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NATIONAL LAND USE POLICY

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HEARINGS

BEFORE THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

NINETY-FIRST CONGRESS

SECOND SESSION

ON

S. 3354

TO AMEND THE WATER RESOURCES PLANNING ACT (79 STAT. 244) TO PROVIDE FOR A NATIONAL LAND USE POLICY

MARCH 24, APRIL 28 AND 29, 1970

PART 1



Printed for the use of the
Committee on Interior and Insular Affairs

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U.S. GOVERNMENT PRINTING OFFICE
44-011 WASHINGTON : 1970

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NATIONAL LAND USE POLICY

TUESDAY, MARCH 24, 1970

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The committee met, pursuant to notice, at 9:45 a.m., in room 3110, New Senate Office Building, Senator Henry M. Jackson (chairman of the committee) presiding.

Present: Senators Jackson, Church, Burdick, Metcalf, Gravel, Jordan of Idaho, Allott, Fannin, and Stevens.

Also present: Jerry T. Verkler, staff director, and Stewart French, chief counsel.

The CHAIRMAN. The committee will come to order.

The President has called the seventies the decade of the environment. His first official act of the decade was to sign into law the National Environmental Policy Act of 1969, which was considered and reported by this committee during the first session of this Congress. That act was a landmark for this country, and I am proud of the instrumental role this committee played in its enactment and in the focus of national attention on the critical environmental issues which face the Nation. As the environmental challenge continues in this decade and beyond, I am confident this committee will continue to meet that challenge with dedication and vision.

Our task is a large one. The projections for growth of population and technology in the last third of the 20th century have staggering implications for our environment. Many of the present problems are already approaching critical proportions. Unless some fundamental changes in policy, law, and institutions are made, the growth of our economy and our technological prowess will cause them to increase in geometric progression. This challenge is a test of the mettle of our civilization, of the ability of our democracy to provide the conditions for a quality life for all our citizens in the face of the environmental pressures of the coming decades.

Many of the actions recently taken or now under consideration relating to the environment seek to improve the quality of air or water. The bill we have before us today, on the other hand, deals with land. The pressures on the Nation's land resources base are already great, and the conflicting ideas as to its best utilization are many. As our population increases, as many say it will by 100 million in the next three decades alone, these pressures and conflicts will multiply. Residential developers will confront conservationists, powerplant and highway builders will confront ecologists, commercial promoters will confront agricultural interests, in ever greater numbers. Some of the great conservation cause célèbres of recent years illustrate these prob-

lems; the Grand Canyon Dam controversy, the Everglades park-dam—airport conflict, the trans-Alaska pipeline problem, just to mention a few.

These major land use conflicts may, in some respects, prove beneficial in that they have focused attention on the need for a national land use policy and for a more systematic effort to plan for the future we want.

S. 3354 seeks to deal with land use conflicts and problems at their source rather than treating only symptoms. The bill would enable the States and the Federal agencies involved in land use activities to establish machinery for comprehensive land use planning which would incorporate environmental as well as economic considerations. It would not thwart material progress, but rather would guide it and allow the States to accommodate it, without sacrificing our national heritage and our goal of a quality life for all Americans.

Specifically the bill provides for grants-in-aid to the States to develop and implement statewide land use plans. It provides for Federal coordination and the cooperation of Federal agencies carrying on activities with land use impact. It would direct the President to reduce Federal grant-in-aid funds with respect to States which do not develop, implement, or maintain statewide land use plans. The program would be administered by a Land and Water Resources Planning Council, an expansion of the present Water Resources Council.

I am pleased to announce this morning a distinguished list of witnesses, headed by the Honorable Francis Sargent, Governor of Massachusetts, and including Prof. Lynton Caldwell of the University of Indiana, a consultant to the committee, and a panel composed of outstanding representatives of the architecture, planning, and landscape architecture professions, including Mr. Rex Allen, Mr. William Slayton, Mr. Carl Feiss, Mr. Walter Monasch, Mr. Thomas Roberts, Mr. Campbell Miller, and Dr. Richard Wilkinson.

Gentlemen, we are delighted to welcome all of you to this hearing.

At this point I would like to insert a copy of the bill in the record.

(The bill, S. 3354, follows:)

[S. 3354, 91st Cong., second sess.]

A BILL To amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Water Resources Planning Act (79 Stat. 244), as amended (82 Stat. 935), is further amended by adding a new title IV to read as follows:

"TITLE IV—A NATIONAL LAND USE POLICY

"FINDINGS AND DECLARATION OF POLICY

"SEC. 401. (a) The Congress hereby finds that there is a national interest in a more efficient and comprehensive system of national and statewide land use planning and decisionmaking and that the rapid and continued growth of the Nation's population, expanding urban development, proliferating transportation systems, large scale industrial and economic growth, conflicts in emerging patterns of land use, the fragmentation of governmental entities exercising land-use planning powers, and the increased size, scale, and impact of private actions, have created a situation in which land-use management decisions of

national, regional, and statewide concern are being made on the basis of expediency, tradition, short term economic considerations, and other factors which are often unrelated to the real concerns of a sound national land-use policy.

"(b) The Congress further finds that all across the Nation a failure to conduct competent, ecologically sound land use planning has required public and private enterprise to delay, litigate, and cancel proposed public utility and industrial and commercial developments because of unresolved land use questions, thereby causing an unnecessary waste of human and economic resources and a threat to public services and often resulting in decisions to locate utilities and industrial and commercial activities in the area of least public and political resistance, but without regard to relevant ecological and environmental land use considerations.

"(c) The Congress further finds that many Federal agencies are deeply involved in national, regional, and State land-use planning and management activities which because of the lack of a consistent policy often result in needless, undesirable, and costly conflicts between agencies of Federal, State, and local government; that existing Federal land-use planning programs have a significant effect upon the location of population, economic growth, and on the character of industrial, urban, and rural development; that the purposes of such programs are frequently in conflict, thereby subsidizing undesirable and costly patterns of land-use development; and that a concerted effort is necessary to interrelate and coordinate existing and future Federal, State, and private decision-making within a system of planned development and established priorities that is in accordance with a national land-use policy.

"(d) The Congress further finds that while the primary responsibility and constitutional authority for land use planning and management of non-Federal lands rests with State and local government under our system of government, it is increasingly, evident that the manner in which this responsibility is exercised has a tremendous influence upon the utility, the value, and the future of the public domain lands, the national parks, forests, seashores, lakeshores, recreation and wilderness areas and other Federal lands; that the interest of the public in State and local decisions affecting these areas extends to the citizens of all States; and that the failure to plan and, in some cases, poor land-use planning at the State and local level pose serious problems of broad national, regional, and public concern and often result in irreparable damage to commonly owned assets of great national importance such as estuaries, ocean beaches, and other areas in public ownership.

"(e) The Congress further finds that the land use decisions of the Federal government often have a tremendous impact upon the ecology, the environment and the patterns of development in local communities; that the substance and the nature of a national land use policy ought to be formulated upon an expression of the needs and interests of State, regional, and local government as well as those of the Federal Government, private groups and individuals; and that Federal land use decisions require greater participation by State and local government to insure that they are in accord with the highest and best standards of land-use management and the desires and aspirations of State and local government.

"(f) In order to promote the general welfare and to provide full and wise application of the resources of the Federal Government in strengthening the environmental, recreational, economic and social well-being of the people of the United States, the Congress declares that it is a continuing responsibility of the Federal Government, consistent with the responsibility of State and local government for land-use planning and management, to undertake the development of a national policy, to be known as the national land-use policy, which shall incorporate ecological, environmental, esthetic, economic, social and other appropriate factors. Such policy shall serve as a guide in making specific decisions at the national level which affect the pattern of environmental, recreational and industrial growth and development on the Federal lands, and shall provide a framework for development of interstate, State, and local land-use policy.

"(g) The Congress further declares that the national land-use policy should—

"(1) favor patterns of land-use planning, management and development which are in accord with sound ecological principles and which offer a range of alternative locations for specific activities and encourage the wise and balanced use of the Nation's land and water resources;

"(2) foster the continued economic growth of all States and regions of the United States;

"(3) favorably influence patterns of population distribution in a manner such that a wide range of scenic, environmental, and cultural amenities are available to the American people;

"(4) contribute to carrying out the Federal responsibility for revitalizing existing rural communities and encourage, where appropriate, new communities which offer diverse opportunities and a diversity of living styles;

"(5) assist State government to assume responsibility for major land-use planning and management decisions which are of regional interstate, and national concern;

"(6) facilitate increased coordination in the administration of Federal programs so as to encourage desirable patterns of environmental, recreational, and industrial land-use planning; and

"(7) systemtize methods for the exchange of land-use, environmental and ecological information in order to assist all levels of government in the development and implementation of the national land-use policy.

"(h) The Congress further declares that intelligent land-use planning and management provides the single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality life and providing the material means necessary to improve the national standard of living.

"PURPOSE

"SEC. 402. It is the purpose of this title—

"(a) to establish a national policy to encourage and assist the several States to more effectively exercise their constitutional responsibilities for the planning, management, and administration of the Nation's land resources through the development and implementation of comprehensive 'Statewide Environmental, Recreational and Industrial Land Use Plans' (hereinafter referred to as 'Statewide Land Use Plans') and management programs designed to achieve an ecologically and environmentally sound use of the Nation's land resources;

"(b) to establish a grant-in-aid program to assist State and local government to hire and train the personnel, and gain the competence necessary to develop, implement, and administer a Statewide Land Use Plan which meets Federal guidelines and which will be responsive and effective in dealing with the growing pressures of conflicting demands on a finite land resource base;

"(c) to establish a reasonable and flexible Federal requirement to give individual States guidance in the development of Statewide Land Use Plans and to condition the distribution of certain Federal funds on the establishment of an adequate Statewide Land Use Plan;

"(d) to enlarge the responsibilities of the Land and Water Resources Planning Council (formerly the Water Resources Council) to include the administration of the Federal grant-in-aid program, the review of Statewide Land Use Plans for conformity to the provisions of this title, and the issuance of a biennial report on national land use policies, trends, projections and problems; and

"(e) to exercise the Federal Government's responsibility to maintain, develop, and refine a coherent national land use policy with respect to the planning, management and administration of all federally owned lands.

"STATEWIDE ENVIRONMENTAL, RECREATIONAL AND INDUSTRIAL LAND USE PLANNING GRANTS

"SEC. 403. (a) In order to carry out the purposes of section 402, the Land and Water Resources Planning Council (herein referred to as the 'Council') is authorized to make land use planning grants to—

"(1) an appropriate single State agency, designated by the Governor of the State, which has statewide land use planning responsibilities and which meets the criteria and guidelines set out in section 406 of this title; and,

"(2) any interstate agency which is authorized by Federal law or interstate compact to plan and regulate land use development.

"(b) The Council is authorized to make land use planning grants in accordance with the provisions of this title to assist and enable eligible State and interstate agencies—

"(1) to prepare an inventory of the State's land and related resources;

"(2) to collect and analyse information and data related to—

"(A) population characteristics, migration, trends and densities;

"(B) economic trends, location patterns, and projections;

"(C) directions and extent of urban and rural growth and changes;

"(D) public works, public capital improvements, land acquisitions, and economic development programs, projects, and associated activities;

"(E) ecological, environmental, geological, and physical conditions which are of relevance to decisions concerning the location of new communities, commercial development; heavy industries, transportation and utility corridors, and other land uses;

"(F) the projected land use requirements of the State for recreation, urban growth, commerce, transportation, the generation of energy, and other important uses for at least the next fifty years;

"(G) governmental organization and financial resources available for land use planning and management within the State and the political subdivisions thereof; and

"(H) other information necessary to conduct statewide land use planning in accord with the provisions of this title.

"(3) to provide technical assistance and training programs for appropriate personnel on the development, implementation and management of statewide land use planning programs;

"(4) to develop, use, and encourage common information and data bases for Federal, State, regional, and local land use planning;

"(5) to establish arrangements for the exchange of land use planning information among State agencies, and among the various governments within each State and their agencies; between the governments and agencies of neighboring States as appropriate; and with interstate compact agencies, river basin commissions and regional commissions established pursuant to Federal law;

"(6) to establish arrangements for the exchange of information with the Federal Government for use by the Council in discharging its responsibilities under this Act; and

"(7) to conduct such other related planning and coordination functions as may be approved by the Council.

"PROPOSALS FOR GRANTS

"SEC. 404. (a) To receive a State land use planning grant a State shall submit to the Council a proposal in such form and in accordance with such procedures as the Council may specify, indicating the program of State land use planning it proposes to undertake, the planning assistance that it will require, the period during which such activities will be conducted, and their estimated costs, and designating those functions which qualify for Federal assistance pursuant to this title.

"(b) From the sum appropriated pursuant to section 410 the Council is authorized to make State land use planning grants to agencies whose proposals are approved in an amount not to exceed two-thirds of the estimated cost of the planning for the three fiscal years after the date of enactment of this title. Thereafter, grants may be made in an amount not to exceed one-half of the new planning costs and one-fourth of the State agencies operating costs.

"(c) Planning grants shall be allocated to the States with approved programs based on regulations of the Council which shall take into account the amount and nature of the State's land resource base, population, pressures resulting from growth, and other relevant factors.

