1971 grazing fee was computed using the previous year grazing fee of 44 cents plus the 9-cent annual increment and 11 cents to maintain comparability for a total fee of 64 cents. For 1972 the fee increase was limited to 3 percent in support of President Nixon's economic stabilization program and was established at 66 cents per AUM.

On December 29, 1972, the Departments of the Interior and Agriculture jointly announced an increase in grazing fees for 1973 beginning March 1. The basic grazing fee for public lands administered by BLM increased from 66 cents to 78 cents per AUM reflecting the 9-cent annual increment and 3 cents for the yearly increase in private forage rental rates. Current regulations call for reaching a fair market value grazing fee of $1.23 plus appropriate forage value index by the 1980 fee year.

DEVELOPMENT AND OPERATION OF RECREATION FACILITIES

Mrs. HANSEN. Insert justification pages 79 and 80 in the record.

[The pages follow:]

RECREATION DEVELOPMENT AND OPERATION OF RECREATION FACILITIES

Amount Available 1973	Fiscal Year 1974			Total available 1974 compared to Total available 1973
	Estimated Total Available	Unobligated Balance from Prior Years	Budget Estimate	
---	$165,000	---	$165,000	+165,000

Recreation Development and Operation of Recreation Facilities, an annual indefinite appropriation, is derived from recreation user fees collected pursuant to the Land and Water Conservation Fund of 1965, as amended. Funds from this source will be utilized to operate, maintain and improve recreation facilities on the public land.

Fiscal year 1974 is the initial funding year for this appropriation. The planned program for FY 1974 together with the recreation maintenance in the Construction and Maintenance and Oregon and California Grant Lands Appropriations will be used to help maintain the 214 existing recreation sites on BLM lands plus the 11 sites proposed for construction in FY 1973. In addition to routine maintenance these funds will be used for necessary improvements at older facilities such as upgrading sanitary and water supply systems.

Personnel Summary

	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions	---	---	---
Full-time equivalent of other positions	---	---	11
Average number of all employees	---	---	11
Average GS grade	---	---	8.9
Average GS salary	---	---	$13,250

ITEMIZATION OF ESTIMATE

Recreation Development and Operation of Recreation Facilities

	Actual 1972	Estimate 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	---	---	$165,000	+$165,000
Unobligated balance, start of year.....	---	---	---	---
Unobligated balance, end of year.....	---	---	---	---
Appropriation.....	---	---	165,000	+$165,000
Obligations by Objects:				
11.0 Personnel Compensation..	---	---	$89,000	+$89,000
12.1 Personnel Benefits.....	---	---	5,000	+ 5,000
21.0 Travel And Transportation of Persons.....	---	---	6,000	+ 6,000
23.0 Rent, Communications, and utilities.....	---	---	3,000	+ 3,000
25.0 Other Services.....	---	---	37,000	+ 37,000
26.0 Supplies and materials..	---	---	20,000	+ 20,000
31.0 Equipment.....	---	---	5,000	5,000
Total Obligations.....	---	---	165,000	+ 165,000

Mrs. HANSEN. $165,000 is requested for this new account to be derived from user fees. What types of projects will be performed with these funds? Will any of these funds be used for fee collection enhancement?

Mr. TURCOTT. Some of these funds will be used for fee collection purposes but most will be used for maintenance of existing campgrounds.

Mrs. HANSEN. Insert in the record a statement on the proposed projects you plan to fund from this account.

[The information follows:]

DEVELOPMENT AND OPERATION OF RECREATIONAL FACILITIES

The operation and maintenance capability provided by this new appropriation will be combined with that provided in the regular recreation maintenance subactivity to upgrade the care and protection activities at the BLM's 214 developed recreation sites. Thus, specific recreation site designations for use of this new appropriation has not been made.

Emphasis will be given to the maintenance of the high public use areas of the Lower Colorado River and the California Desert. These two areas will receive about one-half of the appropriation with the balance being distributed to other high use Bureau recreation areas in the western States and Alaska.

ADMINISTRATIVE PROVISIONS

Mrs. HANSEN. Insert justification page 81 in the record.

[The page follows:]

ADMINISTRATIVE PROVISIONS

Authorization is requested to replace three aircraft in Alaska by transfer from another agency's surplus if suitable aircraft becomes available.

Grumman Mallard. This proposed acquisition would replace a late 1930 vintage Grumman Goose with piston engines and obsolete equipment. Modernization of this aircraft is not feasible nor appropriate in view of the workload. The Mallard aircraft (or comparable sized airplane) has approximately twice the capacity of the goose and will effectively support the native claims program especially in cadastral survey efforts.

Cessna 210. The proposed acquisition will replace a 9-year-old Cessna 180. The Cessna 210 will be used for activities which presently require the use of the Bureau's twin-engined Aero Commander or leased aircraft with higher operating costs. The 210 will serve as the lead or guide plane or retardent bombing operations and for cross country flights.

Aero Commander. This airplane would replace a 7-year-old Aero Commander which is a light twin-engine aircraft seating six or seven. The present aircraft is due for a major overhaul involving prohibitive expenditures in 1973. Substantial savings would be realized by acquiring a newer plane from another agency's surplus. The Aero Commander will be primarily used for new employee transport requirements associated with the native claims program.

Replacement aircraft to be acquired:

Number	3
Cost	0

AIRCRAFT REPLACEMENT

Mrs. HANSEN. What is your requirement for the replacement of three aircraft?

Mr. HASTEY. We have several including the Grumman Goose, Cessna 180, and Aero Commander, all of which need replacement. The Grumman Goose is of late 1930 vintage, and it is one that should be replaced.

We hope we can pick something through the surplus route on this one.

The Cessna 180 we are trying to replace is a smaller plane which should be phased out on a 7-year cycle. This aircraft is now 9 years old. We feel we will have extreme difficulty in picking up a surplus aircraft replacement for this particular plane. We prefer to acquire a new one but the language prohibits that at this time.

The Aero Commander which is a little larger aircraft, is about 7 years old and is subject to replacement on the 7-year cycle.

The flying we do in Alaska, as you well know, Mrs. Hansen, is often done under adverse conditions. We need good aircraft.

Mrs. HANSEN. I couldn't agree with you more. Otherwise you would have neither aircraft nor people to fly them.

Mr. SILCOCK. Also, the new program demands such as native claims, the pipeline, and so on, requires that we be in the field more. Aircraft is our main source of transportation.

Mrs. HANSEN. Your Grumman is a seaplane, isn't it?

Mr. SILCOCK. Yes. We want to replace it with a Grumman Mallard which is a bigger aircraft but is still an amphibian.

SOLID WASTE DISPOSAL

Mrs. HANSEN. In his report of October 26, 1972 (B–166506), the Comptroller General took exception to solid waste management practices of various Federal agencies. I will insert a summary of this report in the record.

[The information follows:]

COMPTROLLER GENERAL'S REPORT TO THE CONGRESS

NEED FOR FEDERAL AGENCIES TO IMPROVE SOLID WASTE MANAGEMENT PRACTICES
B-166506

D I G E S T

WHY THE REVIEW WAS MADE

The Federal Government owns and manages about one-third of the Nation's land and operates or controls thousands of disposal sites on this land. The public uses or views many of the sites.

Since the mid-1960s Federal legislation and Executive orders have stressed the importance of proper solid waste disposal, resource recovery, waste reduction, and the Federal agencies' responsibilities for providing leadership in the nationwide effort to protect and enhance the quality of the environment.

The General Accounting Office (GAO) wanted to know how well Federal agencies were fulfilling their solid waste management responsibilities. Accordingly, GAO reviewed

--disposal policies and practices of those agencies--Bureau of Land Management, Forest Service, National Park Service, and Department of the Army--that managed the bulk of the Federal land having disposal sites and

--procurement, resource recovery, and recycling policies and practices of the General Services Administration (GSA) and the Army.

FINDINGS AND CONCLUSIONS

Tear Sheet

The picture on the preceding page of a solid waste disposal site in Deschutes National Forest, Oregon, is typical of the many sites GAO visited that were operated, controlled, or used by the Bureau of Land Management, the Forest Service, and the National Park Service. (Additional pictures are on pp. 15, 23, 25, 27, 31, 33, and 69.)

Federal regulations generally prohibit Federal agencies from burning wastes in open fires and using open dumps. GAO found open burning and open dumping on Federal lands to be widespread.

The condition of many dumps GAO visited on land administered by the Bureau of Land Management, the Forest Service, and the National Park Service indicated that the agencies needed to improve their operation and control of the disposal sites to prevent air and water pollution and scenic blight. Also wastes taken off Federal land for disposal frequently ended up in improperly operated private dumps.

The Army generally was disposing of its unsalvageable wastes in a satisfactory manner.

At GAO's request, the four agencies classified, according to the methods of disposal, the 651 solid waste disposal sites they operated, controlled, or used in the six States included in GAO's review. The following table shows that 91 percent of the sites could not qualify as sanitary landfills under Federal standards. (See p. 17 for definition of a sanitary landfill.)

	Disposal sites operated, controlled, or used by Federal agencies					
	Bureau of Land Management	Forest Service	National Park Service	Army	Total	Percent
Sanitary landfill	8	10	30	11	59	9
Modified dump	26	105	20	3	154	24
Open dump--no burning	11	227	4	-	242	37
Open dump--burning	60	110	9	-	179	27
Incinerator	-	14	-	3	17	3
Total	105	466	63	17	651	100

GAO visited 131 of these 651 sites and found that:

--56 were burning dumps or showed evidence of burning.

--65 were open dumps that had not been covered periodically with earth.

--24 were dumps in contact with ground water, streams, lakes, or swamps.

--Seven of the eight incinerators did not meet Federal air emission standards. (See pp. 15 to 28.)

In addition, several disposal sites no longer in use had not been closed properly and solid waste was being disposed of in a number of unauthorized areas on Federal land. (See pp. 29 to 34.)

The agencies included in GAO's review generally lacked a systematic approach to identifying and solving solid waste disposal problems. GAO found that, in varying degrees and at various organizational levels, the agencies needed

--more effective responsibility centers (see pp. 35 to 38),

--improved policy guidance from headquarters and policy implementation by regional offices (see pp. 39 to 54), and

--more effective inspection procedures (see pp. 55 to 58).

GAO's review showed that both GSA and the Army could better reduce wastes and recover and recycle waste material. Although both agencies had taken some actions to reduce the amount of solid waste requiring disposal, they had different policies at the headquarters levels and practices at the field levels. A number of actions had been taken at individual locations that, in GAO's opinion, could be widely implemented.

At Fort Gordon, Georgia, for example, the post exchange sold soft drinks in returnable bottles from its 500 vending machines. In addition, the post exchange received shipments of certain items from central warehouses in returnable plastic baskets, which reduced the volume of cardboard boxes requiring disposal. Many of the Army installations GAO visited, however, used nonreturnable bottles and cardboard boxes.

Because Army installations purchase such large quantities of bottled beverages--an estimated 10,000 cases a month at one post--GAO believes that a study should be made to determine whether, on the basis of economic, convenience, and environmental considerations, the Army's procurement of beverages in returnable containers should be emphasized.

Although both the Army and GSA have been recovering some wastes for reuse or recycling, they could recover much more. Generally the Army was recovering wastes only when it was economically advantageous; little consideration was given to salvaging and recycling primarily for environmental benefits.

GSA and the Army, in their procurement activities, should be aware of, and should emphasize, the environmental benefits that could be obtained through using more reusable or recyclable materials, containers, and packaging. (See pp. 63 to 74.)