"(d) Any grant made for the purpose of this title shall increase, and not replace State funds presently available for State land use planning activities. Any grant made pursuant to this title shall be in addition to, and may be used jointly with, grants or other funds available for land use planning surveys, studies, and investigations under other federally assisted programs.

"DUTIES OF THE COUNCIL

"SEC. 405. (a) The Council shall promulgate rules and regulations to administer the provisions of this title, including the detailed terms and conditions under which State land use planning grants may be made.

"(b) In order to carry out the provisions of this title, the Council—

"(1) is authorized to make advance, progress, or other payments pursuant to any State land use planning grant made under this title without regard to the provisions of section 3648 of the Revised Statutes, as amended (31 U.S.C. 529);

"(2) is authorized to provide technical assistance to any eligible State or interstate agency and to River Basin Commissions as specified in sections 403 and 404;

"(3) is authorized, by contract or otherwise, to make studies and publish information on problems related to State and National land use planning;

"(4) shall consult with other officials of the Federal Government responsible for the administration of Federal land use planning assistance programs to States, their political subdivisions, and other eligible agencies in order to enhance coordination; and

"(5) is required to periodically review provisions of the Statewide Land Use Plans for conformity to the provisions of this Act.

"FEDERAL GUIDELINES AND REQUIREMENTS

"SEC. 406. (a) A State agency specified in section 403 (a) must meet or be able to give assurances that it will meet the following requirements in the development of the Statewide Land Use Plan to be eligible for statewide land use planning grants under this title—

"(1) a single State agency, designated by the Governor, shall have primary authority and responsibility for the development and administration of the Statewide Land Use Plan and other appropriate State agencies will assist, where appropriate, in the development of the plan;

"(2) a competent and adequate interdisciplinary professional and technical staff as well as special consultants, will be available to the State agency to develop the Statewide Land Use Plan;

"(3) to the maximum extent feasible, pertinent State and Federal plans, studies, information, and data on land use planning already available shall be utilized in order to avoid unnecessary repetition of effort and expense; and

"(4) such records shall be kept and made available and such reports and evaluations shall be made as the Council may require regarding the status and application of Federal funds made available under the provisions of this title.

"(b) During the three fiscal year period following the date of enactment of this title, State Land Use Plans must, as a condition of continued grant eligibility, meet or be designed to meet, as additional information is developed, the following guidelines and requirements—

"(1) identification of the boundaries of the portions of the State subject to the Statewide Land Use Plan;

"(2) identification of the areas of the State which are not subject to the Statewide Land Use Plan: Such areas shall include—

"(A) lands which are located within the boundaries of any incorporated city which has exercised land use planning and authority, and

"(B) such other lands as the Council may specify pursuant to section 405;

"(3) identification of those areas of the State—

"(A) where ecological, environmental geological, and physical conditions dictate that certain types of land use activities are incompatible and undesirable,

"(B) whose highest and best use, based upon projected State and National needs, on the Statewide Outdoor Recreation Plan required under the Land and Water Conservation Fund Act, and upon other studies, is recreational oriented use,

"(C) which are best suited for natural resource, heavy industrial and commercial development,

"(D) where transportation and utility corridors are or should, in the future, be located, and

"(E) which furnish the amenities and the basic essentials to the development of new towns and the revitalization of existing communities;

"(4) appropriate provisions designed to insure that regional requirements for material goods, natural resources, energy, recreation and environmental amenities be given consideration;

"(5) provisions and procedures designed to insure that the plan is consistent with local, State, regional, and Federal standards relating to the maintenance and enhancement of the quality of the environment and the conservation of public resources;

"(6) provisions to insure that transportation and utility corridors do not damage Federal lands dedicated to the maximization of declared public values, and are established in compliance with regional and State needs, State policies, and policies and goals set forth in other Federal legislation;

"(7) measures such as buffer zones, scenic easements, prohibitions against nonconforming uses, and aesthetic standards to insure that federally designated, financed, and/or acquired areas including, but not limited to elements of the national park system, wilderness areas, and game and wildlife refuges are not damaged or degraded as a result of inconsistent or incompatible land use patterns in the same immediate geographical region.

"(c) To retain eligibility for statewide land use planning grants after the end of three fiscal years from the beginning of the first fiscal year after the date of enactment of this title, the State land use planning agency designated by the Governor pursuant to section 403(a)(1) must meet the following Federal guidelines and requirements—

"(1) the agency must have the authority necessary to implement the Statewide Environmental, Recreational and Industrial Land Use Plan;

"(2) the agency's authority shall include but need not be limited to—

"(A) authority to acquire interests in real property if deemed to be necessary under the Statewide Land Use Plan;

"(B) authority, under the State police powers, to place restrictions on the type of land use activities which may take place in areas designated for a special use under the Statewide Land Use Plan; and

"(C) authority to conduct public hearings, allowing full public participation and granting the right of appeal to aggrieved parties, in connection with the dedication of any area of the State as an area subject to restricted or special uses under the Statewide Land Use Plan;

"(3) the agency must have procedures for modification and change in the State Land Use Plan, including public notice and hearing, to meet changed future conditions and requirements.

"(d) The Council shall have authority to terminate any financial assistance extended under this title if, after the State has been given notice of a proposed termination and an opportunity to present relevant evidence, the Council finds that—

"(1) the State agency has failed to adhere to the guidelines and requirements of this title in the development of the land use plan; or

"(2) the State has not enacted State legislation which meets the requirements of section 406(c).

"OTHER GRANT-IN-AID PROGRAMS

"SEC. 407. Any State whose entitlement to statewide land use planning funds under the provisions of this title has been terminated pursuant to section 406(d), or who fails to develop an acceptable Statewide Land Use Plan by the beginning of the fourth fiscal year after the date of enactment of this title, shall—

"(1) have its entitlement to certain additional Federal assistance programs, which shall be designated by the President, reduced at the rate of 20 per centum per year until such time as the provisions of this title are complied with; and

"(2) be denied the issuance of any right-of-way permits or other permits available under the public land laws and other Federal laws to use or to cross the public domain or other Federal lands until such time as the provisions of this title are complied with.

"STATE-FEDERAL COORDINATION

"SEC. 408. (a) The Council shall not approve the land use plan submitted by a State agency until it has solicited the views of the Federal agencies principally affected by such plans or has evidence that such views were provided the State agency in the development of the plan.

(b) All Federal agencies conducting or supporting public works activities in an area subject to a State Land Use Plan shall make such activities, unless there are overriding considerations of national policy which require departures from the plan, consistent with the approved plan for the area. State and local governments submitting applications for Federal assistance for activities in areas subject to State Land Use Plans shall indicate the views of the State land use agency as to the relationship of such activities to the approved plan for the area. Federal agencies shall not approve proposed projects that are inconsistent with the plan.

"FEDERAL PLANNING INFORMATION CENTER

"SEC. 409. (a) The Land and Water Resources Planning Council or such other appropriate agency as the President may designate, shall—

"(1) develop and maintain an information and data center which has on file, on both a geographical and a functional basis, an up-to-date set of all federally initiated and federally assisted plans for activities which involve any use of lands under State or Federal jurisdiction, which are of more than local significance;

"(2) seek cooperation in placing on file the plans of State and local government and, where appropriate, private enterprise, which have more than local significance for land use planning; and

"(3) develop and maintain statistical data and information on past, present and projected land use patterns which are of national significance.

"(b) All Federal agencies are required, as a part of their planning procedures on projects involving a major land use activity, to consult with the agency designated pursuant to section 409(a) for the purpose of determining whether the proposed activity would conflict in any way with the plans of other Federal, State, and local agencies.

"SEC. 410. There are hereby authorized to be appropriated such funds as may be necessary to carry out the purposes of this title."

SEC. 2. (a) Section 1 of the Water Resources Planning Act, as amended, is further amended to read as follows:

"SECTION 1. This Act may be cited as the 'Land and Water Resources Planning Act'."

(b) Section 2 is amended to read as follows:

"SEC. 2. In order to meet the Nation's rapidly expanding demands for water resources and in order to insure that the Nation's limited land resource base is properly planned and managed, it is hereby declared to be the policy of the Congress to encourage the conservation, development, and utilization of the water and land resources of the United States on a comprehensive and coordinated basis by the Federal Government, States, localities, and private enterprise with the cooperation of all affected Federal agencies, States, local governments, individuals, corporations, business enterprises, and others concerned."

EFFECT ON EXISTING LAWS

(c) In subsection 3(b), delete the last phrase "water and related land resource projects;" and insert instead the following: "projects for the development of land and water resources."

TITLE I—LAND AND WATER RESOURCES PLANNING COUNCIL

SEC. 3. (a) Amend section 101 to read as follows:

"There is hereby established a Land and Water Resources Planning Council (hereinafter to be referred to as the 'Council') which shall be composed of the Secretaries of the Interior; Agriculture; the Army; Health, Education, and Welfare; Transportation; and Housing and Urban Development; the Chairman of the Federal Power Commission. The Chairman of the Council shall request the heads of other Federal agencies to participate with the Council when matters affecting their responsibilities are considered by the Council. The Chairman of the Council shall be designated by the President."

(b) Amend section 102(a) by deleting the phrase "or at such less frequent intervals as the Council may determine,".

(2) Amend section 102 by adding the following new subsections:

"(c) Maintain a continuing study and prepare an inventory of the land resources of the United States, and issue biennially a report on land resources and uses, projections of development and uses of land, and analyses of current and emerging problems of land use.

"(d) Maintain a continuing study of the adequacy of administrative and statutory means for the coordination of Federal programs which have an impact upon land use and of the compatibility of such programs with State and local land-use planning and management activities; it shall appraise the adequacy of existing and proposed Federal policies and programs which effect land use; and it shall make recommendations to the President with respect to such policies and programs."

(d) Amend subsection 104(1) by deleting the word "related".

(e) Amend subsection 201(a) by deleting the word "related" before the phrase "land resources commission".

TITLE II—RIVER BASINS COMMISSIONS

SEC. 4. (a) Amend subsection 201(b)(1) by deleting the word "related".

(b) Amend subsection 201(b) by inserting a new clause (3) as follows:

"(3) prepare and keep up to date, to the extent practicable, a comprehensive coordinated joint plan for Federal, State, interstate, local, and nongovernmental plans which significantly involve land use or have significant impacts upon land-use patterns; zoning or other land-use regulations; and, to the extent possible, nongovernmental land-use plans. It should specifically indicate the relation of planned or proposed Federal projects to land-use development in the region.

(c) Renumber clause (3) of subsection 201(b) to become clause (4).

(d) Delete clause (4) of subsection 201(b) and insert instead a new clause (5) as follows:

"(5) foster and undertake such studies of water resources and land-use problems in its area, river basin, or group of river basins as are necessary in the preparation of the plans described in clauses (2) and (3) of this subsection."

(e) Amend section 201 by adding a new subsection (c) as follows:

"(c) River Basin Commissions which have been established under the provisions of the Water Resources Planning Act (79 Stat. 244) prior to the date of enactment of this amendment may extend their jurisdiction to encompass the land-use planning provisions of this Act, (1) by the request of the Council or, (2) by written request addressed to the Council by the Governor a participating State: *Provided*, That the request is concurred in writing by not less than one-half of the participating States.

(f) Amend the first phrase of subsection 202(c) to read as follows:

"(c) Two members for each State * * *"

(g) Amend subsection 202(d) by inserting after the phrase "* * * and whose jurisdiction extends to the waters" the words "or lands."

(h) Amend clause (3) a subsection 204 by deleting the final word "and."

(i) Amend subsection 204 by deleting clause (4) and by inserting a new clause (4) as follows:

"(4) submit to the Council for transmission to the President and by him to the Congress, and the Governors and the legislatures of the participating States a comprehensive, coordinated, joint plan, or any major portion thereof or necessary revisions thereof, for land-use planning in the area, river basin, or group of river basins for which such commission was established. Before the commission submits such a plan or major portion thereof or revision thereof to the Council, it shall transmit the proposed plan or revision to the head of each Federal department or agency, the Governor of each State, and each interstate agency, from which a member of the commission has been appointed. Each such department and agency head, Governor, and interstate agency shall have ninety days from the date of the receipt of the proposed plan, portion, or revision to report its views, comments, and recommendations to the commission. The commission may modify the plan, portion, or revision after considering the reports so submitted. The views, comments, and recommendations submitted by each Federal department or agency

head, Governor, interstate agency, and United States section of an international commission shall be transmitted to the Council with the plan, portion, or revision; and"

(j) Amend subsection 204 by adding a new clause (5) as follows:

"(5) submit to the Council at the time of submitting the plans called for in clauses (3) and (4) of this subsection any recommendations it may have for continuing the functions of the commission and for implementing the plans, including means of keeping the plans up to date."

TITLE V—MISCELLANEOUS

SEC. 5. (a) Redesignate "TITLE IV" as "TITLE V".

(b) Amend section 401 to become a new section 501 as follows:

"SEC. 501. There are authorized to be appropriated to carry out the provisions of this Act—

"(a) $3,000,000 annually for the administration of this Act; and

"(b) not to exceed $8,000,000 annually to carry out the provisions of title II: *Provided*, That not more than $1,000,000 annually shall be available for any single river basin commission."