RECOMMENDATIONS

The Secretaries of Agriculture and the Interior should direct the Forest Service, Bureau of Land Management, and National Park Service to:

--Establish, at the various organizational levels, responsibility centers for solid waste matters.

--Establish procedures so that (1) solid waste management policies are communicated effectively to all officials, (2) headquarters provides adequate policy guidance to regional personnel, and (3) regional officials carry out agency policies effectively.

--Require periodic inspections and reporting of inspection results of (1) agency-operated and lessee- and permittee-operated disposal sites on Federal land and (2) disposal sites used by the agencies on private land.

The Secretary of the Army should make a study to determine whether, on the basis of economic, convenience, and environmental considerations, the Army's procurement of beverages in returnable containers should be emphasized. The results of such a study could apply to the other military services.

The Secretary of the Army and the Administrator of General Services should each make a study to determine those wastes generated in significant quantities at Federal installations that could be salvaged for reuse or recycling. Procedures should be established to insure that such wastes are salvaged, if feasible, at all GSA and Army field locations.

The Administrator of General Services and the Secretary of the Army also should emphasize to their headquarters and regional personnel the significance of the solid waste problem and the legislative requirements that (1) Federal agencies consider environmental values, along with economic and technical factors, and (2) the Federal Government be a leader in the effort to protect and enhance the quality of the environment.

Finally the Administrator of General Services and the Secretary of the Army should consider using more reusable or recyclable materials, containers, and packaging.

AGENCY ACTIONS AND UNRESOLVED ISSUES

The agencies generally agreed with GAO's findings and conclusions. They cited several actions taken or planned to implement the recommendations. (See apps. I to V.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

About 250 million tons of residential, commercial, and industrial solid wastes--such as abandoned cars, discarded bottles and cans, and paper--accumulate in the United States each year. Although this report contains no recommendations for legislative action, it does discuss problems which Federal agencies have encountered in carrying out their solid waste management responsibilities and identifies a number of ways in which these agencies could exercise greater leadership in the nationwide effort to improve solid waste disposal practices.

Mrs. HANSEN. May we have your comments on this report as it relates to your bureau.

Mr. TURCOTT. Three points were raised in this report which we are responding to. These main three items indicate the need for centers of responsibility, the need for improved policy and guidance from the Washington office as well as the field offices, and the need for a more effective inspection program. We have taken steps by designating an individual at the Washington office, at each State office and at each district office to be responsible for the solid waste program. Also, in connection with CEQ and the Environmental Protection Agency, we are upgrading our special land use permits which authorize these disposal areas on BLM lands. At the same time we are planning an effective inspection program. In the past we have tried to inspect them about once every 5 years but now we are trying to set up a schedule where these rural dumps will be inspected yearly.

INDISCRIMINATE DUMPING

Mrs. HANSEN. What can you do about the situation that all property owners have today, and that is the dumping on the property by people of old cars, old plumbing such as bathtubs, and so on. They haul them out to public and private domain, it doesn't matter what, as long as it is open, and they litter.

I was on a train at one time going through Montana. Off to one side was an area just littered with old cars, bathtubs, and everything.

Mr. SILCOCK. One of the things we are trying to do in connection with this program is to work in cooperation with the local county commissioners in order to establish these county dumps. I think we are getting the attention of the public, at least I know we are in my hometown, because I hear about it when I go back out there, to the effect that we do have now established county sanitation facilities. We are cleaning up, through cooperation with the county officials, the old promiscuous dumps that we have had over the years. Also, through our education efforts such as the Johnny Horizon program, we are trying to educate the public as to where these facilities are, and to encourage proper disposal practices.

In our Organic Act there are enforcement proceedings and powers provided which we do not have at the present time. This will help us to enforce these things in the future provided that act is passed. Where we see violations such as this we can take an action against it.

Mrs. HANSEN. I think it is absolutely mandatory, because you are not going to keep your lands clean unless you have some enforcement.

Mr. SILCOCK. That is correct.

IMPLEMENTATION OF PLLRC RECOMMENDATIONS

Mr. EVANS. What steps have you taken to implement the recommendations of the Public Land Law Review Commission?

Mr. SILCOCK. The report of the PLLRC contained over 450 recommendations for changes in laws and policies relating to the public lands as defined in section 10 of the act which established the com-

mission, the act of September 19, 1964, 78 Stat. 942. The Bureau of Land Management administers approximately 60 percent of these lands.

Many of the recommendations are inconsistent with each other. Most call for new legislation. The Department's legislative program in the 92d–93d Congress includes several proposals which would implement the PLLRC recommendations. The proposed National Resource Land Management Act of 1973 would implement over 100 PLLRC recommendations as they apply to National Resource Lands. For example, the PLLRC report recommends that all public land agencies should be required to formulate long range, comprehensive land use plans for each State or region, relating such plans not only to internal agency programs but also to land use plans and attendant management programs of other agencies. It also recommends that Congress should authorize a program for acquiring and developing reasonable rights-of-way across private lands to provide a more extensive system of access for outdoor recreation and other uses of the public lands and that provision should be made for public participation in land use planning, including public hearings on proposed Federal land use plans, as an initial step in a regional coordination process. These recommendations are provided for in the proposed National Resource Land Management Act of 1973.

The proposed Mineral Leasing Act of 1973 would implement a number of recommendations relating to Federal mineral resources. The National Land Use Policy Act would implement recommendations relating to land use planning, and the proposed DNR would implement recommendations relating to Government organization.

In addition to proposing legislation BLM has taken many administrative actions to implement the PLLRC recommendations. I will be happy to supply a list of such administrative actions for the record.

[The information follows:]

Implementation of PLLRC Recommendations

Following are BLM actions taken or in process to implement PLLRC recommendations.

43 CFR 2800 - To incorporate environmental considerations in terms and conditions of R/W permits.

43 CFR 3041 - Environmental considerations would be considered in management of hardrock minerals.

43 CFR 1725 - The use of poisonous substances on public lands.

43 CFR 3045 - Surface protection in oil and gas exploration.

Drafting offshore mineral leasing and operating regulations for minerals other than oil, gas, sulphur and salt.

Preparing Departmental legislative proposals for amendment of mineral leasing and mining laws.

Drafting legislation authorizing disposal of Federally-owned mineral rights.

Drafting legislation authorizing granting of easements and permits on federally-owned lands.

Preparation of a comprehensive set of stipulations to protect the environment to be incorporated in the Trans-Alaska pipeline permit, if issued.

Issued internal instructions on preservation and protection of primitive values on the public lands.

Issued internal instructions on protection and enhancement of cultural values on the public lands.

Issued internal instructions on management of off-road vehicle use; undertook studies; considering legislation.

Inventoried and listed 103 research natural areas and 23 natural landmarks on the public lands.

Initiated a long-range program for management of the public lands in the California Desert.

Securing appropriations for the nucleus of a ranger force for the California Desert.

Initiated action to make appraisals of public lands a specialist function in BLM.

Installed a comprehensive system of land use planning for the public lands involving multiple use principles, public participation, and intergovernmental coordination.

Adopted an environmentally based, sustained-yield allowable cut plan for the O&C and public land forests of western Oregon.

Initiated a study on a system of continuous canopy timber management.

Initiated an inventory of public domain forests as a first step to developing an environmentally sound forestry program for those lands.

Restricted the use of biocides on the public lands.

Revised procedures in relation to authorized predator control work on the public lands.

Strengthened environmental protection requirements in the OCS leasing program.

Installed a watershed conservation and development system for the public lands.

Installed a wildfire control system based on a Normal Fire Year plan; made the Boise Interagency Fire Center operational; entered into a fire control program with Canada.

Mr. HANSEN. Thank you both and your staff very much for your appearance today. I think it has been a rather rough day.

MONDAY, MARCH 19, 1973.

JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

WITNESSES

THEODORE G. BINGHAM, EXECUTIVE DIRECTOR
CARSON W. CULP, JR., CHIEF, BRANCH OF BUDGET, BUREAU OF LAND MANAGEMENT
CELIA HUNTER, COMMISSIONER
HARRY CARTER, COMMISSIONER
JOE JOSEPHSON, STATE COCHAIRMAN DESIGNEE

Mrs. HANSEN. Today we hear from the Joint Federal-State Land Use Planning Commission for Alaska.

We have as our principal witness Mr. Theodore G. Bingham, Executive Director, and Carson Culp, Jr. Mr. Bingham, since this is your first appearance before the committee we will insert your biography in the record at this point.

[The information follows:]

BIOGRAPHY OF THEODORE G. BINGHAM

Born 1932 at Riverside, Calif. Family traveled extensively during childhood. Active in outdoor work, sports, and Boy Scouts.

Graduated from Washington State University, Pullman, Wash., in 1955 with a B.S. degree in range management and forestry. Graduate work taken in economics and management of natural resources at Montana and George Washington Universities (1963 and 1966).

Employed by the Bureau of Land Management, U.S. Department of the Interior, 1955–72.

1955–59: Range conservation and land appraisal work in southern California.

1959–61: Lands officer in southern California with principal involvement in the establishment of the national cooperative land and wildlife management areas in California between the State and the BLM.

1961–63: Lands and minerals specialist for the Bakersfield (Calif.) district office of the BLM.

1963–66: Assistant manager for the BLM State office at Cheyenne, Wyo. Duties involved the coordination of programs and budgets of the seven BLM offices in the State and the management of the Wyoming Land Office.

1966–71: Chief of the Lands and Minerals Division (changed to Division of Resources in 1970) for the Alaska State Office. Deply involved in the Alaska Native claims issue. Consulted with the Federal Field Committee for Development Planning in Alaska on its report "Alaska Natives and the Land" for Senator Jackson.

1971–72: Chief of the Division of Lands and Realty in the BLM Washington Office.

June 1972: Appointed by Cochairman Horton and Governor Egan as executive director of the Planning Commission.

My wife, Ann, and I have three boys—17, 11, and 11. Enjoy out-of-doors activities with the family—hiking, skiing, golf, and so forth. Active in civic affairs dealing with planning and zoning.

GENERAL STATEMENT

Mrs. HANSEN. I am sure you have a general statement, Mr. Bingham.

Mr. BINGHAM. Yes, ma'am.

Mrs. HANSEN. Do you want to place it in the record and summarize it for us?

Mr. BINGHAM. Yes, ma'am.

[The statement follows:]

STATEMENT OF THEODORE G. BINGHAM, EXECUTIVE DIRECTOR, JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

Madam Chairman, my name is Ted Bingham, Executive Director of the Joint Federal-State Land Use Planning Commission for Alaska. Normally, the Federal cochairman would appear before you; however, as you are aware that position is vacant with Mr. Horton having returned to the Department of the Interior as Assistant Secretary of Land and Water Resources.

Section 17 of the Alaska Native Claims Settlement Act (85 Stat. 688) and companion Alaska legislation (AS 41.40.010) established the Planning Commission. The Commission consists of 10 members, 5 of whom are Federal appointees and 5 State appointees. An appointee of President Nixon (formerly Jack Horton) and Governor Egan serve as cochairman. Joe Josephson was designated by the Governor to serve as the State cochairman in the Governor's stead. In addition, we have a small full-time staff and are technically supported by our resource planning team which was developed from the former northern Alaska planning team.

The Commission is charged with certain duties and responsibilities by the two acts. They may be generalized as:

Land use.—Development of a land-use planning system and public involvement in decisions and plans affecting uses or proposed uses.

Land ownership.—Review and recommendations concerning Native and State land selections, existing Federal land withdrawals, and retention of public easement rights in certain areas.