ADVISORY COMMISSION ON INTERGOVERNMENTAL RELATIONS,
Washington, D.C., March 9, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: This is in response to your request of February 10, 1970, for the Advisory Commission's views on S. 3354, a bill to amend the Water Resources Planning Act (79 Stat. 244). The Advisory Commission has not taken a specific position on all the issues raised in this legislation, but has adopted several policy positions having a bearing on the bill.

The Advisory Commission in its 1967 report, *Fiscal Balance in the American Federal System*, recommended "that the Congress and the President strive toward a drastic decrease in the number of separate authorizations for Federal grants. . . ." In the same report the Advisory Commission further recommended ". . . consolidating in so far as possible into a single Congressional enactment a set of planning requirements both functional and comprehensive to be applicable to Federal grant and aid programs, both present and future. . . ."

In addition, in its 1968 report on *Urban and Rural America: Policies for Future Growth*, the Commission recommended ". . . the development of a national policy incorporating social, economic, and other considerations to guide specific decisions at the national level which affect the patterns of urban growth." In the *Fiscal Balance* report, the Commission stressed the importance of a strong well-staffed State planning program directly under the Governor. The Commission concluded that the planning function should include formulation for the consideration by the Governor and legislature comprehensive policies and long-range plans for the effective and orderly development of human and material resources of the State. More specifically, the Commission in its *Urban and Rural America* report recommended ". . . the development of State policy incorporating social, economic and other considerations to guide specific decisions at the State level which affect patterns of urban growth." The States were urged to ". . . give consideration both to the national policy and to the views of local governments in the formulation of State plans and policy dealing with urban growth." The following staff comments relate to ways and means of promoting the purposes of these general ACIR policy positions.

S. 3354 is not inconsistent with the Advisory Commission's basic position on the need for a national urbanization policy. However, it might be appropriate to consider this legislation within the broader context of such a policy, which in the long run will probably emerge as a consequence of piecemeal consideration of measures such as S. 3354.

Legislation has been introduced in Congress (H.R. 13217 and S. 3228—"Balanced Urbanization Policy and Planning Act of 1969") which implements the Commission recommendation with respect to comprehensive planning. These two bills make the Department of Housing and Urban Development's comprehensive planning assistance program ("701") the single vehicle for comprehensive planning grants to States and localities.

We would therefore urge that S. 3354 be amended to provide that comprehensive planning assistance to the States for the development, implementation, administration of a Statewide Land Use Plan be channeled through the 701 program rather than through this separate authorization.

Finally, the Commission on several occasions has emphasized the need for State local government to attract and retain competent, well-trained, and imaginative personnel. The training provisions of S. 3354 would assist in upgrading the professional capability of State personnel. However, in keeping with the Commission's view that separate grant authorizations be kept to a minimum, we would simply point out that the training provisions of this legislation duplicate those contained in the "Intergovernmental Personnel Act of 1969" (S. 11), which provides grants to States for training of their employees. The Senate has enacted S. 11 and a companion bill is now under consideration by the House Special Subcommittee on Education, Committee on Education and Labor.

We appreciate the opportunity to review and comment on this proposed legislation.

Sincerely,

DAVID B. WALKER,
Assistant Director.

INTERSTATE COMMERCE COMMISSION,
OFFICE OF THE CHAIRMAN,
Washington, D.C., February 16, 1970.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request of February 10, 1970, for the Commission's views on S. 3354, a Bill, "To amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning."

Insofar as the subject bill would establish a national land use policy, and thereby affect the location of transportation corridors in the future, it could have an impact on the operations of carriers regulated by the Commission. However, it would not affect the persent duties or responsibilities of the Commission and therefore, we have no comments to offer.

Sincerely yours,

GEORGE M. STAFFORD,
Chairman.

NATIONAL ACADEMY OF SCIENCES,
OFFICE OF THE PRESIDENT,
Washington, D.C., April 7, 1970.

Hon. HENRY M. JACKSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: This is in response to your letter of February 10 requesting the views of the National Academy of Sciences on S. 3354, a bill that would amend the Water Resources Planning Act to broaden the authority of the Water Resources Council and the several river basin commissions and to include provision for a national land use policy and for financial assistance for statewide land use planning.

There are persuasive arguments that new institutional and program arrangements are needed to support a more comprehensive and systematic approach for planning the nation's future growth. S. 3354 proposes such an institutional framework through the provision of federal support to land use planning agencies that are created on a statewide or interstate basis. Federal policy guidelines are set forth under the provisions of this proposed measure to assure that state programs financed with federal assistance are consistent with a national land use policy. Federal grants would be authorized to support the programs carried out by these agencies to prepare inventories on land resources, collect and analyze information needed to support land use planning, provide technical assistance and training, develop common data bases, and exchange information among federal, regional, interstate, state and local agencies.

The National Academy of Sciences would defer to others who can more appropriately comment on specific institutional arrangements best suited for coordinating and promoting improved land use planning among the states. However, the Academy is pleased to have this opportunity to comment favorably on the provisions of S. 3354 to strengthen federal support of programs that expand our basic knowledge about land use and strengthen our scientific understanding of the dynamics of economic and social growth.

Many program decisions that affect land use, in both the public and private sectors of the nation's economy, are based on single purpose planning concepts that are geared to serve relatively autonomous constituencies and thus often ignore the broader external social and environmental implications that result from such actions. The provisions of S. 3354 that would promote a sound national land use policy, if properly implemented, could have significant implications for remedying deficiencies that result from these narrow approaches to decision making on resource allocation.

The categoric nature of present federal grant programs and the regulations governing their administration provide one example of the institutional constraints which tend to promote uses of land and water resources for purposes often inconsistent with broader social and economic goals. Although the policy purposes served by such programs may fulfill the needs of the legally designated beneficiaries, their secondary consequences in the aggregate may adversely affect other components of society. Furthermore, under existing institutional arrangements, policy officials may often be denied the opportunity of allocating scarce resources to serve higher program priorities or of considering alternative approaches for problem solving in a different program context. A sound national land use policy supported by more effective regional or statewide land use planning programs could provide a constructive basis for shifting from the narrow restrictions imposed by categoric grants towards a more fiexible grant stucture. Under such an approach, greater discretion would be permitted to the states and local communities in the utilization of federal assistance.

The policy framework proposed in S. 3354 also would bring a greater degree of objectivity to the evaluative process of assessing proposed public and private decisions about land use development. In addition, it would create a more constructive basis upon which to build a body of criteria and assumptions that are reflective of a broader range of interests and values than is now afforded by specialized institutions engaged in the fragmented process of decision making about land use.

Implicit in this comprehensive approach to land use policy proposed by S. 3354 is the assumption that needed technical skills, methods of analysis and scientific knowledge are available for understanding the structure and dynamics of the social and economic environment in which growth and development occurs.

Unfortunately, the range and complexity of problems involved in the process of developing new concepts of land use planning and reconciling the widely divergent goals of constituencies concerned with resource development, require far greater substantive knowledge and a more sophisticated perspective than we are yet able to provide. At this point in time we possess only the rudimentary basis for developing the clarity and comprehensive overview needed to forecast the land use implications and interactions of changing population characteristics, economic and industrial development, urban and rural growth, or the environmental considerations that are relevant to a sound national land use policy.

The national resolve to formulate a sound national land use policy should be accompanied by a parallel recognition that substantial investment of additional resources must be devoted to the task of developing better factual data about land use and improving our scientific understanding of the interplay among social, economic and technological factors that determine regional and national growth patterns.

The program authorized by S. 3354 would provide constructive incentives for strengthening the scientific disciplines concerned with land use planning and improving the political mechanisms that manage regional and statewide growth. It thus represents an essential first step in our longer term objective of building a sounder and more objective basis for allocating public and private resources to developmental programs in a way that reflects a greater sensitivity to their consequences for society as a whole and their impact on the physical environment.

I hope these comments will prove useful in your deliberations.

Sincerely,

PHILIP HANDLER, *President.*

Senator JORDAN. Mr. Chairman, I would like to commend you on your leadership in this field and calling our attention to the needs of moving in this direction. We do live on a planet that is finite and definitely limited in its resources, yet our ability to expand our gross national product under the pressures of population growth has put a steadily increasing and sometimes conflicting demand on the natural resources of this planet. This legislation is therefore timely and properly directed to the problem immediately at hand and I commend you for it.

The CHAIRMAN. I want to thank my able colleague from Idaho, who has been so helpful on all of our legislation here, particularly in the area of the environment, and especially with respect to the bill that the President signed on January 1. I am most appreciative for his assistance and help.

The Chair is delighted to welcome to the committee once again the able Governor of Massachusetts, the Honorable Francis W. Sargent.

Governor Sargent comes to the committee with unique qualifications. The Chair had the opportunity of first meeting him when he served as the Executive Director of the Outdoor Recreation Resources Review Commission, where he did an outstanding job in a very difficult assignment. And prior to that he was commissioner of natural resources in Massachusetts. Then he was commissioner of public works, then Lieutenant Governor, and now Governor. And I must say that the committee is fortunate in having your testimony this morning, Governor Sargent, because you do come with outstanding experience at the State level, of great importance to the committee is your understanding of the problems of conservation and problems of the environment. We want to wish you a warm welcome.

You have a prepared statement, I believe, and you may proceed in your own way.

STATEMENT OF HON. FRANCIS W. SARGENT, GOVERNOR OF THE COMMONWEALTH OF MASSACHUSETTS

Governor SARGENT. I do have, Mr. Chairman, and I am very pleased and honored to be appearing before you and your committee, I might say that the woodsy and fishy background that I have that you mentioned, has been, I think, quite helpful in my new role as the Governor of our State.

I am very pleased today to be able to appear before your committee in behalf of the Nation's Governors.

When the National Governors' Conference Committee on Natural Resources and Environmental Management, of which I am a member, met with you, during the Washington meeting of the National Governors' Conference, you spoke with us concerning your bill S. 3354 which would provide financial assistance for statewide land use planning.

At that time, I indicated I would be glad to come to Washington to testify on what I consider to be a most urgent need.

Today, our concern for the environment is at a peak, and this is true across the entire Nation. Citizens are stirred by the threats to our health, safety, and esthetic surroundings posed by air and water pollution, urban sprawl, billboards, noise, overbuilding, and over-

crowding. If we are to extricate ourselves from this most urgent domestic crisis, we would do well to ask how we got into this situation in the first place. We don't have to look very far for the answer.

For decades we have been dealing with our environmental problems on a piecemeal basis. Haphazard development—an almost reckless pursuit of the goal of meeting present needs—has brought us serious trouble. We should have been thinking about the whole system, about the total environment, and about the problems created in one aspect of our surroundings by stopgap solutions in another.

We have used up available land in chunks, without thinking through the best possible method of insuring that the land would serve us properly. We should have realized that high-density housing and industry over wide areas would cause acute air pollution, that unlimited development along our riverbanks would bring water pollution, that if we failed to plan in a coordinated fashion we would find it difficult, and prohibitively expensive, to put things right.

Now the public has awakened, and some ask: Have we awakened too late? As a conservationist myself, I cannot take that viewpoint. I have great faith in our future, and in our ability to cope with its environmental challenges.

In order to do so, we need a total approach to environmental planning. We need land use planning which thinks ahead to the problems of both air and water pollution, noise pollution, solid waste disposal, esthetics, and the destruction of the human spirit that accompanies overcrowding and the lack of open space. If we are going to consider the whole man, then we must consider the whole environment.

Conservationists, and I have been one for more than 20 years, have worried about the wilderness too long, I think. We have concentrated on the mountain, the forest, the seashore—and properly we should, for these are the bedrock of our natural heritage.

We must now broaden our view and shift the emphasis, for more than 90 percent of our people in Massachusetts live in major metropolitan areas. Conservation, if it is to mean anything to most Americans, must be brought home to them where they live. We must take the tools of the conservationists and apply them to the problems of urban areas.

In this day and age, far more serious than whether we provide picnic tables for the forests and campsites, is the question of providing parks and playgrounds for the blighted areas in the cities of all of our States.

If we plan, if we study carefully all of the possibilities for our cities, if we sit down together—developer, conservationist, public official—in a spirit of cooperation and understanding, then our legacy to the coming generations can be a much brighter environment, a Nation where all residents can enjoy a healthy, decent environment, no matter where they may live.

Let us use the tools we have—cluster zoning to save our dwindling green spaces, high rise construction used sensibly to block the sprawl of development, and air rights development.

The 1970's represent our last chance to set aside the land we must have to pass on our national heritage to our children. We have begun to evidence our concern, and it comes none too soon.

What we are talking about here is not merely the existence of life—but the quality of that existence. The quality of our lives, and those of our children, will be directly proportional to the quality of our environment. What could be more precious? What then should demand our attention most urgently?

I know that every one of the Governors of the 50 States and Territories will enthusiastically endorse your proposal to provide Federal financial assistance for statewide land use planning. Questions of open space planning, recreational resource management and urban land use must be approached within a broad environmental context. There is need for better communication and policy coordination on a continuing basis and at the highest level of State government.

The process of long-range environment planning must be initially the setting of broad policy goals by each State. To this end in Massachusetts I have recommended establishment of an Environmental Quality Control Council, and under the modernization plan for our State government, a separate department for environmental affairs is established.

Next week I will introduce legislation before our State legislature to establish a state corporation to develop new communities and construct housing to replace units demolished as a result of land takings for public projects. An elaborate process of review will insure that the decisions of this corporation take environmental values fully into account.

I have recently called for a reordering of transportation priorities in Massachusetts. For too long our transportation policy has been to use Federal funds to increase the number of automobiles and acres of concrete in our urban areas without regard to the increase in air pollution and damage to our environment.

These are examples of what one State is doing, but it is by no means enough. Given the predicted pressures of population growth and subsequent development expansion, land use planning both public and private must be tempered with an urgency of purpose. If we do not act now, the opportunities which are currently available will not exist come the end of this decade.

Two forces are needed and I believe with Federal financial assistance the States can do both jobs. One is to acquire and preserve segments of open land for public purposes and enjoyment. The second is to promote rational development of the landscape for urban work and needs—housing, industry, service—without, and I emphasize that, without needless destruction of its environmental values.

As your chairman noted in introducing this draft legislation, it should be the basis for thorough discussion as to its details. It is very likely that the Commonwealth of Massachusetts at a later date will have certain specific suggestions for changes to meet our needs and governmental structure.

Mr. Chairman, that is the completion of my formal statement. If you have any questions, I would be very happy to answer them.

The CHAIRMAN. Thank you, Governor, for a very fine and a very helpful statement.

First, I want to compliment you on the action that you are taking in Massachusetts. Also I wish to note that a very important land use study is now under way in your state under the direction of Prof.

Carroll Wilson at MIT. Mike Telson, a graduate student, is active in this program. I believe he is here today. I want to say that this kind of leadership is very helpful to those of us who are trying to find some answers to the problems.

I take it that you would agree that we can achieve our economic goals and objectives and at the same time provide for quality life. Do you see any reason why this can't be done? We do have in this country 26 million poor people who are at the poverty level. There are those who go to the extreme of saying that we must stop all growth; in effect, no growth programs. To me this is inconsistent with the social, economic, and material requirements that are essential for those who are not as fortunate as some of the rest of us.

What is your comment on this?

Governor SARGENT. Well, in my view, Mr. Chairman, we must expand. We must provide better facilities for all people, rich and poor. This means, of course, additional transportation facilities. It means additional industry. It means additional shopping centers and housing. But my view is that you shouldn't say stop all development. Instead we should be sure that the development is being properly planned, and I think this has been the problem in America. We have not done that. We have let the developer do the planning for us and he hasn't in all instances had the vision that is necessary. He has lopped down the trees and he has flattened the hills and he hasn't paid attention to the watersheds and he has caused pollution and erosion of the land.

I think we have got to recognize that we are an expanding nation and an expanding economy and I think we can have the best of both worlds if we plan and if we start doing it now. But if we don't in the next few years, I shudder to think what the future of this country will be.

The CHAIRMAN. No one can deny, of course, that there are conflicts between development on the one hand and open spaces, opportunity for recreation, all of the things that help to improve the quality of life. The thing that has disturbed me and which led to the introduction of this legislation is the fact that in all 50 States, in virtually all 50, we do not have an adequate forum to adjudicate these conflicts. Would you agree in general terms that this is a major problem?

Governor SARGENT. Yes, I would. I think, Mr. Chairman, that many of the 50 State governments were really designed for an earlier generation, perhaps an earlier century. Today, speaking as a Governor, I am finding it more and more difficult to try to resolve some of these conflicts. For example, in our State we have at the present time over 300 separate State agencies and the vast majority of them report to no one but the Governor. Well, this is absurd and this is the same situation that we have in many of the States.

Now, we have gotten a reorganization plan through which will go into effect in 1971 that will provide for a cabinet arrangement of nine cabinet officers. One of them will have the specific responsibility for planning and for the wise use of the environment in our State. I think this is a real step forward. I think then it will be possible to control these things.

The CHAIRMAN. And through the decades, the various political entities have undertaken certain segments of this power structure to

exercise it in conflict with other governmental segments. My understanding is that there are about 60,000 governmental entities at the local level in the 50 States that have a hand in planning, land use planning, either directly or indirectly. In my State we have 2,000 subdivisions of the State of Washington that have a hand in land use planning of one form or another, zoning of all kinds. The burden of the effort here is to encourage the States to adapt statewide, regionwide land use planning authority. You will recall so well that out of our ORRRC report and findings came the Bureau of Outdoor Recreation and we required, as a condition, precedent to the obtaining of land and water grant-in-aid funds for the States and for the subdivisions of the States that each State establish a statewide recreation plan. Most States didn't have such a plan. The result is that all 50 States have that kind of plan today. The net effect is to make it possible to plan better for open spaces and for recreational opportunities.

I just wanted to say this is the thrust of our effort, and we will certainly welcome, as we go along, specific recommendations such as you indicated regarding the bill at hand.

Governor SARGENT. Mr. Chairman, in relation to the outdoor recreation plan of the States, before I joined ORRRC we had taken the initial step in Massachusetts of developing the statewide recreation plan. It was rudimentary, I would certainly agree, and the big problem we immediately found was that we had so many agencies involved and so many jealousies involved it was very difficult to develop the plan. But I think that the new Bureau of Outdoor Recreation has done a lot in terms of assisting the States in getting out of their parochial method of looking at State problems.

The CHAIRMAN. Well, of course, we condition those grants referring now to the land and water fund grants on the States adopting such legislation. Prior to that the States—the Governor tried but were not able to get statewide plans through, so the carrot and stick approach had to be used. And I take it that, speaking as you are for the Governors here this morning, and it has been my previous information, that most of the Governors have been trying to get various statewide or regionwide land use planning established authority set up, but they have run afoul of so many conflicting interests, governmental interests, in the State legislatures, that it has been virtually impossible to get meaningful statewide land use planning authority through.

Is this a fair statement?

Governor SARGENT. Yes, it is. I would just like to comment. I think one section of your bill refers to certain penalties and to certain support that the States would get and I think that the carrot and stick approach is a proper one. Being a Governor I would prefer more carrots and less sticks, perhaps.

The CHAIRMAN. As long as the carrot is able to bring forth the objective, we would be glad to lay aside the stick.

Governor SARGENT. I think you can't avoid the stick. I think the stick has to be available.

The CHAIRMAN. It is a question of how much.

Governor SARGENT. Yes; that is right.

The CHAIRMAN. Thank you very much.

Senator Jordan?

Senator JORDAN. Thank you, Mr. Chairman.

Governor, I want to commend you on a very fine statement and express my appreciation for the fact that the Governors' conference is directing their attention to this very real problem. Demographers tell us that by the turn of the century, in about 30 years, we can expect another hundred million people in the United States. Our inventory shows now that about 70 percent of the people live on 1 percent of the land, and if we extrapolate that new 100 million on that same ratio, it means that they are either going to move into presently overcrowded cities or we are going to have to build new cities. I know in your statement you give a little attention to the fact that you are going to call for a commission to look into the prospects of building wholly new cities in your State.

I personally think this is the direction we have got to move in. Will you expand that a little bit? What is your—Will you comment on that? How do you feel about that?

Governor SARGENT. I would like to, Senator. I think one of the difficulties has been in the East. Now, I can't speak for your State, for example, but I think that the thrust in recent years in the effort to make more land available has been toward zoning. It looked like a panacea but it isn't. Take half acre zoning, for instance. What it means is that you have a half an acre and a house and half an acre and a house, and spread it all over the countryside, and really don't plan it properly. I think now in retrospect it would have been better if we had clustered the housing in certain instances and then saved a band of green area around it, with the streams and other features.

So we are proposing an arrangement whereby the cities and towns will have the opportunity and the financing with State guarantee of funding to build new communities.

Now, this is quite a departure. I don't expect that new communities will spring up overnight. But I think where it has been done in various parts of the world it has been most successful and this was because the planning was done properly. I think we can see so many instances, particularly in the heavy populated Northwest where we have just done it wrong by letting the developer do the planning for us rather than the people doing the planning.

Senator JORDAN. Have you been to Reston or Columbia, these new towns?

Governor SARGENT. I haven't been. I saw Reston when it was first being set up and I know it was a very interesting plan and I don't know just how it has worked out.

Senator JORDAN. Well, I hope you take the time on one of your trips to get out there. I am sold on Reston. We keep a place out there where we escape weekends, at least, and sometimes in between, and that represents to me the finest example I know of what you are talking about. Concentrating the living area in order to leave open spaces that are usable for playgrounds, for green areas and for a lake, and so on. So I think this is a real challenge to meet this burgeoning population which is going to be with us. Whether we like it or not, it is coming and it is going to take State planning and coordinating to move to meet the problem that is bound to come and time is not going to wait for us in this matter. Time is not going to stand still while we get the thing going.

It is all together too short now to get to planning from a central agency.

I appreciate your contribution.

Governor SARGENT. Thank you, Senator.

Senator CHURCH (now presiding). Governor, is it your opinion that the problems of increasing congestion and pollution are combining to bring about a change in attitude in this country toward planning? Ten years ago Government planning was thought to be contrary to the cardinal principle of free enterprise and men who sought public office were given to decrying and condemning planning, and associating it with socialist States.

Do you think that attitude has finally begun to change in this country?

Governor SARGENT. I do, Senator. I believe that as you do. A number of years ago planning was a dirty word and you weren't supposed to use it. It was the wrong thing to do. And I have a number of scars on my back as a result of having recommended planning in the past. But I think today that people recognize that we have made a mess of things, that we have made a mess of the face of America in many areas, and I think that even the strongest advocate of "I want to be able to do what I want to with my own land" will agree that when the other guy next door makes a mess of his land, it adversely affects his, and therefore there should be some method of controlling it. But there also has got to be I think the opportunity for the voice of the citizens in the decisions that are made.

I can use an example if I may.

Senator CHURCH. Yes.

Governor SARGENT. Your committee endorsed a few years ago the establishment of the Cape Cod National Seashore, and I think through the efforts of your committee it has become a very remarkable thing in our State. I believe I was the first public official to come out for it. The minute I did, I really caught it on the chin from the real estate interests and the lumber yards and the various people in industry. But I think they are the first people today who would tell you that indeed this was one of the finest things that could have been done in that section of our State, that it is important for everyone, not merely the people living there, but for future generations. I think this is part of what you are really talking about in relation to planning for future generations.

Senator CHURCH. In your testimony, Governor, you mentioned the statewide plan that you were soon going to introduce in your own State legislature. Could you tell us something about that plan, particularly with regard to how the plan will be implemented? In other words, I think the record should show here something of a—some detail concerning a State plan that is now in the process of being formed, because the end objective of this bill is to give States financial assistance that formulate such plans.

Traditionally the only way you could implement a plan that has to do with land use is through zoning regulations and these have been—where they have been adopted at all, they have been local in character, usually confined to the corporate limits of some municipality.

Now, how will your plan deal with this problem and what method of enforcement will there be to make sure that it is not simply an idle vision but actually a real effective ongoing program with teeth in it?

Governor SARGENT. One of the first fundamentals as I view it is that State government has got to get itself in a condition to be able to handle this new challenge and this new responsibility, and I think most State governments, mine included, are not really in a position to do the thing with real sophistication because they are so fragmented. As I mentioned earlier, in our State at the present time we have over 300 separate agencies of State government that supposedly report directly to the Governor and it doesn't work and we have now changed things around and there will go into effect after the next election in 1971 a new cabinet arrangement.

Well, under the provisions of the cabinet there will be one cabinet officer who would be concerned with environmental affairs and with overall planning. I think this is necessary. You have to do that in order to get everything pulled together.

A few years ago we set up an outdoor recreation plan and there have been certain plans for development but they have never all been put together into one logical plan that looks ahead 10 years or 20 years ahead.

Senator CHURCH. Suppose that is done as you intend it to be done and a master plan is finally devised. How do you then proceed to get anyone to pay any attentiton to it?

Governor SARGENT. This is a problem and I don't know what the precise answer is. I think it would call for a more sophisticated and better informed public, for one thing. I think you can have plans and they frequently are tossed to one side. The matter of enforcing regulations, if you want to call them that, has to be handled in a very gingerly way. I don't know just how that best should be done. But I think there has to be considerable power in the hands of that leader in State government who can provide the necessary leadership. But I don't know what can be done in a punitive way to those communities that don't want to comply. I don't believe we are in a sophisticated enough State to require all of the things that we desire to have done.

Senator CHURCH. I think this goes really to the heart of the question with which this legislation is concerned. I know we are just at the threshold of a whole new endeavor on the part of Government, but traditionally even municipal government has been timid in establishing and enforcing zoning regulations, and our cities have largely been designed and built by realtors.

Governor SARGENT. Right.

Senator CHURCH. It is difficult for me to conceive that they will give up easily their right to build as they please, and where they please, or for that matter, will industry concede readily to zoning controls? It seems to me that the planning will be meaningless unless it is accompanied by appropriate and effective methods for enforcement and implementation.

Governor SARGENT. Yes. I think that we have come a long way over the past 10 years. I can remember 10 years ago when various communities, both large and small, in New England, would just resist terrifically anything to do with zoning or planning. Now more and more communities have adopted them but they do have appeal

provisions, so that an aggrieved developer can present his case to an appeal board, and there are certain exemptions that are thereby worked out.