Information and education.—Development of an interfacing awareness of land, resources, and uses, with a resultant decrease in conflicts, between the people and interests of Alaska and the Nation.

The Commission has been actively engaged in these responsibilities since its formation meeting on July 31, 1972. A good share of our early activities involved the organization and administrative procedures for this new entity of joint government—the Joint Federal-State Land Use Planning Commission for Alaska. We must recognize and applaud the fine administrative assistance we have received from both the Department of the Interior (principally the Bureau of Land Management) and Alaska's Department of Natural Resources.

The detail of our activities to date is expressed in our annual report for 1972 which has been filed with Congress and the State legislature. For your information, I have a copy to leave with your staff.

The Commission has drafted statements of goals, objectives, issues, and program methodology which are currently under public review. The Commission seeks assistance in developing and refining its perceptions of the respective National, State, and local interests in lands and land-use in Alaska. The promotion of these respective interests within the land-use planning process, and the development of land management systems which will combine flexibility with responsiveness to legitimate concerns for the environment, the economy, governmental functions, and social needs, are ultimate objectives of the Commision.

Many of the responsibilities of the Commission can be effectively met only by infusing within the respective Federal and State agencies and Native corporations an understanding and respect for the planning process. The Commission is both short-lived and advisory in nature. We are, therefore, serving as a board through which mutual problems and concerns can be discussed and rational decisions can be achieved. At our urging Federal and State agencies are working together to coordinate management problems, sharing information, and improving their relationships with the numerous "public" or interest groups.

We have initiated action on all of the tasks assigned us by the Congress and the Alaska Legislature. Some have been, or will be, completed shortly. Others will develop as conditions programs under the Settlement Act. The responses to date by the various management and regulatory or action agencies is laudatory, and, we believe, progressive.

The specific program the Commission has undertaken involves action in six broad categories:

1. Make recommendations concerning areas of Alaska which should be retained in Federal ownership as parks, wildlife refugees, forests, and other public uses.

2. Make recommendations to insure that economic growth and development are orderly and planned, are designed to insure the economic and social well-being of the Native people and other citizens of Alaska, and are cognizant of environmental quality.

These two categories basically relate to our planning functions. Toward this end, the Commission has (1) reviewed and made recommendations to the Secretary of the Interior concerning the areas to be withdrawn by him pursuant to subsection 17(d)(2); and, (2) is developing an adequate data base on which informed decisions can be made. Included with the latter is a resource inventory to be completed during early 1974; the availability and dissemination of this information to interested Federal, State, local governmental groups, and Native entities; the establishment in Alaska of a resource library by the Department of the Interior; the identification of resource data needs (gaps in existing data); and encouraging the use of new technology such as that available from the Earth Resources Technology Satellite (ERTS).

3. Make recommendations concerning lands available for selection by the State and Natives under the Statehood and Settlement Acts.

To this end, a staff paper, "40 Million Acres," setting out the selection rights of Alaska Natives has been prepared and distributed to interested parties. The Commission has made certain general recommendations to the Secretary of the Interior on general priorities between the Federal, State, and Native interests. The Commission is in the process now of reviewing each of the 12 Native regions to determine the adequacy of the areas from which the Native entities may select lands under the Settlement Act. This review has been completed for three regions and specific recommendations made to the Secretary of the Interior.

4. Make recommendations concerning possible changes in the laws, policies, budgets, and programs affecting Federal and State agencies managing lands in Alaska.

Foremost in this activity are the regulations being promulgated by the Department of the Interior to implement the Settlement Act. The Commission has had extensive discussions with departmental people on this matter. Detailed comments were made on the first proposed regulations last September. We are currently reviewing the second proposed regulations published a week ago.

We have addressed comments to both the President and the Governor on the 1974 budgets of certain land management agencies. Our principal focus was toward the implementation, and other necessary actions, by these agencies in relation to the Settlement Act.

We have sponsored two forums in Alaska. One addressing the subsistence use of Alaska's resources and the relationship of those uses to regulatory and management practices of State and Federal agencies. The second concerned the major survey problem confronting the Bureau of Land Management in timely and responsible description of the lands of Alaska to be selected and conveyed to the State and Natives.

5. Recommend the reservation of interests in lands granted to Natives which are necessary to guarantee international treaty obligations and to insure the right of public use and access of docks, transportation, and utility purposes, and other public uses.

We have in progress a study to identify possible access needs throughout Alaska. Federal, State, and local governmental agencies are jointly and singularly providing input to this study. This work will not only assist the Commission in meeting its responsibility, but the program is timed to provide information and assistance to the Native corporations in making their land selections and for either the Secretary of the Interior or the Congress to consider in connection with legislative proposals on the national interest or subsection 17(d)(2) lands.

6. Be available to advise and assist in the development of land-use plans for lands selected by the Natives and the State of Alaska.

In fiscal year 1974, we will be continuing our efforts along these lines, with emphasis on the national interest of 17(d)(2) lands, the transportation or easement study, completion of the Native withdrawal studies and recommendations, regulatory and legislative reviews, initiation of the review of

existing Federal withdrawals, completion of the resource inventory, and the first cut of a broad statewide land-use plan.

For fiscal year 1974, we are requesting an appropriation of $750,000 for the Federal share of the anticipated cost of the Commission. Under the terms of our enabling legislation, neither the United States nor the State of Alaska is responsible for paying more than 50 percent of the expenses of the Commission.

I appreciate the opportunity to appear before the committee and will be pleased to answer your questions.

INTRODUCTION OF ASSOCIATES

Mr. BINGHAM. Madam Chairman, if I may, because of the change in time of our hearings two of our Commissioners and our State Cochairman designee were able to make it from their attendance at the New York American Wildlife and Natural Resources Conference meeting.

I would like to introduce Celia Hunter, who is one of our Commissioners from Fairbanks, Alaska.

Miss HUNTER. I am formerly of Marysville, Wash., by the way.

Mrs. HANSEN. Very good.

Mr. BINGHAM. And Mr. Joe Josephson, who is Governor Egan's designee as State Cochairman; and Mr. Harry Carter, who is a member of the Commission from Fort Union, Alaska.

Mrs HANSEN. We are very pleased to have you here today. I am glad your conference and the committee hearing occurred at the same time.

Mr. BINGHAM. I have a prepared statement and I will summarize it and possibly add a few things to it.

My name is Ted Bingham. I am executive director of the commission. Normally the Federal cochairman would appear but, as I am sure you are aware, Mr. Horton was recently appointed Assistant Secretary of the Interior and his successor has not yet been nominated.

Mrs. HANSEN. I can't keep up with all the new appointments that are being made.

Mr. BINGHAM. Section 17 of the Alaska Native Claims Settlement Act and companion legislation by the State of Alaska established the Planning Commission in 1971–72. The commission consists of 10 members; two cochairmen, one appointed by the President, and the Governor or his designee, plus four appointed each by the Secretary of the Interior and the Governor of Alaska.

We have a small full-time staff and we are technically supported by what we call the Resource Planning Team which is the offshoot of the old Northern Alaska Planning Team which you are familiar with.

Mrs. HANSEN. Yes, I am. Have you been able to use any of their massive documents?

Mr. BINGHAM. Yes, ma'am; all of them.

Mrs. HANSEN. I am glad that appropriation wasn't completely wasted. Sometimes we suspected it was.

LAND USE PLANNING RESPONSIBILITIES

Mr. BINGHAM. We have briefly three general charges under the two sets of legislation establishing us—the first is land use. which is the development of a land use planning system, and hopefully imple-

menting it within Alaska. This covers the aspects of land ownership involving either the lands which the State or Natives may select under the Statehood Act or the Claims Act, the review of the existing Federal withdrawals, and retention of public easement rights. Information and education programs also really tie to the land use planning activities, in that to become aware of and utilize a land use planning process we have various problems in Alaska.

I might make a couple of additional comments here.

That the Upick Eskimo language, for instance, carries no words in it illustrating squares, acreages, sections, townships, and so forth. Somewhere in the neighborhood of 25 percent of the Natives have this as their tongue, their normal language, and it becomes difficult trying to discuss these terms with them. We must convert to using such things as measuring distances by the length of their airfield, for instance.

Mrs. HANSEN. I have news for you. A lot of people in the lower 48 wouldn't know an acre if they met it head-on.

Mr. BINGHAM. Yes, ma'am.

Mrs. HANSEN. So don't think the Eskimos are alone.

Mr. BINGHAM. We have been engaged in our responsibilities since our first formation meeting on July 31, 1972. Much of our activity has been in organization, and for the record I want to applaud the fine help we have had from both the Bureau of Land Management and State department of natural resources in helping us get established.

For instance, we have a contract with the Bureau of Land Management to support us administratively, personnel payroll and similar, and they are doing an excellent job for us. Our activities through calendar year 1972 are expressed in our annual report which we filed with the Speaker of the House and President of the Senate and the State legislature. I have a copy with me to leave with this committee for your perusal.

We have drafted certain statements of those objectives and issues which we have out under public review.

PUBLIC PARTICIPATION IN COMMISSION ACTIVITIES

Mrs. HANSEN. When you say "public review," are your meetings held throughout Alaska?

Mr. BINGHAM. Basically, yes. We have held two Commission meetings, one in Fairbanks and one in Juneau, where we have actively sought public reaction to these, and what we are doing here is attempting to get an expression of the various sectors of people's interest in lands and resources.

This is to develop the social aspect of land use planning—what is the State interest in the use of or development of resources, what is the national interest in the use or development of resources.

In the long run then as you make your land use planning decisions you must give weight to alternate uses or competing uses—will you mine an area for its economic good or do you preserve it for its scenic beauty.

If you have this conflict, you assess the weight and feelings of the people affected. In this aspect we have prepared one paper which is titled "Objectives and Issues" which is attempting to approach this—do you want to develop the timber industry in the interior of Alaska, for instance?

This is a question to ask people—what is their reaction? Some say "Yes," some say "No."

Mrs. HANSEN. You might insert in the record for the committee a listing of the questions you have asked the public in Alaska.

Mr. BINGHAM. I have those documents with me if you would like to have them.

Mrs. HANSEN. If you please.

[The information follows:]

OBJECTIVES AND ISSUES OF THE COMMISSION AND QUESTIONS ASKED THE PUBLIC

Two papers, one entitled "Objectives and Issues in Land Use Planning for Alaska" and the other "Suggested Program and Methods" have been circulated to the public for comment. Two Commission meetings have focused on land use planning issues—Fairbanks in December 1972 and Juneau in January–February 1973. These meetings coupled with individual responses and discussions have resulted in affirmation of the papers.

The two papers are contained in volume II of the Commission's 1972 annual report, exhibits 14 and 15.

In connection with public review of these papers, we have asked the following questions:

1. What do you see as the major land problem in Alaska?
2. What do you see as the National, State, native, and individual interests in the following land uses: (*a*) Resource development—particularly nonrenewable resources; (*b*) parks, forests, wildlife refuges, wild and scenic rivers, and similar uses; and (*c*) occupancy and settlement?
3. Is there anything which should be added to or deleted from the Commission's proposed program and methods?

In addition to seeking responses from the public, we have sought and received input from the various Federal and State agencies, the academic sector. and from organized conservation and industrial-business groups.

Mr. BINGHAM. They are also in our annual report.

[Discussion off the record.]

LAND USE RECOMMENDATIONS

Mr. BINGHAM. We have also developed a program which we are progressing with. Basically this program involves six categories. One is to make recommendations concerning areas of Alaska which should be retained in Federal ownership, essentially permanently, and, two. to make recommendations to insure that the economic growth and development is planned and designed to insure economic and social well-being, concern for the environment, et cetera.