We have just passed in our State a bill that was called "antisnob" zoning which would require that communities could zone if they wanted to but they must at the same time have a certain proportion of their town set aside where low-income housing would be made available, but then the question of how rigorous the enforcement of this should be has been fairly nebulous so far.

The State has considerable authority. How rigorously they should use that in the coming year I am not certain.

Senator CHURCH. You would agree, though, that this really is the key to whether or not we will have effective planning, or whether we will just be talking a good case and actually doing nothing about it. I can't conceive that this kind of overall planning can achieve the desired result if we are going to rely on the assumption that everyone will voluntarily conform.

Governor SARGENT. I am sure they won't but I think it is a gradual process and it is a matter of shifting public opinion and I think the things that are to be done by means of zoning and planning now would have been unheard of 10 or 20 years ago. I wish there were a panacea that we could put into effect next week, but I don't believe that the people are ready for very sharp teeth in the planning laws that you might adopt in the various States. I think there has to be some thrust, but it has got to be applied rather gradually. We are becoming more sophisticated and we are accepting more and more controls that were unheard of just a few years ago.

Senator CHURCH. Do you view this bill as a financial inducement to the States to proceed each in its different way toward formulating some kind of statewide plan on land uses, or do you see it as a method for establishing standards in the field that will be applicable to all States? In other words, the bill contains provisions for grants-in-aid to States that develop plans, establishes certain criteria and sets out a penalty provision if States do not develop plans that meet the criteria.

You have testified that you feel that the States would generally approve of the legislation. I would like to hear a little more from you concerning your conception of the bill. I think that this goes very much to the heart of how States will receive the legislation, what view they will take of it.

Governor SARGENT. Well, I can only speak as one Governor in this particular instance, although in my general statement I was speaking for the 50 governors.

I think that some of the States would not like the proposition of having the penalties, but I think there has got to be some sort of penalty here. If there isn't, it will be difficult to get some of the States to move. I think each State should play its part. Each State should be able to have a certain amount of individualism. For example, a national standard that might be appropriate in Idaho, or Wyoming might not be appropriate in Massachusetts. We should have in each State a good deal of the say, but I think the Federal Government should provide the leadership, provide the guidelines, provide the carrot, and provide some of the penalty but not too much of the penalty if the States fail to act.

I don't know whether that properly answers your question.

Senator CHURCH. Are you generally satisfied with the language of the bill as it now stands?

Governor SARGENT. Yes; I am. There might be specifics that will be developed throughout your hearings and if you have additional detailed questions that we could provide detailed answers to, we would be very happy to do this. I support and agree with the main thrust of the legislation but reserve my rights regarding certain particulars.

Senator CHURCH. Thank you very much, Governor.

Senator Fannin?

Senator FANNIN. Thank you, Mr. Chairman.

Governor, we are very pleased to have you with us here this morning. I am impressed with not only your statement but your answers to these questions and certainly commend you for your goals.

You talked about new cities. Our city of Phoenix is named after the bird that rose from the ashes and we have several cities now that are rising from the desert sands of our State and I imagine that you have heard about some of them. They are very successful.

We have both retirement cities and also cities that are becoming industrialized, and I hope that in your studies your people will have a chance to visit some of these cities to see the planning that is going forward. Many national concerns are involved in these developments, and I know we would be pleased to counsel with you in regard to their planning.

When we are talking about land utilization, we have to do a little dreaming, think of new concepts. We continuously are thinking about our utility policy, electric and telephone, that they should go underground because of the landscape. We also have a problem in our cities, with the overcrowding of our airways and highways due to the transportation of commodities.

I know that since 1902 there have been studies going forward on handling much of our transportation problem underground. In other words, in the cities with subways, and then, too, cross-country highways.

That might sound a little strange but I know that studies have been made to use a system similar to what they do in the department stores where they have these tubular devices and send the money to the cashier from the different departments, and now in manufacturing plants they are carrying parts throughout the plants on that basis.

With the great array of talent here today I wish they would just think about the possibility of going underground with much of our transportation. We do not have inclement weather to contend with. We can go on a straight line. We can carry merchandise, even the potentiality of passenger travel some day underground. I don't think it is really too much of a dream to look forward to something of that nature.

I wonder if you have any comments in that regard.

Governor SARGENT. Well, I am interested in your observations, Senator Fannin. Your State and mine, of course, are quite dissimilar, but in relation, for instance, to the transportation situation you men-

tioned, we have similar ideas, just within the past month I have put a halt to large segments of our Interstate Highway System that would go through some of our older cities; namely Boston, Cambridge, in that general complex.

I think that we have been placing too much emphasis on highway use, we have completely ignored and forgotten the matter of rapid transit in and out of cities which is probably a much better way of taking care of large numbers of people without polluting the air, without tearing down the cities. I think we should be doing much more in terms of modern rail transportation. What has happened to the rail transportation in America is almost a disgrace when you see what is happening in other parts of the world. We have overemphasized highways. So that I would tend to agree with you that we should be exploring the new techniques that are now becoming available and emerging for mass transportation.

Senator FANNIN. When we are talking about rail transportation and moving of products, just think about the fantastic amount of liquid petroleum products that are now moved through pipelines on railway right of ways and that have reduced the number of cars that are necessary—number of engines necessary and, of course, pollution of the air.

We can realize the advantages that could accrue if we could devise a system of going underground. We do get away from so many problems, and you do not have the problem of tunneling that many people consider. We have hundreds, perhaps several thousand miles of tunneling in my State of Arizona. They are all involved in the mines of our State, although we do have tunnels in areas where we are going down to a river—2 miles where travel is on a simple basis of what could be a very difficult task. So I trust that some of the people with great expertise in many fields of scientific endeavor that are with us here today will consider the potentiality in this regard. So when we talk about land utilization, we could plan a way of having just our commodity traffic taken care of. We know that we can't go to the air with all that merchandise, because the airways are already overcrowded, that one of our great problems is getting in and out of airports.

So I just have that thought in mind and I know that they may seem farfetched but many of the programs that seemed farfetched 2 years ago are realities today.

Governor SARGENT. I would agree with you, Senator. Although I went to MIT, I would hesitate to comment on some of the more advanced possibilities that there are for transportation which I presume you might be hearing from experts in that field. But it seems to me we just can't continue to have 8 and 10 and 12 lanes of concrete tearing into cities, bringing in more cars and polluting the air. And there is nowhere to put them once you do get them in there.

I don't think this problem is unique to the heavily populated Northeast. This is happening in all the cities, now, of America. We have got to have a balanced transportation system in the future and I would agree with you.

Senator FANNIN. I certainly realize that we have many, many problems before us that will have to be solved because naturally title to the land—there are so many other areas that require consideration

that I just throw this out as one thought that might offer a great possibility.

I certainly thank you.

Senator CHURCH. Senator Gravel.

Senator GRAVEL. Thank you very much.

Governor, it is a pleasure seeing you again. As you know, I consider you a very personal friend. I think you are doing a fine job in Massachusetts.

Governor SARGENT. We are sorry you left our State, Senator.

Senator GRAVEL. The competition was probably a little keen in the area I was interested in.

Governor SARGENT. We never have a shortage of candidates.

Senator GRAVEL. We have the same situation in Alaska, I am afraid.

First I would like to make a statement. For the record, I think that our planet is now being encapsulated technologically and now affords us the opportunity to turn inward and clean up the domestic demands made of the planet.

I want to commend the chairman in his absence for the foresight and leadership of this particular bill because without it we can't properly or effectively implement the delineating factors to proceed in this area.

With that I just want to, with the permission of the chairman announce my cosponsorship of this legislation.

Let me say, however, that you certainly have a feel and it is evidenced by the fact that you are representing the rest of the Governors of this Nation, and the question may have been asked before by Senator Church in my absence, if so, I apologize for the redundancy, but do you feel that from the discussions that you have had in the Governors' conferences that this type of going slow legislation, if you can characterize it that way, will catalyze the necessary governmental bodies to begin implementing programs?

Governor SARGENT. I think I can speak for all the Governors by saying that they would agree wholeheartedly with the main thrust of the legislation, the purpose of the legislation. I think that some of the Governors might be concerned and might want to comment on section 406 which relates to certain penalties. I think that some of the States might be a little uneasy about penalties.

In my personal view, there must be some stick as well as carrot, as I have said earlier in the hearing.

Senator GRAVEL. I want to associate myself with Senator Church's view that it may be wishful thinking and sometimes government systems don't react as rapidly as we would hope and I think in that light that this is a good first step.

I would like to ask you a question and at the same time pose it as what I would hope would not be a pitfall and that is, that we first became acquainted at a regional conference and I am very fond of the regional concept as an operating vehicle for governments to participate in the sense that they follow guidelines, parameters of economic rather than the artificial political boundaries. Has there been any thought at your Governors' conferences or at your regional conferences, particularly in New England, where this planning would transcend the bare political subdivision of a State because the plan-

ning has probably greater appliance on the socioeconomic factors than it does on the political boundary factors?

First, has there been any discussion of this, and second, if there hasn't, I would hope in this regard you would show some leadership for it that I hope would permeate itself to other regions.

Governor SARGENT. I think, Senator Gravel, that the boundaries, those imaginary lines between communities, are becoming more foolish all the time in relation particularly to resource planning. Likewise I think that those boundary lines between States in many instances should be erased to a certain extent when you are considering resource planning. When you are considering the wise use of water, for example; or certainly the air that we are hearing so much about today—about the severe air pollution that we have. I think that the States must work together.

In the instance of New England, we have a unique arrangement in that the six New England Governors meet frequently. We are on a very close personal basis. We meet not only as members of the New England Governors' conference but we also meet as members of the New England regional commission.

Even though we are split evenly by party, I don't think there has ever been any partisanship at all that I know of between the Governors on the matters of regional interests and concern and I think this should be encouraged.

It seems to me in any talks I have had with the New England Governors and the other Governors, that they all recognize the importance today of planning and of planning for the future. In many instances there are logical groupings of States that can effectively work together in relation to planning.

Senator GRAVEL. Within the area of your expertise, based on past experience and also for the projection of the plans that will be evolving, has there been, and I hope there would be, consideration of utilizing the tools of Government more as leverage on the private sector, say, via incentives, tax benefits on State level, because the wealth that can be brought to bear in the solution-making process is so much larger in the private sector that it can be in the governmental sector, merely by adjusting the thrust of an act. Has there been any consideration of this?

Governor SARGENT. There has been. In our State we have certain tax incentive arrangements in relation to, for example, pollution clean up. In our State I have just recently proposed a $250 million bond issue; $50 million of that would be available to assist marginal industries, small industries that might cause a severe unemployment situation if they would be closed down. They are able under the terms of the bill that I have proposed to get long-term, low-interest loans if they are indeed marginal industries.

So that I would say that government should be using every means it can to have industry play its part, and I think in the past we didn't do that. I think industry now recognizes that they have got to be a full partner in wise resource management.

Senator GRAVEL. I was thinking a little broader than just industry. I was thinking more within the confines of the planning concepts of how you can get the money market to react, how you can get—in fact, as a land developer, I can say that the entrapment of the

committee in the errors that have been committed by your realtors has been because Government has not been there to establish the parameters within which to act, and I think that it is only the very, very large developers that have done some very significant projects. Particularly there have been some private successes in Sweden and in Norway that I think are absolutely outstanding and still have been private, not governmental.

Governor SARGENT. I think there are many instances today where some of the more sophisticated development firms have done remarkably well in relation to the wise use of the land and they have, as we were talking earlier, tended to cluster the development and preserve a green belt around it and to preserve the streams and lakes and build around them, and so on.

There are very few examples of it, but the examples that are available in some of the States are outstanding.

Senator GRAVEL. If I could just cite one example that occurred in Alaska. It may be occurring around the Nation, requiring that the power utilities be placed underground. I can recall when doing subdivision work that the cost of the cable was twice as much as overhead but as soon as you started to force the people to go underground, the cost of the cable came down because of the greater demand. This was a simple act of government which had reverberations throughout the entire economy and which permitted the economy to react in a beneficial way. I would just commend that course of action as one that has greater impact and probably more rapid solution. I think all of your views are certainly an encouragement to the goals that we are seeking.

Governor, I can't thank you enough for the wisdom and leadership you are bringing to all of these problems.

Governor SARGENT. Thank you very much.

Senator CHURCH. Senator Stevens.

Senator STEVENS. I will be happy to yield to Senator Burdick.

Senator CHURCH. Senator Burdick.

Senator BURDICK. I came in late and I have lost the thread of the testimony but I will assure the witness I will read his statement very carefully.

Governor SARGENT. Thank you.

Senator CHURCH. Senator Stevens.

Senator STEVENS. Thank you. Governor, I understand our Governor of Alaska has written in support of this bill. Have all of the 50 Governors supported this bill? Is this the position of the Governors' conference?

Governor SARGENT. I believe that all of the 50 governors having studied the bill in detail have supported the principle of it. We have talked at many Governors' conferences about the need for national leadership in terms of getting the States moving and more sophisticated planning. I believe that they would, as my statement indicates, support the general principle but they might have reservations about some of the details, and I would suggest, Mr. Chairman, that you might have the committee perhaps contact the 50 governors to get comments.