On this we have to date, reviewed the Secretary of the Interior's situation as to his early identification withdrawal of 80 million acres and made certain specific recommendations to him on these withdrawals. He has accepted about 85 percent of our recommendations.

Second, we are developing a data base on which——

Mrs. HANSEN. Do you have for the committee a map of Alaska which shows what the State has already selected and what the Federal Government has withdrawn?

Mr. BINGHAM. This map is available. I do not have one with me.

Mrs. HANSEN. Please send a map to the committee because we are going to have other agencies before us and this whole question is rather important. We need to be able to see what lands remain for the State to select and what lands have been selected or are in the process of selection.

[Note: The maps were supplied to the committee.]

Mr. BINGHAM. I mention as an aside, I was with the Bureau of Land Management in March of last year, when we made first cuts on that map. Unfortunately or fortunately, I have to claim some authorship to it, so I am not unfamiliar with it.

Mrs. HANSEN. I think the committee has to see and be aware of the rather complicated picture of Alaskan land ownership and where we will be after all the decisions are made.

RESOURCE INVENTORIES

Mr. BINGHAM. There are still many decisions to be made on it, I must say. On this resource inventory activity, which is what we have picked up from the early actions of the North Alaska Planning Team, and then are continuing on with statewide, the research of secondary information is to be completed and put in written format on six physiographic regions of the State by this summer. We are making this information available and disseminating it to the interested Federal, State, local, and native groups as it is prepared. Through our urging, the Department established a resource library in Alaska being operated by the Bureau of Land Management, and we have hopes that it will become a joint Federal-State library. We are also encouraging the use of new technologies, such as the Earth Resource Technological Satellite. This January we put on a 2-week training program in which we had 85 State, local, and native people in attendance. This covered using the imagery from the satellite for identification of new concepts, new ideas, and a better look at the State of Alaska.

STATE AND NATIVE LAND SELECTIONS

A third major area is our recommendations concerning lands available for selection by the State and the natives under the statehood and settlement acts. We prepared a number of staff papers, some of which are in our annual report, which we have prepared and distributed. One of these is a paper I did entitled "Forty Million Acres," trying to explain in relatively simple terms the 40 million acres available to Alaskan Natives.

We have made certain general recommendations to the Secretary.

Mrs. HANSEN. At this point I think it might be well to know what the Alaskan Native population is today.

Mr. BINGHAM. The enrollment being conducted by the Bureau of Indian Affairs is somewhere around 67,000 natives enrolled in the State of Alaska, and they are looking for upwards of about 20,000 from outside of Alaska.

Mrs. HANSEN. So all in all, it will be somewhat under 100,000.

Mr. BINGHAM. I would guess that they will come out probably 85,000 to 90,000.

Mrs. HANSEN. What is the total population of Alaska?

Mr. BINGHAM. Right around 300,000, including military.

Mrs. HANSEN. So about 33 percent of the population of Alaska is native population?

Mr. BINGHAM. Yes; I would say about 30 percent is a good, round figure on that. We are now in the process of reviewing each of the 12 regions set up under the act in relation to the adequacy of the areas set aside by the Secretary, in the act, for the natives to make their selections. This principally focuses on what is known as the

deficiency lands under section 17(d)(2). We have completed this review for three regions and have, or are making recommendations to the Secretary on what we feel should be done as far as the availability of lands on which the natives may make selections.

BUREAU OF LAND MANAGEMENT BUDGET FOR ALASKA

The fourth area concerns recommendations of possible changes in laws, policies, budgets, and programs affecting Federal and State agencies who manage land or resources in Alaska. Foremost, of course, are the regulations being implemened by Interior-BLM in relation to the settlement act itself. We are continually discussing this with departmental people. We made detailed comments on their first draft regulations proposal last September and are currently reviewing their revised draft that was published a week ago Friday. We have a meeting next week in which we are going to consider and come out with the final comments of the Commission as to those regulations.

Mrs. HANSEN. What are your comments on the President's recommendation for the Bureau of Land Management appropriations?

Mr. BINGHAM. To implement as fully as possible their needs to carry out their real estate program in relation to the activities under the Claims Act, and their major survey program for which the regulations are presently being developed. The natives will receive nothing in the way of title until patent is issued after survey. That survey program of 40 million acres of native lands and the roughly 80 million acres of State land yet to be selected could run anywhere from 40 to 60 years.

Mrs. HANSEN. At the rate they are going, it will be 100 years.

Mr. BINGHAM. This is quite possibly true.

Mrs. HANSEN. Because the budget has never yet reflected the survey needs in the Bureau of Land Management. They are still behind in the lower 48.

Mr. JOSEPHSON. May I just interject this, Madam Chairman. This is a major concern of ours. As the Governor's designee, it is certainly a concern of State interest. The Commission did sponsor a conference on survey problems. We brought together State law people, natural resource people, and the Bureau itself was very willing and open to be there as a participant. From that I hope will come some suggestions that might help expedite the process.

Mrs. HANSEN. The only thing that is going to expedite the process is money, of which they never have enough budgeted. They did come before the committee, as I recall, last year and testified they were going to do some aerial photography, but I'm sure you are aware that aerial photography is not the metes and bounds kind of survey that is going to satisfy a title claim.

Mr. BINGHAM. That is quite true. At this forum we held we had representatives of the title companies, private surveying outfits, and so forth. One of the purposes that we were trying to do there was to focus in on what is necessary in the way of surveys, and how this might be accomplished both with in-house Government surveyors and contract surveyors.

Mrs. HANSEN. Either one is going to cost money. I have been on the committee 10 years and I have seen very small progress made in the

area of the surveys. The Alaska Natives will never have any fiscal freedom as far as land ownership, until you have your surveys complete.

Mr. BINGHAM. This is quite true.

Mrs. HANSEN. Because otherwise there is no formal title to that land possible. It is only guesswork at best.

OTHER AGENCY BUDGETS AND PROGRAMS FOR ALASKA

Mr. BINGHAM. That is quite true. It is one of the very weakest spots in the claims issue. I might mention as to the other agencies that we commented on as far as their budgets; our comments there were directed at areas where there was need for information or activities related to the settlement claims. For example, we made comments on the Geological Survey's budget for the ERTS (earth resources technology satellite) program, and their geological fieldwork.

Mrs. HANSEN. Do you deal with the Forest Service lands?

Mr. BINGHAM. Yes, ma'am. We commented on the Forest Service budget also.

Mrs. HANSEN. That is in a disgraceful state this year.

Mr. BINGHAM. I am not that familiar with it nationwide. I reviewed only the Alaska region.

Mrs. HANSEN. They have got proportionately as much money in Alaska as they have anyplace else, and it is not adequate.

Mr. BINGHAM. My friends in the Forest Service tell me that.

REVENUE SHARING IN ALASKA

Mrs. HANSEN. You cannot lower these budgets in the name of fiscal expediency without causing a lag someplace else. Every time the administration cuts someplace, they say that this can be taken care of by revenue sharing. I don't know what Alaska receives in revenue sharing, do you?

Mr. JOSEPHSON. There is a great controversy about it, between some State spokesmen and Senator Stevens as to whether the net is favorable or unfavorable.

Mr. BINGHAM. I have read the figure in the newspaper of $6 million in revenue sharing for Alaska.

Mrs. HANSEN. Just look at the size of Alaska, look at the size of their problems, the size of surveys needs alone. Then you realize they have reduced fire money, and they are expecting the States to meet these costs. In most instances, they can't do it, so you are going to have a cut in these programs of natural resources.

Mr. JOSEPHSON. Madam Chairman, one thing that I think we have to scrutinize, too, is any tendency that the monetary portion of the settlement be treated as an in-law arrangement for the Federal programs that benefit Alaska Natives.

Mr. HANSEN. So do I. This is another thing that is bothering the committee.

Mr. BINGHAM. Along this same line, another forum we have sponsored is one on subsistence uses of Alaska fish and game, specifically directed toward the relationship of that use to the management and regulatory practices of the State and Federal agencies. This is one issue that is of high concern to the Native community, and to some extent the non-Native community in Alaska. We have out of that

forum at least achieved some rational agreement as to what is a base level of subsistence and what is a base level of maintenance of life style, which will vary from time to time or place to place.

RESERVATION OF LANDS FOR ACCESS AND PUBLIC PURPOSES

A fifth area is the area recommending the reservation of interest in lands granted to Natives, which are necessary to guarantee international treaties and insure the right of public use and access of docks, transportation, utility purposes, and other public uses.

We have in progress a study to identify possible access needs throughout Alaska. Presently, we have over 50 Federal, State, and local government agencies who are joining us in this identification of access or easement needs. These range everywhere from the aspects of utility corridors to sites for communication or navigation aids.

We are timing this program to be relatively completed a year to a year and a half from now, in order that it be maximum benefit to the Natives. The villages are required to make their selections by the end of next year and the regions the following year. We also feel that it will be useful to the Secretary of the Interior and the Congress in connection with the 17(d)(2) lands, the national interest or 80 million acre areas.

ASSISTANCE TO ALASKA NATIVES

The sixth area is to be available to advise and assist in the development of land use plans for the lands selected by the Natives in the State of Alaska. The change in the act on this one is "upon request." We are making ourselves available principally to the Natives.

Mrs. HANSEN. Will this be on a reimbursable basis?

Mr. BINGHAM. No. The act provides that upon request we will assist. We actually will enter into this probably on a regional land planning basis anyhow, as we go through and attempt to show how the Federal and State governments and the local interests can jointly plan wise use of lands.

SUMMARY OF FUTURE ACTIVITIES

In fiscal 1974 we are going to be continuing our planning efforts along these lines, with emphasis on the 17(d)(2) lands because of the deadline for the Secretary of Interior to make his legislative proposals by this December. We are in the process now of scheduling out some 40 different locales to hold hearings in late April and through the month of May. These will include hearings in four locations outside of Alaska—Seattle, San Francisco, Denver, and Washington, D.C., seeking to obtain the views of the people toward the use of Alaskan lands and resources, but not to play with the argument of parks versus forest versus some other Federal designation.

As I indicated earlier, we hope by the end of fiscal 1974 to have our transportation easement study virtually completed. We will have completed our review of the Native withdrawal areas, and have made our recommendations. We will be fully up, probably, in reviewing ongoing proposed legislation both at national and State levels as it may affect management in Alaska. We are preparing now our program for the review of existing Federal withdrawals and recommendations as to proper use, be that enlargement, decrease, or change in management

of those areas. We will complete our resource inventory hopefully in the first quarter of 1974, and by the end of 1974 we have hopes of having the first cut on a broad, statewide land use plan. This would be in a very broad prospectus. I view it as what may be normally known in some of the lower States as a master plan for accounting, where you would identify, say, a watershed area without its subdivision into with one, two, or three as various allowable uses within it. We need to attempt to come up with rather broad criteria which then we can match or play against the criteria of parks versus forest versus mining areas or whatnot.

SHARING OF COMMISSION EXPENSES

For fiscal 1974 we are requesting an appropriation of $750,000 for the Federal share, which is 50 percent of the cost. We have a problem before the State legislature at this time. With the circuit court's ruling on the pipeline, Alaska is looking at budget cutting. It appears now that the maximum that we can expect from the State legislature for 1974 is only $700,000, maintenance of their present level.

Mrs. HANSEN. Are you enabled to use services in lieu of money?

Mr. BINGHAM. We are using an in-kind contribution partially.

Mrs. HANSEN. So this could be part of the matching funds?