I have with me a member of the staff of the National Governors' Conference and I could say that the staff of the National Governors'

Conference would be glad to compile any information that might be useful to your committee.

Senator STEVENS. I think that would be useful. I recall the days when I was with the Interior Department, and we had what we called a shadow easement on the Potomac and on the important historical monuments here.

When I returned some years later I find that there are apartment houses that do in fact obliterate the view of the Potomac and now as you come down Constitution Avenue you see them starting to obliterate the view of the Capitol.

I wonder if there is any way that we can legislate to put the stick against the right people. It seems to me that as you mentioned, you would prefer the carrot on the governmental level. Don't you think the stick in this bill ought to be directed somehow toward those who once they acquire their own private property are not complying with the planning?

Governor SARGENT. I think we have instances where the stick has been applied to the private individual who has developed contrary to the overall plan of the town and he has gone to court and there have been actions and he had been held up.

There are instances of it and I think there will be more instances as the public demands more of each landowner to comply with the plans that are being developed for the neighborhood, for the community, and for the State.

Senator STEVENS. Just one last question. I know everyone is anxious to hear the other witnesses who are here but I come from an area, obviously an oil area now, where people are also attacking depletion allowance and yet I think of the depreciation deduction which is given to private investment, particularly in the real estate field, where you can in effect recover a value of a building three, four, any number of times simply by the mechanism of selling it to a new owner, and I wonder if the stick that is missing here isn't the right of the people who administer these plans to certify that private development should no longer get the right to deduct from income taxes depreciation or any concept of recovery of capital if they in fact do not comply with these plans once they are adopted?

I think the biggest stick that—the chairman I believe is legislating quite softly and I think we still have the big stick here in the taxation field which we ought to consider in requiring compliance because if we are going to cut off grants to the State—because someone is not complying with the plans, then we ought to find some way to cut off some benefits to those who cause the States to lose the grants. I would suggest as we are going along you might consider to give us suggestions along that line.

Governor SARGENT. That is an interesting approach which I hadn't really considered. I would be glad to look into this to see if there are any examples of such in my State.

Senator STEVENS. Thank you very much.

Thank you, Mr. Chairman.

Senator CHURCH. Thank you, Senator Stevens. I think it is fair to say that this bill provides money to assist States in working out plans, but it is left to the States to decide how these plans should be enforced. I wonder, Governor, if you have considered the possibility of amend-

ing your State tax laws so that an industry, for example, which is failing to meet the standards that the State imposes for clean water and clean air is given an inducement to comply.

Here again we get to the question not only of enforcement but also of inducement and certainly it is prudent Government policy to furnish inducement and obtain voluntary compliance as a result, and thus avoid the necessity of harsh enforcement measures wherever possible. And it occurred to me in the course of listening to some of the questions that have been asked here that it might be possible to furnish such an inducement to many polluting industries by providing that the cost of compliance be treated as an operating expense for income tax purposes rather than as a capital investment must be carried for a long time, and that this might be one of those carrots that could be written into State legislation which would tend to achieve a much higher level of voluntary compliance.

Governor SARGENT. In our State we have certain incentives that we are able to apply in relation to water pollution clean up, for example, and I think this is a good avenue to explore and to use insofar as possible, particularly where we have such a huge task as I see it in America now of trying to restore these rivers and streams to their natural state.

Senator CHURCH. Yes, and I think Senator Stevens has a very good point when he says the tax avenue might be the best, the most effective means that Government has at its disposal to secure the necessary cooperation from private industry and private landowners.

Governor SARGENT. Thank you, Mr. Chairman.

Senator BURDICK. Mr. Chairman——

Senator CHURCH. Senator Burdick.

Senator BURDICK. Listening to your testimony, a question arises in my mind that may not be serious, but the responsibility for this planning rests with the States. Does the Governors' Conference or you have any idea as to how to get cooperation between States? I can think of many States that are separated by a river and one State may have a very fine plan—State A may have a very fine plan for park development, et cetera, and right across this river State B would have an industrial complex of some kind.

How do we mesh the States together?

Governor SARGENT. Well, I think that is always very difficult and it certainly is difficult when you get into the area of water pollution on one river that flows through a number of States and it is always the guy upstream who is the culprit.

Senator BURDICK. This may not even be water pollution. This may just be differences in area.

Governor SARGENT. Exactly. We have an arrangement among the six New England States where we have surprisingly good agreement. I realize that there are potential conflicts that will come up but we have so far been able to work them out, and I think that the regional commissions are one of the vehicles.

I think the River Basin Commissions that are in existence have been a vehicle to resolve differences frequently.

I don't know what further I can say other than my experience is that we have been able to handle it fairly well in our area.

Senator BURDICK. We have commissions in water but we don't have them in land use, and it seems to me one State can go ahead and plan

the way it wanted, and the other State could plan the way it wanted, and there is nothing in the law here that suggests that the two States ought to consult from time to time.

Governor SARGENT. I think that would be a matter that would be well for your committee to consider. Perhaps it would be well to have some specific provision in there whereby the States must by a regional or other approach work together or if they don't, they would be deprived of certain Federal funds. This just occurs to me as a possibility.

Senator BURDICK. Thank you.

Governor SARGENT. I don't know the precise answer.

Senator BURDICK. It just occurred to me, too, that this problem could exist, maybe not in any great way but it could exist.

Senator CHURCH. We will look into that.

Governor SARGENT. Not only could but probably does and will.

Senator CHURCH. Governor, you have been very helpful in your testimony. We do appreciate it and thank you so much for being the lead-off witness for this bill which we hope will become a significant contribution to the whole problem of achieving a higher quality of our general environment.

Governor SARGENT. Mr. Chairman, thank you and the members of your committee for your patience. I appreciate being with you.

Senator CHURCH. Thank you, Governor, very much.

Our next witness is Prof. Lynton K. Caldwell, Department of Political Science of the University of Indiana. He is a consultant to the committee whom we shall be calling upon from time to time as we consider this legislation.

Professor Caldwell, we are happy to have you and I invite you to proceed with your testimony after which we will have questions.

STATEMENT OF PROF. LYNTON K. CALDWELL, DEPARTMENT OF POLITICAL SCIENCE, UNIVERSITY OF INDIANA, CONSULTANT TO THE COMMITTEE

Mr. CALDWELL. Senator Church, members of the committee, I have already filed with the committee a written statement regarding the importance and principle features of this legislation. My remarks this morning will therefore primarily highlight the main points of this testimony.

Following these remarks, I would like to illustrate the character of our national land use problems through a set of 11 transparent overlay maps prepared by several of the Federal agencies at the request of the committee. Mr. King and Mr. Miller of the committee staff will assist us in making this an expeditious presentation.

First, I would like to address my comments to the question: Why is a national land use policy needed?

We cannot safeguard the quality of American life or the soundness of the American economy without a comprehensive, coherent, and scientifically valid policy for land.

The bill under review is the most fundamental measure that could be taken to implement the National Environmental Policy Act of 1969.

The stability of natural resources based industries, and the future distribution of economic activities and of population require wise

land use decisions now if serious conflicts and costly error are to be avoided in the future.

We cannot cope effectively with our problem of land use at any level of government unless we deal with them, in their appropriate aspects, at all levels.

Land is still our basic resource; what happens to our air and water originates on the land. In our continental economy, land use decisions in any area may effect the public welfare and other land use decisions in other places. An airport displaced from the Everglades will seek another location; misplaced industrial development may destroy recreational assets; preemption of forest land for recreational or ecological purposes may displace forest industries and may increase the cost of timber.

Public jurisdiction over land use is divided among the three major levels of government—none have total jurisdiction. Failure of any level to participate in an effort to establish predictable national land use would defeat not only a nationwide effort, but very possibly efforts at the other levels.

My second question is what are the proper objectives of such a policy?

The guiding objective is to obtain a coherent and effective system for wise land use decisionmaking consistent with our constitutional system of Federal Government and with our tradition of democratic self-government.

This bill is consistent with the concept of "creative federalism"—with making our present constitutional system work under conditions of population explosion and the space age.

Since the settlement of the continent and its era of the land office and the Homestead Act, the Nation has not had a coherent land use policy. A consequence has been a large and growing series of conflicts over land use. A declared policy is required to provide a basis for public and private decisions throughout the Nation.

A second objective of this legislation, an indirect objective, to be sure, is to develop public attitudes, indeed a public conscience, toward the use of land that is appropriate to the real needs of our times and protective of our future health, happiness, and prosperity. These attitudes must be operational.

Our public attitudes have been molded by the long vanished experience of free land and the frontier—in the age of Spaceship Earth new assumptions are needed. Criteria for land use are needed that are ecologically valid, economically sound, and intelligible to ordinary people.

We cannot rely on individual self-interest, local community or corporate judgment for land use decisions in the public interest. New institutions are needed to enable our present institutions, enterprises, and governmental agencies to perform consistently with public interests.

The third question is how should Federal policy be implemented at Federal, State, and local levels? The bill moves in the direction that I feel we must take.

We must develop a national system—which is a coherent Federal-State-local system that will help us meet the land use problems of the present and future by:

(*a*) Establishing criteria for land use decisions.

(*b*) Informing us not only of how land is now being used, but also revealing trends and impending conflicts.

(*c*) Providing a nationwide forum for the responsible, timely, and democratic consideration of land use needs, priorities, and problems.

The act is not just one more Federal grant program. The Land-Use Planning Grants to the States are part of a larger pattern of policy development and administration. Ideally, the grant-in-aid feature of the act should be related to other grants or spending programs affecting land use but the essential feature of this act is that it establishes a system.

And now with your indulgence I would like to ask Mr. King and Mr. Miller to present to the committee a series of overlay maps prepared at the request of the committee for this hearing.

The first of the overlay maps describes Federal outlays by geographic location in the last fiscal year. This shows where the Federal dollar is going, at least in terms of the aggregate dollars to particular States.

One could then ask the question: How does this outflow of Federal money influence where people live and work and travel?

The second of the series of overlays begins a series on transportation. The overlay now being put over the other map shows the location of Federal airports. This map does not fully give the impact of the airports although it describes where they are. Of course, it is difficult to show the orders of magnitude. The small green squares show the larger airports but I still feel we do not get from the overlay the full magnitude of the concentrations in places like New York, Chicago, Washington, and Los Angeles.

The next overlay gives us the Interstate Highway System and you can recall the remarks just made by Governor Sargent about the problem that he has encountered in the State of Massachusetts with respect to this plan. As a matter of fact, we all well know that in recent months the public opposition to the routing of the interstate highways has stalled many projects in many parts of the country.

The third overlay describes our primary highway network. This now begins to develop a fairly complex system of transportation.

Now, it would be desirable if in addition to these overlays we had overlays showing the railroad network, and not only the airports but the principal airline corridors, and in addition to this, and I am reminded here of Senator Fannin's remarks about the underground transport, if we had a map showing energy flow, pipelines, powerlines, and power grids. If we had these we would even get a more dramatic picture of the way in which the whole transportation system interlaces the country into one vast continental economic unit.

We will now turn to another series of overlays describing the use of water resources. Here we find a different kind of pattern. The location of certain kinds of facilities, those particularly having to do with defense and water resources, tend to be generalized throughout the country. We do not have the heavy concentration in the urban areas that one would find in the case, for example, of transportation or the flow of energy. But the presence of these installations in various parts of the country has an impact upon the activities that these generate.

Here, for example, are the water resources development projects, and we can see that they are spread widely around the country.

Another difficulty with the overlay, which I bring to your attention, and I will have quite a comment on this at the end of our presentation, is that you don't get fully from this picture the importance of the resources development or of the intensity of its effect. I would suggest that if you looked at the map you might think, for example, that water resource projects in Arkansas, for instance, probably had greater impact and more importance than they have in Arizona; I believe the Senator from Arizona would feel as I do that the water resources projects no doubt are of much greater significance relative to the economy of the State of Arizona than they are, for example, in the State of Arkansas, as important as they may be to Arkansas.

The next overlay gives us major defense installations throughout the country. As we all know, these defense installations have a great many ramifying effects with respect to the use of land. We have not located our defense installations necessarily with regard to other land-use considerations. I am reminded of a point made in my prior presentation, writing to the committee, that one of the first problems we ran into with the ABM program was the objection of people in urban area to the siting of the missiles.

Now, this objection was somewhat complex. There were various issues involved, but one of them was simply a question of land-use conflict.

Now, I think we can move from these two types of Federal activities to look at the public lands distribution in the United States. It is important I think, to remember that almost one-third of the land in the United States is under Federal jurisdiction. It is a part of the public domain or it is administered by various Federal agencies.

And here we have in effect one-third of the land of the Nation for which the Federal Government has not only primary but almost exclusive repsonsibility, with respect to the opportunity for future use and development lies in the Federal jurisdiction.

We have received already and will continue to receive the task force reports of the Public Land Law Review Comission, which deal with the public land question, but I think it should be noted that whatever decisions are made with respect to public lands anywhere have great ramifications for privately owned lands, so that it is not adequate merely to consider the public land decisions solely as a public land question. They have far-reaching implications.