Mr. BINGHAM. That is right. At the present time this year as our funding has been set up, there is a $500,000 direct funding and $200,000 in kind. The State, for instance, has 10 people on our resource planning team. The State pays these people which is in-kind to us. The State has two commissioners, whose travel costs, et cetera, to our functions, are paid as part of the in-kind contribution. A report on this is furnished to me on a monthly basis for my review and approval, and then placed in the Federal accounting records as in-kind support.

JUSTIFICATION MATERIAL

Mrs. HANSEN. We will insert the justifications at this point in the record.

[The information follows:]

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JOINT FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

Salaries and Expenses

Total Appropriation, 1972	$125,000
Total Appropriation Available, 1973	708,800

Summary of Increases, 1974

Salaries and Expenses:	
To finance full-year salary costs for Commission's staff	41,200
Budget Estimate, 1974	750,000

Analysis by Activity

	FY 1972 Amount Available	FY 1973 Adjusted Amount Available (Appropriation)	Estimate	Increase (+) or Decrease (-) 1974 compared with 1973
1. Salaries & Expenses	$19,000	$708,800	$750,000	$41,200
Unobligated balance lapsing	106,000	---	---	---
Total	$125,000	$708,800	$750,000	$41,200

1. Salaries and Expenses: FY 1973, $708,800; FY 1974, $750,000; an increase of $41,200. The increase consists of:

Increase (+) or Decrease (-) Amount	Positions	Total Program	Total Positions	Explanation
1. +$41,200	---	$750,000	18	To finance full-year salary costs for Commission staff.

Cost Factors Involved in Increase

(1) Salaries and personnel benefits, $41,200.

Need for Increase:

(1) The Joint Federal-State Land Use Planning Commission was established in accordance with Section 17 of the Alaska Native Claims Settlement Act (P.L. 92-203) and by Act of the State of Alaska (AS 41.40.010). The Commission began its activities in June 1972 with the establishment of an office in Anchorage by the Federal Co-chairman and Executive Director for the Commission's Staff. Thirteen of the Sexteen additional commission employees have been hired to date in FY 1973. The time required for recruitment is generating a total of $82,400 in salary costs which were reflected in the FY 1973 estimate. These savings will not be available in FY 1974. A total increase of $82,400 is required in FY 1974 to cover the added costs of which $41,200, or 50%, of the total increase, is the Federal share. The State of Alaska will pay the remainder of the increase through its contributions as reflected in the budget estimate for the "Cooperative Fund" trust fund.

Program of Continuing Work:

The Commission will continue a program of land use planning and submission of recommendations to the State and Federal Governments on disposition and use of lands as required by Section 17 of the Alaska Native Claims Settlement Act of 1971. The program for FY 1974 will continue the following:

- Land Use planning including identification and making recommendations with respect to areas best suited for retention in Federal ownership such as parks, game refuges, etc.; areas to be made available for disposal; and uses to be made of lands remaining in Federal and state ownership.

- Advising Native village and regional corporations on land use plans for selected lands.

- Reviewing existing public land withdrawals and making appropriate recommendations to the President of the United States.

- Holding public hearings on land-use planning programs and establishing a committee of land use advisors.

- Recommending appropriate program and budget levels for Federal and State land managing agencies to the President and the Governor. Also recommending changes in Federal or State Laws, policies and programs as deemed appropriate.

- Making recommendations to insure economic growth and development in accordance with national environmental objectives.

- Making recommendations to improve coordination and avoid conflict between the Federal and State Governments and the Native people in land selection and land use decisions.

- Identifying necessary public easements across lands selected by Village and

regional corporations.

- Reporting annually to the President, the Congress, the Governor, and the State Legislature on the Commissions' activities.

For data gathering and research activities on Alaskan resources and present and projected land uses, the Commission is utilizing the services of a multi-discipline team consisting of resource specialists from various Department of Interior Bureaus, the Forest Service, and the State of Alaska. Initially established as the North Alaska Planning Team under the jurisdiction of the Bureau of Land Management, this group provided an organization-in-being which could provide the Commission with resource data and professional expertise without the necessity for recruiting an entirely new staff of resource specialists. The team constitutes the professional resource staff of the Commission. Its work assignments are received from the Commission, but for administrative purposes team members will continue to be employees of the various Interior Bureaus and the State of Alaska. Salaries of the Federal employees on the Team, and other Team expenses including administrative support costs, but excluding the salaries and related expenses of State employees assigned to the Team, are paid by the Commission on a reimbursable basis. The State of Alaska pays the salaries and expenses of its employees who are Team members, and these costs are considered as part of the 50 percent share of total Commission expenses paid by the State.

The Commission's immediate staff will consist of 16 employees including an executive director, co-councils, an economist, a Coordinator for Native Affairs, land use planners, and clerical support. This staff together with the Federal Co-chairman and the Governor's Representative total the 18 full-time employees of the Commission.

Personnel Summary

	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions.....	18	9	9
Full-time equivalent of other positions...	--	1	1
Average paid employment.....	--	8	10
Average GS Grade.....	10.4	10.4	10.4
Average GS Salary.....	$16,171	$16,171	$16,171

ITEMIZATION OF ESTIMATE

Joint Federal-State Land Use Planning
Commission for Alaska
Salaries and Expenses (Federal share)

	Actual 1972	Estimate 1973	Estimate 1974	Increase (+) Decrease (-)
Program and Financing:				
Total obligations.....	$ 19,000	$708,800	$750,000	+$41,200
Unobligated balance lapsing..	106,000	---	---	---
Appropriation:	125,000	$708,800	750,000	+ 41,200
Obligations by Objects:				
11.0 Personnel compensation..	2,000	133,800	177,000	+ 43,200
12.1 Personnel Benefits: Civilian Employees.....	---	42,000	53,000	+ 11,000
21.0 Travel and Transportation of persons.....	---	60,000	50,000	- 10,000
22.0 Transportation of things.....	3,000	20,000	3,000	- 17,000
23.0 Rent, Communications, and utilities.....	---	23,000	23,000	---
24.0 Printing and reproduction	---	4,000	4,000	---
25.0 Other Services.....	9,000	416,000	430,000	+ 14,000
26.0 Supplies & Materials....	5,000	5,000	5,000	---
31.0 Equipment.....	---	5,000	5,000	---
Total Direct Obligations.....	19,000	708,800	750,000	+ 41,200
Reimbursable Obligations:				
26.0 Supplies & Materials....	2,000	---	---	---
31.0 Equipment.....	17,000	---	---	---
Total Reimbursable Obligations.....	19,000	---	---	---
99.0 Total Obligations.....	37,000	708,800	750,000	+41,200

Cooperative Trust Funds

Section 17 (a)(9)(A) of the Alaska Native Claims Settlement Act, Public Law 92-203, limits the Federal share of the expenses of the Joint Federal-State Land Use Planning Commission for Alaska to 50 percent. The State of Alaska provides for the remaining 50 percent of commission expenses through a combination of (1) assignment of State employees to the Commission's professional resource staff and (2) cash payments. The total estimated contribution for FY 1974 is $750,000 of which $180,000 will be provided in-kind through assignment of State employees; the remaining $570,000 will be a cash contribution.

Personnel Summary

	1972 Actual	1973 Estimate	1974 Estimate
Total number of permanent positions.....	--	9	9
Full-time equivalent of other positions..	--	1	1
Average paid employment.....	--	8	10
Average GS grade.....	--	10.4	10.4
Average GS salary.....	--	$16,171	$16,171

ITEMIZATION OF ESTIMATE
Joint Federal-State Land Use Planning
Commission for Alaska

Alaska Cooperative Trust Fund

	Actual 1972	Estimate 1973	Estimate 1974	(+) Increase (-) Decrease
Program and Financing:				
Total obligations.....	---	$528,800	$570,000	$+41,200
Unobligated balance available Start of Year.....	---	---	- 47,200	---
Unobligated balance available End-of-Year.....	---	47,200	47,200	---
Appropriation.....	---	576,000	570,000	- 6,000
Obligation by Objects:				
11.0 Personnel compensation.....	---	$133,800	$177,000	$+43,200
12.0 Personnel Benefits: Civilian Employees.....	---	42,000	53,000	+11,000
21.0 Travel and Transportation of persons.....	---	60,000	50,000	-10,000
22.0 Transportation of things....	---	20,000	3,000	-17,000
23.0 Rent, Communications, and Utilities.....	---	23,000	23,000	---
24.0 Printing and reproduction...	---	4,000	4,000	---
25.0 Other Services.....	---	236,000	250,000	+14,000
26.0 Supplies & Materials.....	---	5,000	5,000	---
31.0 Equipment.....	---	5,000	5,000	---
Total Obligations.....	---	$528,800	$570,000	$+41,200

COMMISSION MEMBERSHIP

Mrs. HANSEN. Please insert in the record a listing of the current membership of the Commission.

[The information follows:]

FEDERAL-STATE LAND USE PLANNING COMMISSION FOR ALASKA

COMMISSIONERS

Federal appointees

Federal Cochairman (vacant) (formerly occupied by Mr. Jack Horton recently confirmed as Assistant Secretary of the Interior for Land and Water Resources).
Miss Celia Hunter, executive secretary, Alaska Conservation Society.
Dr. Richard Cooley, economist.
Mr. Joseph H. Fitzgerald, former chairman, Federal Field Committee for Alaska.
Vacancy (formerly occupied by Mr. George Sullivan, mayor of Anchorage).

State appointees

Mr. Josephson, State Cochairman Designee.
Dr. Max Brewer, State Commissioner of Environmental Education.
Mr. Charles Herbert, State Commissioner of Natural Resources.
Mr. James Hurley, Matanuska Valley farmer.
Mr. Harry Carter, formerly executive director, Alaska Federation of Natives.

COMMISSIONERS' COMPENSATION AND MEETINGS, LIFE OF COMMISSION

Mrs. HANSEN. What compensation do the members of the Commission receive?

Mr. BINGHAM. The Commissioners receive $100 per day actual involvement, plus per diem, and travel expenses. This is when they are actually at a formal Commission function. The Federal Cochairman is paid at the executive level 5. Mr. Josephson is full-time salary under a schedule equivalent to a GS grade level.

Mrs. HANSEN. How many formal Commission meetings have you held to date?

Mr. BINGHAM. Eight.

Mrs. HANSEN. Where were these held?

Mr. BINGHAM. All have been held in Anchorage except the December meeting, which was held in Fairbanks and the January meeting which was held in Juneau. In addition, two meetings of the Commission's Advisory Committee have been held, one in November 1972 and one in March 1973.

Mrs. HANSEN. What is the termination date for your operations as prescribed in Public Law 92-203?

Mr. BINGHAM. December 31, 1976, a 5-year life.

ALASKA'S IN-KIND CONTRIBUTION FOR COMMISSION EXPENSES

Mrs. HANSEN. You are requesting an increase of $41,200 for salaries and expense. We have just discussed the State's ability to provide their 50 percent share. You can place in the record, if you will, the total State participation in kind by the number of positions and the salaries.

Mr. BINGHAM. I can give you the details on that.

[The information follows:]

IN-KIND PARTICIPATION COMMISSION EXPENSES PAID DIRECTLY BY THE STATE OF ALASKA

This State in-kind represents the salary, benefits, travel, and other expenses of the State's department of natural resources personnel on the resource planning team.

For the current fiscal year (fiscal year 1973) the State in-kind budget consists of:

Personnel services	$182,100
Travel	12,200
Contractual services	12,900
Commodities	2,500
Equipment	4,400
Total	214,100

For fiscal year 1974 it is proposed to consist of:

Personnel services	176,000
Travel	4,000
Commodities	20,000
Total	200,000

The State employees on the resource planning team are supervised by the team leader who reports to and is supervised by the commission's executive director. The team occupies space in the same building as the commission and there is constant interchange between the commission and the team.