Now we can turn to those lands in which we have recreation facilities, in which through, in the first case, Federal action through our national park system, we have provided recreational and ecological amenities for the American people.

It might be pertinent to our consideration of this bill and to the action forcing provisons in it to note that almost without exception—there may be a few earlier exceptions, perhaps Yellowstone National Park was one—no national seashore area or monument has been established without local contention, and very often some of our national parks of which we are most proud today and the abolition of which would be bitterly fought in the communities in which they are established, were opposed by many people at the time they were established.

We now have the State park system. This gives us pretty nearly the complete picture at least of the outdoor recreation areas and

amenities. But you will note that the concentration of people which we will see in the next overlay is not where most of the recreation areas are.

This overlay shows population distribution, urban and rural, in the United States as of 1960. Well, of course, we have added a few million people and the intensity around the great metropolitan areas is greater as of 1970. But I think the contrast is striking between primarily where the recreation areas are and where the people are.

And now the final overlay will make this, I think, even more dramatic when it reveals where people are expected to be in the next decade. With the growth of the metropolitan areas and the urban fringe you see a spillover and sprawl into areas that even now are not well provided with recreational or other kinds of outdoor facilties.

Moreover, these maps give us in addition the notion of the complexity of the land use problem, and therefore I think dramatize the need for a system which includes the Federal Government, the States, perhaps regional areas and the localities. It also indicates the varied nature of this problem.

I am going to ask Mr. King and Mr. Miller if they will conclude now by putting up as many of these as they can for a final view, the final impact of this complex network of land use that on the one hand ties the country together as an economic, cultural communications unit, but on the other hand is productive of a great many bitter economic and social and political conflicts. And, Mr. Chairman, I might point out that not only do these conflicts arise where there are large concentrations of people, but note, for example, the southern tip of Florida, where we have the Everglades National Park, where an interstate highway is planned that actually presently cuts across part of that park and where, as we all know, there has just been a major controversy over the location of a jet airport.

Now, this is a relatively big cypress swamp, a relatively unpopulated area of Florida. If we can have this kind of conflict in that rather relatively lightly populated area, one can very well imagine the intensity of the conflict in those areas in which there are tremendous concentrations of land use, varieties of land use.

I think, Mr. Chairman, this is perhaps sufficient to present to the members of the committee some notion of the magnitude and complexity of this problem and why it is that an action forcing piece of legislation that creates a nationwide system is essential if we are to cope effectively with the problem.

Senator CHURCH. Thank you very much Professor Caldwell. I understand that the map overlays which you have shown us represent something of a first in pulling all of this information together, and that many of the Federal agencies who were contacted and whose cooperation was solicited first protested that this was quite an impossible undertaking. So we may have pulled together here in one place more information relating to parks, recreation, resource development, defense installations, the transportation system, the concentration of population, than ever has been projected on one map of the United States before. In fact, there is so much information there that the map itself almost disappears.

Mr. CALDWELL. Yes. Well, the very confusion of the map itself I think is instructive, but, Senator Church, I would suggest that we

need a good many more elements to be factored into this total land use equation, and this form of presentation, impressive as it is, fails to give us one very important element in there and that is the dynamism of the process. I would suggest that we now have techniques of computerization that could give this committee current information, accurate information as to developing trends, so that we can begin to be anticipatory instead of reacting in dealing with many of these problems.

And I would also suggest that this bill that is now under consideration does provide a facility within the Federal Government for the collection of data and information and for its exchange.

This is one of the valuable features I think of this total system that this bill undertakes to establish.

(Professor Caldwell's complete statement follows:)

A National Policy for Land

(Statement by Lynton K. Caldwell, Professor of Political Science, Indiana University)

The need for a national land use policy is painfully evident. Political and economic controversies over land use criss-cross the nation from Purdhoe Bay, Alaska to Biscayne Bay, Florida, from Machiasport, Maine to Woodside, California.

Public opposition to the first plans for siting anti-ballistic missles was partly a land-use controversy. Highway and airport construction projects have been in trouble because they preempt land that communities want for other purposes. In Boston and Philadelphia expansion of medical and research facilities and the rebuilding of depreciated urban areas have been stopped and delayed by bitter opposition from local residents who would be dispossessed by the changing use of land. There is hardly an acre of unoccupied land in the United States for which someone does not have plans—from which someone does not hope to turn a profit or to realize an ambition.

Unfortunately for our domestic peace and tranquillity, many people have plans for the same limited areas. The consequences of these crossed-purpose objectives have been expensive. Natural resources, human effort, and money have been needlessly wasted; disappointment, anger, and frustration have been widely experienced; the courts have been preoccupied with litigation that ought never to have occurred; and the time and energies of public officials has been taken up with mediating among conflicting interests instead of acting positively to advance the public welfare.

In addition, increasing population, affluence, and monetary inflation have been pushing the price of land to unprecedented heights. For example, the National Association of Home Builders reports that typical home sites in Boston have risen 147% in the last decade; percentage increases for the same period in Washington, D.C. are 113%, in Charlotte, North Carolina, 173%, in Dayton, Ohio, 115%, and in Lafayette, California, 119%. Headlines in the weekly news media carry such options as "Now: A Rush to Buy Land" or "The Coming Boom in Raw Land." The total market value of all taxable land in the United States, as appraised by local government, has been estimated to have more than doubled during the past decade. Not all of this increase in price is attributable to inadequate land-use planning. But some significant part of it does appear to be generated by speculative buying that forces land prices far beyond increases resulting from population pressure and economic growth.

Inflated land prices have led to disastrous results for the public welfare and individual investors in the past. Speculation fever places all unoccupied land in jeopardy of unwise and irresponsible development. The montary and political costs of protecting indispensable resources in farms, forest, range lands, mineral and aggregate deposits, wetlands, coasts, and urban open space are increased. Public works and public improvement efforts are not only made more costly but are increasingly promoted (or resisted) *not* because of their intrinsic need or merit, but because of their effect upon the profits to be realized from the sale of land. Although a few far-sighted or fortuitously situated land-owners may

individually benefit from the inflation of land prices, the vast majority of the people invariably lose. Not only does the public welfare suffer from the immediate chain reaction consequences of unnecessarily high prices for land, but it is also injured by loss of future opportunities needlessly foreclosed by short-range profit-taking decisions that ignore long-range economic, ecological, and social values.

It is clear, therefore, that the present chaotic treatment of our irreplaceable natural resuorces in land is bad public economics. It is also, and even more importantly, bad human ecology. Large-scale industrial and development projects tend to be economically and ecologically irreversible. Everywhere, but especially in areas near our greater urban centers, their location should be the result of careful, comprehensive multi-disciplinary planning. Unfortunately the criteria for site selection are usually restricted to the limited and relatively short-range interests of the buyer or developer. The cost factors considered seldom go beyond the relative monetary costs of developing the required acreage. The costs (and benefits) projected into the surrounding area are seldom honestly appraised.

It is easy to criticize the self-interested behavior of individuals and corporations that fail to consider the full range of consequencies of their land related actions. But we should also recognize that the individual, industry, developer, or government agency that is determining and influencing future land use in an area seldom finds any practical way of taking the broader and often more fundamental considerations into account. Without a comprehensive public system for ascertaining the effects of land use decisions and the varied needs, interests, and values of people in these decisions, it is unrealistic to expect better patterns of land use and development than those now prevailing. The destructive, unstable, and uneconomic tendencies of our current chaotic land use practices is the strongest possible argument for a better method of making land use decisions. The National Land Use Policy Act of 1970 is intended to provide a better method.

OBJECTIVES OF THE ACT

The purpose of the Act is to provide a system through which the American people can make wise land use decisions in their communities, through the State governments, and with the assistance of the Federal government. Under our federal system no single level of government can meet the land-use challenge alone. Primary responsibility for representing the public interest in land rests with the States. But the actual practice of land use planning and management traditionally has been delegated to local jurisdictions—city, town, and county. State and local land use decisions are powerfully affected by a wide range of Federal programs, policies and decisions. Federal action impinges in dozens of different ways on local land use, and experience shows that the Federal impact is too often unpredictable, contradictory, or indifferent in relation to local needs and interests.

The National Environmental Policy Act of 1969, signed by the President on January 1 of this year, provides a means for coordinating the environment-affecting decisions of the Federal agencies. It requires them to take into account the full range of relevant factors, ecological, esthetic, social, and economic, in planning their environment-affecting activities. It should result in much better land-use decisions at the Federal level. But some system is needed to relate these decisions to land use policy and planning at State and local levels. The National Land Use Policy Act of 1970 is, therefore, a logical and necessary complement to the National Environmental Policy Act of 1969.

Just as we cannot obtain responsible and effective land use at State and local levels without Federal cooperation, we cannot obtain wise land use decisions without means to insure that nationwide and regional interests will receive adequate consideration in State and local decision making. If we are realistic we will recognize the hard political fact that almost no major land use decision will please all of the parties concerned. The interests of particular individuals are not always consistent with the interests of society. The policies of a single state may not be consistent with the interests of its neighbors. Accommodation of competing interests is a basic function of politics; but the vital importance of land resources to our future welfare is an argument for the accommodation to be based on widely acknowledged and accepted principles that are ecologically and economically sound, and that optimize the accruing benefits over a broad range of individual preferences and public interests.

For example, Federal cooperation is essential to effective urban and regional planning. If Federal decisions regarding the location of highways, airports, mili-

tary installations or navigation projects are not shared with local authorities, local effort may be (and often has been) frustrated or undone by unforeseen Federal action. Numerous instances can be cited, of which the Everglades' jet port is a recent case-in-point. It is also true that nearly all of our major national parks and monuments were established over the highly vocal objections of certain local interests, often including representatives of State and local governments. In these cases the national interests out-weighed the local objections. Two hundred million Americans could never have had our magnificent system of national parks if land use decisions had been left solely to local judgment and initiative.

The proposed Act realistically takes account of the need for Federal-State-local cooperation in developing land use policies; it recognizes that this cooperation requires common, agreed upon standards or guidelines for decisions and for resolving inevitable differences. Section 401 of the Act, therefore, declares a nationwide policy for land and establishes criteria to guide the implementation of the Act at Federal, State, and local levels:

> It is a continuing responsibility of the Federal Government, consistent with the responsibility of State and local government for land-use planning and management, to undertake the development of a national policy, to be known as the national land-use policy, which shall incorporate ecological, environmental, esthetic, economic, social and other appropriate factors. Such policy shall serve as a guide in making specific decisions at the national level which affect the pattern of environmental, recreational and industrial growth and development on the Federal lands, and shall provide a framework for development of interstate, State, and local land-use policy.

ACHIEVING THE OBJECTIVES

The methods by which the objectives of the Act would be achieved are three. There is first a provision for Statewide Environmental, Recreational, and Industrial Land Use Planning Grants from the Federal government to the States. Second, a Federal coordinative agency is provided by the Land and Water Resources Planning Council (a reorganization of the present Water Resources Planning Council). An important new function of the Council would be to develop and maintain an information and data center covering all Federally initiated and assisted plans which involve any use of lands under State or Federal jurisdiction, which are of more than local significance. Third, the Act specifies guidelines and requirements to assure, so far as possible, that there be widespread and timely public participation in the planning process and that the individual States fully extend to their citizens the benefits and protections of the Act.

Long experience with Federal grants for nationwide objectives have made evident the necessity for action-forcing provisions where the concurrence of all States is necessary to the attainment of nationwide goals. Although the fifty States are equal juridical partners in the Union, they differ greatly in their readiness to cope with new and critical issues. Moreover, many land use and environmental policy problems cannot be fairly and effectively resolved without interstate cooperation. For example, if some States attempted to attract industrial development by permitting the developers to avoid paying the price of ecologically and socially sound land use, they would automatically penalize those States that had sought to protect their citizens and their resources through wiser control measures. Our legislation for air and water pollution control recognizes that the States cannot play an effective role in nationwide efforts if only some States play while others do not. The best friends of State government are those who recognize the need of States for help in tasks requiring mutual cooperation. On policy issues affecting the entire nation, action-forcing provisions in national laws are the realistic price that we must pay for a decentralized system of State-local planning and administration. The alternative would appear to be Federal centralization or new units of federally created regional government.

A NEW ETHIC FOR LAND?

A practical philosopher of American social attitudes, John Ise of Kansas, onee remarked that ". . . Americans are land value animals. For three hundred years they have been moving westward seeking titles to land they hoped would rise in value; for three hundred years they have been following the lure of the unearned increment, the beacon light of 'something for nothing' . . . ." Yet in the words of another American, James Russell Lowell: "New occasions teach new

duties, time makes ancient good uncouth." The attitudes and practices of frontier America could hardly be expected to serve the needs of today's complex, interdependent, and populous society.

The great majority of Americans now live in cities and own no land beyond a home site. But all Americans, rural, small town, and urban, have vital interests in how our limited supply of land is to be used. Very few can hope to benefit from speculation in the "good old American way." Very few can benefit from narrow-based and short-sighted land use decisions even when rationalized by alleged advantages for full employment, economic growth, and increased tax yields. Most of these advantages could be realized more substantially and without offsetting social and ecological costs, if the land use decisions were made in the context of over-all community and national welfare. It is time to put away our phychological coon-skin caps and flintlocks, and realistically face the real problems of the technological society that we have created. We need to question the maxims that too often substitute for clear visioned and pragmatic assessment of what is actually happening to the American land.