The State employees occupy the following positions and are salaried as indicated.

Position title	Alaska schedule	Equivalent to GS level in Alaska
Mining engineer	23A	13
Range and agricultural specialist	23A	13
Petroleum geologist	20A	12
Urban planner	21A	12
Forester	20A	12
Oceanographer	20A	12
Antiquities specialist	20A	12
Cartographer	15A	7
Graphic artist	15A	7
Secretary II	10C	5

Note: The above amounts are current estimates and exceed the $180,000 shown in the budget justification as the inkind contribution for both fiscal years 1973 and 1974. This difference will be made up by an equivalent reduction in the cash contribution from the amounts shown in the budget justification.

Mrs. HANSEN. $180,000 of the State share will be provided in kind. How was this determined, and what is the legislative authority for in-kind contributions?

Mr. BINGHAM. In our annual report, we had one of our cocounsel prepare a legal memorandum on the inkind situation.

Mrs. HANSEN. Do you want to place it in the record for us?

Mr. BINGHAM. Yes. We also have, though I do not have in this file or with me, an opinion by the Associate Solicitor for Public Lands, Department of Interior, on the inkind contribution.

Mrs. HANSEN. I am sure we are liable to have some questions on this.

[The information follows:]

INKIND PARTICIPATION

Inkind participation to costs of the Commission by the State of Alaska are supported by the opinions expressed by the Associate Solicitor, Division of Public

Lands, U.S. Department of the Interior (memorandum of Sept. 25, 1972, follows) and by the Commission's cocounsel (refer to exhibit 13, vol. II, 1972 annual report of the Commission).

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington, D.C., September 25, 1972.

Memorandum to: Federal Cochairman, Federal-State Land Use Planning Commission for Alaska.
From: Associate Solicitor, Division of Public Lands.
Subject: State of Alaska's contributions to Commission activities.

Rather than paying a lump sum of money to the Commission from which the Commission, in turn, pays the salaries of some of its employees, I understand that the State of Alaska instead is detailing employees to the Commission and is paying the salaries and fringe benefits for such employees directly from the Alaskan treasury. Section 17a(9)(A) provides that "the United States shall be responsible for paying for any fiscal year only 50 percent of the costs of carrying out subsections (a) and (b) for such fiscal year."

It is my opinion that the moneys expended by the State of Alaska for the salaries and fringe benefits for the employees which have been detailed to the Commission constitute "costs" within the meaning of the quoted subsection of the Alaska Native Claims Act. Consequently, these expenditures must be taken into account when the maximum permissible Federal contribution is computed. In this connection, I have considered the memorandum to you of September 19, 1972, from the Assistant Director, Administration, Bureau of Land Management. The interpretation of the Alaska Native Claims Settlement Act contained therein is specifically disapproved.

DAVID E. LINDGREN.

EXPENSES FOR CONTRACTUAL SERVICES

Mrs. HANSEN. On page 4, there is an increase of $14,000 for other services. What does this involve?

Mr. BINGHAM. We are, for instance, utilizing video tape for taping of our meetings, and to be able to provide tapings of field hearings with the village communities, in order that the Native people, who more easily express things in the nonverbal, can express their feelings. This increase in part would be for this. In part, this would be further increased in such items as the resource planning staff, and specific expertise in specific fields, such as the utilization of an archeologist or something of this nature to make some specific studies.

USE OF CONSULTANTS AND COMMISSION EMPLOYMENT

Mrs. HANSEN. Please place in the record the consultants you have hired and what the salaries have been.

Mr. BINGHAM. At present, we have not hired any consultants.

Mrs. HANSEN. Insert in the record whether you plan to hire any. We have found that consultants are sometimes used to escape personnel ceilings.

[The information follows:]

USE OF CONSULTANTS

The Commission has no plans to hire consultants in fiscal year 1974. We have received numerous "offers" of assistance; however, most of those that appear meritorious have been out of reach in price. Some are pending further review and consideration. We anticipate the development of proposals for possible specific consultant work to be done in fiscal year 1975 and 1976. We are looking here at specific samples on demonstration planning projects for village (or portions) and extreme problem areas such as the planning to present a "West Yellowstone" condition in connection with State-Federal management of lands

at Lake Chulatna on the south side of Mount McKinley. This latter is, in part, a result of the out-of-court settlement of the State-Interior suit over the withdrawals made by Interior in March 1972.

We find that much that is being suggested in the way of consultant work is obtainable in other less expensive ways—the forum is an excellent example. Another method is the workshop where with minimal expense we can bring experts together to discuss various concepts and approaches. This allows open comparison without extensive and expensive consultant reports. We also find that many "consultants" exist in the Federal and State agencies, whose services are available at no cost.

PERMANENT POSITIONS

Mrs. HANSEN. Please insert in the record by grade, job title, and responsibilities a listing of your 18 permanent positions.

[The information follows:]

STAFF OF THE COMMISSION

The Commission has established 18 full-time positions. Two cover the Co-chairmen and the remaining 16 constitute the immediate staff.

The position titles, equivalent general schedule grade, and responsibilities of these staff positions are:

Executive Director, GS–16. Supervision of staff, including the resource planning team; all administrative matters—payroll, procurement, etc.; policy and other guidance to and from Commission.

Attorney adviser, GS–15. Provides interpretations and advice on a wide range of legal problems and the preparation or review of regulations, contracts, reports, etc.

Economist, GS–15. Preparation of economic analyses—national, regional, and local. Provides advice on the economic relationship of various proposed or alternative land uses.

Attorney adviser, GS–15. Provides advice and assistance in the development of legal policies and procedures of both an Alaska regional and national nature.

Program analyst, GS–13/14. Reviews ongoing or proposed programs, policies, etc., of State and Federal land management agencies. Provides Commission with relationships of agency programs, policies, etc., to land use planning and recommended Commission action.

Regional planner, GS–13. Exercises policy initiative, and interprets, presents, and recommends policy consideration on land use planning activities. Assists Native entities in land use planning.

Communications Director, GS–12. Development of informational material to present the land use planning process and other functions of the Commission to Government agencies, Native groups and the public.

Coordinator for Native Affairs, GS–13. Provides liaison between Commission and the various Native corporations and between the Natives and governmental agencies. Analyzes and recommends actions involving the Native groups.

Assistant to Coordinator for Native Affairs, GS–7. Assistance in the coordination of activities with the Native villages and regional corporations.

Secretary, GS–8. Personal secretary and assistant to the Federal co-chairman.

Secretary, GS–8. Personal secretary and assistant to the State co-chairman designee.

Secretary (Administrative Assistant), GS–7. Secretary to the Executive Director. Handles most day-to-day administrative actions.

Secretary (Recorder), GS–6. Records highlights and prepares summary minutes of all formal Commission meetings. Other clerical duties.

Clerk-Typist (MT/ST), GS–5 (2 positions). Typing and other clerical duties.

Receptionist, GS–5. Initially receives all visitors and telephone calls. Handles mail and other clerical duties.

STATUS OF COMMISSION ACTIVITIES

Mrs. HANSEN. What is the current status of your work? Are you on schedule?

Mr. BINGHAM. That is a rather difficult question to answer, in that

much of our activity is, in some respects, trying to find out what we are supposed to do.

Mrs. HANSEN. How long have you been in operation?

Mr. BINGHAM. Eight months. We have relatively resolved those issues, and have laid out our program.

Mrs. HANSEN. Which you have just discussed in your justifications?

Mr. BINGHAM. Yes. Currently, I would say we are on top of that program as laid out.

Mrs. HANSEN. I believe it was Secretary Hickel who came to us with a proposal, through the BLM, of some land planning in the northwest quadrant of Alaska.

Mr. BINGHAM. It would be northern Alaska.

Mrs. HANSEN. That's right; what has happened to that?

Mr. BINGHAM. This has been taken over by our planning team and they are upgrading it together with doing the same inventory on the balance of the State. That was probably about 40 percent complete when the Claims Act was passed—that is, the northern Alaska planning. It has now progressed to the point where we are probably pretty close to the neighborhood of 60 percent complete statewide in this resource inventory and planning work.

Mrs. HANSEN. How can you be 60 percent complete when the Geological Survey doesn't even know what is underneath your land?

Mr. BINGHAM. Well, to the extent the information is available.

Mrs. HANSEN. How much information is available?

Mr. JOSEPHSON. Madam Chairman, I think one purpose of the inventory is to identify deficiencies and data gaps, with a view to perhaps recommending primary research in some areas.

Mr. BINGHAM. We have done that on a first cut, and do have a report which identifies by priority those areas that we feel, for instance, either the Geological Survey of Interior or the State geological survey should do primary investigation work.

Mrs. HANSEN. Do you work with the Defense Department? They have a lot of land in Alaska.

Mr. BINGHAM. Yes; in fact, we have from the Defense Department, for instance, their vegetation survey which, up until about 4 months ago, was classified information. There are four maps on what is known as the series E scale—which is a big map of Alaska—that were known to be produced. Also we have borrowed the worksheets for this from the man who did the work for the military. We are in the process now of trying to figure out the best way of converting that very valuable piece of information to usable form not only for ourselves but for anyone else who has that interest.

Mrs. HANSEN. What is the total amount of land owned by the Defense Department in Alaska?

Mr. BINGHAM. I believe the figure is about 2.6 million acres.

POTENTIAL CONFLICTS BETWEEN NATIVES AND NON-NATIVES

Mrs. HANSEN. What is your major problem in Alaska at the present time?

Mr. JOSEPHSON. Would you like me to try that?

You inquired, Madam Chairman, about formal meetings. In all our meetings we have public testimony and we have informal meetings in rural Alaska, so I think we have a pretty good feel. I think that

we have identified immediately the deficiency land problems of Native organizations under the act. The potentiality of conflict, I would say, between Native and non-Native over such matters as subsistence, use of hunting rights on land.

Mrs. HANSEN. Can you speak to that a little more fully, because this is something that you are more familiar with than anyone else.

Mr. JOSEPHSON. I think Mr. Carter and Miss Hunter would want to perhaps say a word, too. One of the things that I think the Commission can do is to provide a forum so that polarization can be avoided in what otherwise would be very conflicting situations. From the point of view of, for example, the sportsman, he may regard the transfer of land into Native ownership as a deprivation of his traditional sports use of resources. On the other hand, I think the Native is concerned that while fee simple title for some areas is being given to him, he is being fenced out by law, so to speak, as he perceives it, from other areas where he may have enjoyed a traditional subsistence use, and he is concerned, we find, very sensitively to our mission to assist the Secretary in identifying easements, for example, on lands that will be under Native patent. He thinks that process may deprive him of what he expects.

Mrs. HANSEN. In other words the non-Native hunters and fishermen who are deprived of Native lands could turn around and not allow the Natives to use their land; is that correct?

Mr. JOSEPHSON. I think there is a potentiality for this.

Mrs. HANSEN. Similar to Indian fishing in the State of Washington, for example?

NATIVE CORPORATIONS, NEED FOR EXPERTISE

Mr. JOSEPHSON. Commissioner Carter was the executive director for the Alaskan Federation of Natives prior to his position with us.

Mr. CARTER. Madam Chairman, I think that both the Native people and the non-Native people are concerned equally as to access on public lands or native lands as they are selected. You asked the question what is the major problem facing us in Alaska. Relative to the Native problem or the implementation of the Land Claims Act, it is the fact that we don't have expertise or the funds or the organizational structure yet established to successfully implement the act within the time frames provided by law.

Mrs. HANSEN. Such as the survey?

Mr. CARTER. Yes, that is one of the problems.

Mrs. HANSEN. How about finding the people?

Mr. BINGHAM. One of the problems, to add to what Mr. Carter has said, is that under the act the various Native entities must form corporations. As Harry put it at one of our Commission meetings, it is going to require the Native groups in Alaska to form somewhere between 500 and 1,000 corporations to avail themselves of the benefits of the act and, and I am not sure if my round figures are correct, but I would say that there are probably not much more than 100 or so Natives in Alaska that are on speaking terms with a corporation.

Mrs. HANSEN. I wondered about that at the time it was passed.

Mr. BINGHAM. Harry, would that be a fairly close estimate do you think?

Mr. CARTER. That is probably true. I would even doubt that 100 of us understand what corporate entities are all about.

Mrs. HANSEN. Wasn't that put in the act so they would have the privilege of borrowing funds?

Mr. CARTER. I think it was needed as an organizational or legal entity through which land can be managed or money can be managed. We are mandated under the act to establish over 200 corporate entities within the first 4 or 5 years of implementation. Subsequent to that time in order to maximize the benefits of the land and money, we will have to establish business entities for various purposes, and I fully envision that we will have between 500 and 1,000 corporate entities established in Alaska within the next 5 to 10 years, so a major problem as I see it personally, is having to educate our people in running these corporate entities and managing businesses.

Mrs. HANSEN. Are you getting any advice from anyone on this?

Mr. CARTER. Well, there has been a tremendous proliferation of advisory groups in Alaska attempting to assist the Natives for one reason or the other.

TRAINING OF ALASKAN NATIVES

Mrs. HANSEN. I know but how many of your own people are being trained so that these corporations are able to function effectively?

Mr. CARTER. That activity is very minimal. Some of the corporations have set some of the organizational funds aside to train Native people through the institutions as we know them and we do, I would guess, have between 50 and 100 people in the universities learning specialties to help manage these corporate entities. Other than that there is no formalized effort, no concerted, coordinated effort, to train the people that will be necessary.

Mrs. HANSEN. You shouldn't have to be at the mercy of, for lack of a simpler word, a party of interest.

Mr. JOSEPHSON. I think an objective impression is that quality of leadership in a corporation is inversely proportionate to its need for that leadership. In other words, the most sophisticated, prosperous corporations have the best leadership and the ones with the greatest problems have the greatest need.

Miss Hunter might like to say something.

Mrs. HANSEN. We would be very happy to hear from you.

NEED FOR COORDINATION BETWEEN AGENCIES

Miss HUNTER. Thank you, Madam Chairman.

In looking at the picture in Alaska today, I think that one of our major problems is the tremendous proliferation of agencies and entities which is occurring, part of it as a result of the Alaska Native Claims Act, with a minimum of coordination in the past between many of these agencies. We have, of course, the State level, we have the Federal level, and we have local levels which are involved. We have our bureaus which are involved in planning and zoning activities and we have now the presence of the Natives as proprietors of the land. I think that one of the major weaknesses in Alaska has been a failure to really coordinate all of these entities into the overall picture of land use planning and that sort of thing.

This is one thing, one function, I think, that the Commission has a real interest in and where we have perhaps already acted as a forum for many of these interests to come together and talk together who had not had this opportunity before. I think this was borne out in our assistance forum when we brought together many people from State and Federal agencies to discuss the problem of assistance. Many of these people had not sat down with their opposite numbers in the State and Federal agencies to talk about their particular viewpoints. I think that it was extremely valuable. I think this is the one function which we are better able to handle than any other agency now in existence in Alaska.

FINANCING SCHOOLS IN ALASKA

Mrs. HANSEN. This is a related subject which is going to come up later with the Bureau of Indian Affairs. At one time Alaska was moving into a system of putting its young people at boarding schools and using some of the high schools at Bethel, Anchorage, Fairbanks, Juneau, and so on.

Now I understand you have changed your thinking and you are going to create several smaller high schools, of the 40-student type, so that these are within the access of a village. This means an entire change of financing.

For example, there was $10 million set aside in last year's budget for your dormitory program. Now that is held up because you have changed plans. How is this change going to affect the financing of school construction?

Mr. JOSEPHSON. I don't know that we can answer that here, primarily because our most immediate attention has been on resources and land issues. I was a senator in the State legislature and, as Harry does, I know something about what was led to that change in philosophy.

Mrs. HANSEN. It is fine. The only reason I brought this up is before we get more deeply into the construction budget itself we have to have some idea about how prepared you are to assume these construction costs.

Mr. JOSEPHSON. I recall that the State commissioner of education felt that the financial burden difference would not be as great as some of us had expected because he thought that the dormitory facilities would be less elaborate, and that there would be more access to going home, more frequently. Of course this is in response to very great parent interest in the villages.

Mrs. HANSEN. I completely understand but my question is when you break up your high schools into small units like 40 students or so, that is going to necessitate more construction. Who is going to do the financing?

Mr. CARTER. Madam Chairman, I can't answer that.

Mrs. HANSEN. Do you want to indicate to the Governor of Alaska that we would appreciate having some information as soon as we can because this means quite a departure. I don't think the committee wants to be confronted with the same thing that we are confronted with all over the Indian country where communities find themselves without a tax base and then they come in and they want the Federal Government to build the schools.

Public Law 815 does not adequately fund school construction at the present time. Supposing you have 30 non-native youngsters and 10 Indians. Then the school district suddenly decides that the BIA should fund the whole school. As you know, we get ourselves into a big construction problem that we are unable to fund. I just want to know what program planning is done by the State of Alaska.

Mr. JOSEPHSON. We are moving in the direction of State and local educational control and for the first time now we have local government formed with education powers in the north of Alaska, in the new borough in the Arctic Slope area. There is still a court contest in our State Supreme Court on that local government corporation but the local government is already sending out tax assessments and will assume educational functions in an area that is overwhelmingly Eskimo in population.

You inqured about how we are doing in our role and I think the difficulty in answering that is that we are current with all the timetable requirements but there are more or less intangible duties like developing a planning process where it is hard to know qualitatively if we are doing all that we can in a self-critical approach. One difficulty is that in many areas there are no local government entities with powers of planning and zoning as yet.

STATE OF ALASKA'S FISCAL SITUATION

Mrs. HANSEN. How is the State of Alaska coming along fiscally?

Mr. JOSEPHSON. Terribly.

Mrs. HANSEN. What is your revenue per year?

Mr. JOSEPHSON. Well, I could only answer it this way. When I was in the State senate in September 1969, we received $900 million revenues from the North Slope Oil sale following the Prudhoe Bay discoveries.

The then Governor recommended marking $500 million constitutionally into a permanent fund as an endowment which the legislature did not do, I think wisely as circumstances proved.

Now I think the fund is in the neighborhood of $600 million and the rate of withdrawal or outtake is accelerating because as the principal diminishes, naturally the earnings diminish. The State's fiscal planning has been predicated on the flowing of North Slope oil and the delays will create a very serious cash flow crisis in the State within the next several years.

So I think the State's long range future is great, but the short term problem is a very, very serious one.

Mrs. HANSEN. You are going to have further fiscal problems.

What are they going to pay these added costs with? Second, who is going to collect it? Third, what is going to happen to them if you don't collect it?

Mr. JOSEPHSON. The bulk of the revenue is from the petroleum industry, which is the contestant in the court case. The fact is I think that the State's recurring revenues from income tax and so forth constitutes only about half of the State's rate of annual expenditure. The other half has been based on nonrecurring revenues such as the process of the sale of the North Slope and therefore there is no way——

Mrs. HANSEN. Suppose the North Slope is stopped.

Mr. JOSEPHSON. Then it seems to me the State faces a drastic curtailment of services, a tax increase, but even that with the situation we have wouldn't make much of a dent in the problem.

ALASKAN NATIVE LANDS

Mrs. HANSEN. Are your Alaskan Native Lands going to be taxable by the State of Alaska?

Mr. BINGHAM. Under terms of the Act they are nontaxable unless developed or leased to third parties for a period of 20 years.

Mrs. HANSEN. So you write off 40 million acres there. Then the Federal Government hasn't finished all its land selection, so you are going to write off what they have.

I thought the Public Land Law Review Commission was going to come in with perhaps some good new base for in-lieu taxation of Federal activity, Federal property, but I don't think there is a bill prepared.

Mr. BINGHAM. I think this is one area we will look at if the oil does not get into production. There will be in time, and again this relates back to such things as what may constitute an interim conveyance to the Natives, the coal fields up above the Seward Peninsula or down in the Bering Glacier-Chugach Forest area.

Mrs. HANSEN. You have just as many problems mining coal as you have transporting oil.

Mr. YATES. How are they going to transport the coal?

Mr. BINGHAM. These are problems. They are not quite as significant.

Mrs. HANSEN. You have new problems that Alaska has not had to confront before and that is the whole environmental area.

Mr. JOSEPHSON. Of course I have had an unusual opportunity to see what happens. When the State feels prosperous it does a great job in environmental protection. In fact, it repeals some industrial tax legislation at the State level and so forth.

When the State feels poor, environmental cost suffers in my judgment and I think in a rounded view of the problem that should be understood.

INCOME FROM TOURISM

Mrs. HANSEN. What is your yearly income from tourism in Alaska? What is the State's income?

Miss HUNTER. That is a terribly hard figure to come by because a tourist dollar is very nebulous in many instances but certainly it is, I think, rated about No. 3 as far as State income is concerned and it is growing rapidly.

Mr. BINGHAM. It follows oil and gas, mineral production, and fisheries ranking. I believe it is getting close to $200 million, or perhaps $300 million, but this is one of the nebulous things as Miss Hunter has indicated.

STATE TAXES

Mrs. HANSEN. What is your sales tax?

Mr. JOSEPHSON. There is no State sales tax.

Mr. BINGHAM. No. There are various sales taxes in some cities ranging up to 5 percent; in other words, local units of government. The sales tax has been local government only.

Miss HUNTER. Real property is local and not State.

Mrs. HANSEN. So the State depends on the income tax?

Mr. JOSEPHSON. Yes, which is a factor of the Federal return. It is something like 16 percent of the Federal return and it is automatic computation. The method of computing the return is the same.

Mrs. HANSEN. When the fishermen come from Grays Harbor or Seattle, they pay just that portion of the income tax for the time they are fishing?

Mr. BINGHAM. Supposedly. There is some question about this. I was talking about it with a fisherman from Kodiak coming out on the plane, Alaska is considering presently this limited entry legislation and the gentleman was discussing the aspects that one way to cut down some of the controversy is to allow these fishermen to be successful in the limited entry programs only if they have paid their State taxes.

His inference was there was a number of the out-of-State non-Alaskans who fished in Alaska waters who did not pay the State tax. This is the inference of a man who operates a couple of canneries in the area.

Mr. JOSEPHSON. The State maintains a revenue office in Seattle, as a matter of fact. There is indication that there is revenue lost there.

TOURISM

Mr. BINGHAM. This again is one of those things that is rather nebulous to hit. As I was about to say on the tourist dollar, for instance, a dollar spent by tourists on an Alaska Airlines, does it stay in Alaska, does it stay in Seattle, does it come to the East coast?

Mrs. HANSEN. It sustains Alaska's airlines first of all, doesn't it?

Mr. BINGHAM. Basically, it sustains Alaska's airlines, depending on whose annual report you read and it does support the population of the State of Alaska, but what I am saying is that to try to assess the amount of dollars to Alaska from that particular phase of tourism is rather difficult.

Many of our tourists start out in New York and buy a round trip airline ticket and some people who run the statistics will count that entire fare as Alaska tourism whereas others will discount the entire fare.

Mrs. HANSEN. Then they get up there and it rains and they want to go home.

Mr. BINGHAM. I took the ferryboat in 1966 from Prince Rupert to Haines and we traveled with an elderly couple from California. This was their tenth trip and this time they were going to see McKinley. On nine trips they had not seen McKinley and this time they were were going to see it.

Mr. JOSEPHSON. Difficult as as it is, I think we have to make that inquiry about the economic value of tourism. When we move into this summer's review of the 80-million-acre withdrawal we will come to that.

Mrs. HANSEN. Too many people go to Alaska unprepared.

Mr. McKay?

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USE OF EARTH RESOURCES SATELLITE

Mr. McKay. One quick question.

Are you in fact being able to utilize the photographic techniques developed out of NASA's Apollo programs and so on?

Mr. Bingham. We are utilizing the photographs from the ERTS program, the EROS program. I think it will be quite beneficial. They are giving us some primary data that would not otherwise be available.

We also visualize the information being very valuable to the Natives in that we can superimpose rectilinear grids on them and they will be able to more visually relate themselves to areas of concern that they are knowledgeable about and in turn then relate to this rectilinear grid.

Mr. McKay. Isn't there also some possibility that resource analysis can be had from those things?

Mr. Bingham. Yes; we are working with it now and one example is analysis on the specimen vegetation map. We are now looking at these aspects and are discussing with the University of Alaska the possibilities of contracting with some people there to do some vegetative typing on the ERTS photographs, using specimen maps as ground truth instead of having to send a team out on the ground to check on them.

Mr. McKay. That is all I have.

PROBLEMS OF ALASKAN NATIVES

Mrs. Hansen. Mr. Carter, did you wish to say something?

Mr. Carter. Yes, Madam Chairman.

With regard to special problems in Alaska and the implementation of the act, there is something that is quite serious that is happening and there is a growing tendency of people to look upon the financial income under the act as a substitute or supplement for social programs for the Native people in Alaska.

I am sure that you are well aware that the income to the State of Alaska for the Alaskan Native people ranges between $50 million or $100 million a year. There are only 3 years, the third, fourth, and fifth years, as I understand it, that there is $70 million coming into the Native corporations and if we have to substitute our private funds for public programs, then we are going to be in a position of bankruptcy in a very, very few years.

The Native people of Alaska pride themselves and publicly stated that they were the Nation's first environmentalists. If we are forced into a position of financial bankruptcy because of having to assume public program responsibilities then we will be forced to utilize the resources of our privately owned lands in a manner that will be inconsistent with the desires of the Nation or with the interests of the Nation.

If we have to develop the resources on our private lands in an expeditious manner without good sound planning then we are going to have a catastrophe, so it is absolutely important that we maintain the current level of programs for the people of the State of Alaska and possibly increase those in accordance with the inflation that is occurring. I hope that we do not have to use our private funds to take the place of the public responsibility toward the people up there.

Mr. Josephson. All of us are grateful for the interest of the committee and I would like to transmit to Governor Egan your inquiry about the school matter and have him answer.

Mrs. HANSEN. I would be very interested. You have some hard decisions to make. I don't want you to appear before us 10 years from now with the same problems that Montana hasn't solved in a half century.

We will insert in the record at this point some questions submitted by Mr. Evans.

[The questions and answers follow:]

SOURCES OF ALASKA RESOURCE DATA

1. Question. Has the Commission developed its own information on the location and amount of resources, or does the Commission rely on information supplied by other sources?

Answer. The Commission through its Resource Planning Team is both developing its own information on the location and amount of resources and securing information from other sources.

There presently exists a large amount of recorded and unrecorded information about Alaskan resources. However, this information is scattered among Federal and State agencies, research organizations, and the files of many user groups and individuals both within and outside the State. The information has never been brought together in one place and analyzed to determine its validity and usability for decisionmaking processes.

In order for the Commission to expeditiously accomplish its many mandates under the Alaska Native Claims Settlement Act, it needs a rapid accurate appraisal of the resources that exist in the State, an analysis of their potential for use and development, and identification of the conflicts that may result from various alternative allocations of land resources. The Commission must also address itself to the social and economic impacts of land and resource uses as well as the environmental consequences of use and developmental actions.

The very nature of the resource planning team lends itself to developing a comprehensive and current information base. The interdisciplinary, interagency, and intergovernmental structure of the team membership will assure that the entire gamut of natural resources will be covered by an inventory and that only current information will be secured from all readily available sources.

AGENCIES PROVIDING RESOURCE DATA

2. Question. If the Commission does rely on other sources for its data, what are those sources?

Answer. Resource planning team members are developing the above information primarily from secondary sources with a certain amount of information being compiled and analyzed originally by the team. Original investigations into the extent of subsistence uses, the extent of known and indicated antiquities, identification of coastal zone resources, identification of ecosystems throughout the State, and a statewide public easement and right-of-way inventory are the primary areas of investigation not previously undertaken by others on a statewide basis.

For the most part the remainder of the information is being derived from secondary sources involving a variety of Federal and State agencies, various interest groups, Native corporations, educational institutions and individuals.

Although not a complete listing the following Federal and State agencies and interest groups have and will continue to contribute to the information being developed.

FEDERAL

All Department of Interior agencies including
- Bureau of Land Management.
- Bureau of Outdoor Recreation.
- National Park Service.
- Bureau of Sports Fisheries and Wildlife.
- Alaska Power Administration.
- U.S. Geological Survey.
- U.S. Bureau of Mines.
- Bureau of Indian Affairs.

Department of Defense
Alaska Command.
Corps of Engineers.

Department of Transportation
Alaska Railroad.
Federal Aviation Administration.
U.S. Coast Guard.

Environmental Protection Agency

Department of Commerce
National Oceanic and Atmospheric Administration.
National Marine Fisheries Service.

Department of Agriculture
U.S. Forest Service.
Rural Electrification Administration.
Agricultural Stabilization and Conservation Service.

Department of Health, Education, and Welfare
Public Health Service.

STATE

Office of the Governor
State Division of Planning and Research

Department of Natural Resources
Geological Survey
Division of Agriculture
Division of Lands
Division of Parks
Division of Oil and Gas

Department of Commerce
Alaska State Housing Authority

Department of Economic Development
Alaska Travel Division

Department of Environmental Conservation
Department of Fish and Game
Department of Highways
Department of Public Works
Division of Marine Transportation
Division of Aviations
Division of Communications

University of Alaska

INTEREST GROUPS

In addition to Federal and State agencies the team is contacting native corporations, both regional and village, and individual natives to secure information on subsistence needs. Alaska Methodist University has povided substantial assistance with the antiquities inventory.

Alaska sea-grant program and the Arctic Research Laboratory at Barrow has provided information on arctic and cold weather, coastal zone and ecosystems research.

Minerals and oil and gas resources information has been secured from the Alaska Miners Association, individual geological consultants, Standard Oil Co. and a task force from the combined Alaska Geological Society and American Institute of Mining, Metallurgical, and Petroleum Engineers.

Conservation groups such as the Sierra Club, Alaska Conservation Society, and statewide fish and wildlife clubs have also provided information.

PLANNING FOR RESOURCE DEVELOPMENT

3. Question. Lieutenant General William F. Cassidy, then Chief of the Corps of Engineers and Executive Secretary of the Corps' Environmental Quality Council, wrote on July 7, 1969,

"The development of Alaska is proceeding on a resource by resource, an agency by agency or an industry by industry basis with an apparent lack of regard for the total Alaskan development or possible large-scale environmental consequences of such development. The burden of providing total planning and concern for the total environment must rest on the State and Federal agencies responsible for such development * * * As development activities grow with an amazingly rapid and increasing pace, the government is in imminent danger of losing its opportunity to step in and provide the total planning required. There is a real danger that actual private development will preempt Government efforts."

What is the Commission doing to insure that the development of Alaska does take place on a planned basis?

Answer. The Commission recognizes that well-planned use of Alaska's lands is the product of a balanced interplay between governmental and private action. Responsive and responsible governmental planning is needed by both public and private interests in land resources. Alaska's governmental structure for planning is relatively new and incomplete. It was only last year that the State established a department of community and regional planning. In much of rural Alaska there is no effective level of regional government and, consequently, no regional planning body between the few small municipalities and the State.

In this context, part of the Commission's effort to insure that the development of Alaska takes place on a planned basis has been directed toward building and strengthening lasting governmental institutions which can continue the process of public planning and governmental cooperation after the Commission's mandatory demise in 1976. The Commission has been working with the State's newly established department of community and regional affairs to set up public forums on planning and regional government in areas of Alaska where there is no regional governmental entity. As regional governmental bodies are established by the State, the Commission will help develop these new institutions as effective planning bodies which can consider diverse interest in land, access the public interest, and prepare and implement comprehensive land-use plans.

The Commission is also acting directly to provide an interim mechanism for total comprehensive planning in Alaska. Because of its joint structure and its function as a public forum for consideration of national, State, local, and private interests, the Commission is well suited as a planning body which recognizes the wide range of implications involved in land use. The Commission's diversified representation and outlook should help assure balanced consideration of these changes.

Over time, the Commission hopes to integrate its planning program with ongoing Federal, State, and regional planning institutions, so that, after 1976, Alaska will be left with a strong and lasting mechanism for comprehensive statewide land planning and intergovernmental cooperation.

CONSERVATION OF ALASKAN RESOURCES

4. Question. How is the Commission insuring that the national interest of the American public at large in the conservation of Alaska's natural resources is represented?

Answer. Generally in five ways. First in the makeup of the Commission itself. The appointment of members by the Secretary of the Interior and the Governor of Alaska were made in order to represent not only varied background but to also include interests from outside Alaska. Second, through utilization of an advisory committee that includes members with specific interests—interests that include national conservation groups or representatives thereof. Third, to utilize the public or open aspect of all Commission meetings and to solicit public appearance and participation from all interested local—State—national representatives.

Fourth, through liaison and consultation with the nationally organized groups. For example during our present visit here in Washington, members of the Commission are visiting the North American Wildlife and Natural Resources meeting and with the American Petroleum Institute.

Last, but not least, through the public hearings process.

I might also point out that the Commission is advisory only. In this respect our recommendations must be thoroughly evaluated, sound, and supportable. If otherwise, the regulatory or "line" agency—Federal or State—will give recommendation little concern.

5. Question. It is my understanding that the Commission intends to hold public hearings in the lower 48 States as well as in Alaska. Do you have sufficient funds in your budget to hold such hearings, and where and when do you plan to hold them?

Answer. This is correct. Our budgeting provides for public hearings both in and outside Alaska. No set number are programed as cost varies with locality, duration, and number of Commissioners and staff attending the hearing.

In connection with the Commission's considerations on the National Interest or subsection 17(d)(2) areas we are now firming up a hearing schedule which will include 30 Alaska places and 4 outside Alaska. Those outside Alaska are scheduled: Seattle, Wash., May 26 and 27; San Francisco, Calif., May 23 and 24; Denver, Colo., May 26 and 27; and Washington, D.C., May 29 and 30.

The total cost, excepting salary cost of full-time employees, for this series of 34 hearings is estimated at $65,000.

Mrs. HANSEN. I am deeply interested in the future of Alaska. It is a very beautiful State and I intend to be up there again this summer.

Thank you all very much.

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