It is difficult to be ethical by ones self alone. Without the aid of social institutions few men know how to be moral. Liberty under law implies a society that protects and enlarges freedoms that could never exist under anarchy. Any American who fears his rights and freedoms threated by responsible, democratic, public planning should ask himself these questions: What are the real constraints upon my personal freedom to obtain secure predictable employment; to live unmolested in a neighborhood unthreatened by deterioration, invasion by incompatible activities, or exorbitant tax increases; to travel to work, school, worship, or recreation over safe uncongested streets; to have access to open skies, open beaches, woods, fields and uncluttered roadsides? Millions of Americans are today denied these freedoms by the unintended, inadvertent consequences of our planless patterns of land use. How free can we truly claim to be when we permit our past investments to be depreciated, our present life experience to be impaired, and our future opportunities to be jeopardized by failure to create institutions and procedures that could help to safeguard these values.

Today our civic institutions are being tried as severely as they have ever been in war or peace. In large numbers the new generation of youth is skeptical of the integrity of our government and dubious of its ability to cope with our national problems. Traditional slogans have little meaning for the youth, for theirs is a non-traditional world. More than their elders, they are tending to judge institutions and leaders by their actions rather than by their words. Having been convinced by parents, teachers, and events, of the great power of our technology and economic system they tend to see our ecological or environmental crisis as essentially a moral issue, or a crisis of the will. They have been taught to expect results and they are now demanding them in areas of life that their elders did not see as requiring public attention. The shaping of our nation's future through the transformation of its land is one of these areas that ever more urgently requires a new kind of public moral commitment. There is still enough wealth and technological capability to undo or repair some of the errors of the past. There is little doubt that the Nation has the material resources to cope effectively with its land use and environmental problems. The question is—Will it do so?

No man made the land and none will possess it beyond a lifetime. Land has been altered and, for his own purposes, improved by man; but it has also been misused. Not only Americans, but all men, in their own ultimate interest, must develop a land ethic that is consistent with our best knowledge of the natural world, including the full range of human needs in land and environment. The National Land Use Policy Act, as law, would be a major step toward the development of a popular land ethic, relevant to the circumstances of our time. The declaration and institutional arrangements provided under the Act are necessary concomitants to a new ethic for land. And a new ethic of respect for land, for the full range of human needs and values dependent upon land, would greatly ease the implementation of the Act. Thus the philosophical implications of the Act would make its application easier than might otherwise be expected for new public measures.

Let us, therefore, hope that the Congress will move ahead to consider, to strengthen (if necessary), and with the concurrence of the President, to pass this bill into law. It is hard to imagine a measure before this Congress of more fundamental and permanent significance. Here is an Act that, more than almost any other proposal now pending, would evidence the ability and intent of the Nation's

political leaders to deal realistically with our public problems. Let us hope that this opportunity will be vigorously pursued in the months ahead.

Senator CHURCH. With the permission of the committee, I would like to suggest that we proceed to call the panel of witnesses up so we can get into that phase of the presentation, and then I am sure there will be many opportunities to ask questions of the panel.

We would like very much Professor Caldwell, to have you stay on with the panel because I am sure that some of the questions will be addressed to you.

Our panel consists of Mr. Rex Allen, who is president of the American Institute of Architects, Mr. William Slayton, executive vice president of the American Institute of Architects, Mr. Carl Feiss, who is chairman of the Ad Hoc Committee on New Towns Legislation, American Institute of Architects, and Mr. Walter J. Monasch, president, American Institute of Planners, Mr. Thomas H. Roberts, executive director of the American Institute of Planners. Finally in the field of landscape architecture, Mr. Campbell E. Miller, president of the American Society of Landscape Architects, and Prof. Richard R. Wilkinson, chairman of the Department of Landscape Architecture, North Carolina State University.

Gentlemen, we are very pleased that you are all here and I suggest that we proceed with your presentation.

STATEMENT OF REX ALLEN, PRESIDENT, AMERICAN INSTITUTE OF ARCHITECTS; ACCOMPANIED BY WILLIAM L. SLAYTON, EXECUTIVE VICE PRESIDENT, AMERICAN INSTITUTE OF ARCHITECTS; CARL FEISS, CHAIRMAN OF THE SUBCOMMITTEE ON URBAN GROWTH POLICY LEGISLATION, AMERICAN INSTITUTE OF ARCHITECTS; WALTER J. MONASCH, PRESIDENT, AMERICAN INSTITUTE OF PLANNERS; THOMAS H. ROBERTS, EXECUTIVE DIRECTOR, AMERICAN INSTITUTE OF PLANNERS; CAMPBELL E. MILLER, PRESIDENT, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS; AND RICHARD R. WILKINSON, CHAIRMAN, DEPARTMENT OF LANDSCAPE ARCHITECTURE, NORTH CAROLINA STATE UNIVERSITY

Mr. SLAYTON. Thank you, Mr. Chairman. My name is William Slayton, executive vice president of the American Institute of Architects. The AIA is a professional society representing over 24,000 licensed architects.

Accompanying me are Mr. Rex Allen, president of the AIA and a distinguished architect from San Francisco, and Mr. Carl Feiss, chairman of the AIA subcommittee on Urban Growth Policy.

Mr. Allen will present our written testimony and Mr. Feiss will present slides on the subject of land use.

Senator CHURCH. Thank you.

Mr. ALLEN. Mr. Chairman, the American Institue of Architects welcomes this opportunity to present testimony on S. 3354, legislation to establish a national land use policy. For several years we have advocated the importance of a national land use policy and more specifically the importance of a national urban growth policy.

THE NEED FOR AN URBAN POLICY

The proposed legislation recognizes the importance of urban growth, but must go further if we are to deal with the question in a substantive way. The estimates of population growth over the next 30 years vary—the usual figure is that we shall have 100 million more Americans by the year 2000. We know also, that, in addition to population growth, a rising gross national product will bring increasing affluence. We know that the amount of urbanization per unit of population will be significantly greater than the present ratio. People will acquire more units of housing, will demand more space, and will consume more goods. This means we will urbanize the lands more rapidly than we have in the past, indeed, doubling existing urbanization by the year 2000.

If present trends continue, the population increase will take place almost exclusively on the periphery of our present urban centers. Thus, we can project metropolitan areas of considerable size—perhaps a size and configuration that makes them unmanageable, ugly, and unpleasant in which to live. We should address ourselves to ways in which population growth can be encouraged to take place in less populated areas. We should as a nation, also, be concerned with establishing mechanisms that lend to the creation of a good environment wherever urban growth takes place.

STATE DEVELOPMENT CORPORATIONS

One way to assist in organizing urban growth is through a new towns program as several European countries have done. We as a nation should address ourselves to creating those mechanisms that will make it possible to:

1. build what I call free-standing new towns, of considerable size;
2. encourage the planned expansion of smaller communities;
3. build satellite new communities on the periphery of existing metropolitan areas; and
4. control the growth or direct the growth that we know is bound to occur on the periphery of our metropolitan areas.

The National Committee on Urban Growth policy pointed out that, assuming a population increase in the next 30 years of 100 million people, the construction of 10 new cities of 1 million each and 100 new cities of 100,000 each could absorb only 20 percent of this population increase. Obviously, the construction of 110 new cities over a period of 30 years is a very ambitious program indeed.

The mechanisms to carry out such a program must of necessity be governmental. As Senator Jackson has pointed out, it is the State that controls the use and development of land except for those lands owned by the Federal Government. The role of the Federal Government, in addition to dealing with its own lands, should be that of encouraging the States to establish such mechanisms. That is not to say that the Federal Government should prescibe such tools; it can suggest, however, ways to foster a national growth policy.

What are some possible mechanisms that the State could establish for dealing effectively with the question of urban growth? One is to establish State-chartered urban development corporations to under-

take the development of free-standing new cities, the expansion of smaller communities, and the development of satellite new communities on the periphery of metropolitan areas. Such corporations would need public financing to acquire raw land, through the power of eminent domain if necessary, prepare the plan for the development of the area, install the necessary public facilities, roadways, and utilities. It would then sell or lease the land to private developers who would agree to cooperate with an overall development plan. No subsidy would be required in this operation; the only financial assistance necessary would be long-term financing. In fact, the developments ought to show a return on investment over the long pull. This has been the experience in Great Britain where the Government has lent money at prevailing interest rates to such development corporations for the construction of new towns. These new towns are now beginning to show a return on their investment.

The New York State Urban Development Corporation is the only such corporation we now have in the United States with this authority. The States need positive mechanisms to implement a statewide land-use plan.

It is not, however, as though we are not experienced in this kind of an operation in the United States. The operation of urban renewal projects is basically the same process as the one we have proposed. The major difference is that in urban renewal projects in inner cities, the price of land is high and a subsidy is necessary to pay for the demolition of the structures and the pricing of the land in order to make it attractive to private development. But the process of land acquisition, large area planning, and private development in accordance with the plan is one for which we now have considerable experience.

The Federal Government could assist in the establishment of these corporations by providing long-term financing either through direct Treasury loans or through Federal guarantee of bonds issued by such development corporations. Such development corporations can be of local character dealing with the expansion of a smaller city or they can be statewide as in the case of the New York State Urban Development Corporation.

STATE CAPITAL PROGRAMING

Another way to implement a statewide land-use plan is through the coordinated use of the State/public investment program to encourage economic development where the land-use plan calls for such development. The proposed legislation could state this more specifically than it does. States spend a good deal of money for public investment in such things as highways, hospitals, State office buildings, recreational space, branches of State universities, and so forth. However, no State has really coordinated its public investment program so that public improvements are built where the State has determined development should be encouraged. These public investment activities can have a considerable impact on encouraging development wherever they are placed. The legislation should give more specific recognition to the importance of State public investment programs and include a requirement that they be related to the implementation of State land-use plans.

GOVERNMENT ORGANIZATION IN METROPOLITAN AREAS

It is essential that development on the periphery of metropolitan areas be controlled or guided.

Here again it is necessary to rely upon the State to establish such a mechanism. We know that most of our urban growth will take place around existing metropolitan areas. There is no place in the United States where a mechanism has been established to deal with the proper development of these areas. It is true that we have metropolitan or regional planning committees, but these planning bodies are advisory only; they have no governmental constituency to which to report. Their effectiveness is based upon persuasion. Each local governmental jurisdiction within the metropolitan area exercises control over zoning and other mechanisms that determine the way its particular land will be developed. There is no mechanism for implementing a metropolitan-wide development plan.

We could shape the character of urban growth if we established a development plan and a metropolitan governmental agency with the authority over public investment within a metropolitan area to implement it. This agency should have control over the location of transportation systems—major highways and mass transit—the location of airports—the location of major utility lines, water and sewer, the acquisition of major open space, and major land use allocations for such things as housing and industry.

Development follows transportation routes and major water and sewer lines. It cannot take place on land designated as open space. We all know that industrial development springs up quickly around airports. With control over location of these major public investments, the development pattern of the metropolitan area could be guided. Federal legislation should provide the means to encourage this kind of control over metropolitan growth.

Where a metropolitan area encompasses more than one State, the problem is more complicated. We have had some experience in this regard however, in the New York City metropolitan area with the establishment of the Tristate Transportation Agency. Certainly we could encourage the establishment of similar interstate compacts to decide the location of those public investment activities within the metropolitan area that shape its future development.

CONCLUDING COMMENTS

In conclusion, we would like to comment on two specific aspects of the bill before this committee.

The bill calls for a land and water resources planning council composed of the Secretaries of the Interior; Agriculture; the Army; Health, Education, and Welfare; Transportation; Housing and Urban Development; and the Chairman of the Federal Power Commission. We believe that his council would not be effective in developing a national urban growth policy or in evaluating and coordinating administrative and statutory means for implementing such a policy. The members of the council have heavy day-to-day operational responsibilities, and consequently, must place a lower priority on the council's activities relative to their departmental responsibilities. The establishment and implementation of national urban growth

policy needs first priority attention of members of the council. To limit the proliferation of councils on various aspects of environment, we suggest that the Council on Environmental Quality be enlarged by two or four members and its scope be increased to include the development and monitoring of the national growth policy.

Secondly, the bill states that the national land use policy should "* * * facilitate increased coordination in the administration of Federal programs so as to encourage desirable patterns of environmental, recreational, and industrial land use planning * * *." As mentioned earlier a council of department heads is not a very strong policy and coordinative body; and, secondly, the Department of Interior, while clearly involved in natural resource problems does not have the scope of concern to coordinate a national growth policy. We believe that the job must be done in the executive branch and that the President should decide on how this can best be accomplished.

In summary, Mr. Chairman, the AIA supports the strengthening of State land use planning, but sees this as only one aspect of the greater problems of developing and implementing a national urban growth policy. The highest priority attention must be given to the problems of rapidly urbanizing metropolitan areas. Here reside the greatest opportunities to find answers to the questions of housing, employment, transportation, education, environmental amenity, and pollution. For most people this is where the action is and where the Nation is being challenged to create an environment that is attractive and socially just for all.

And now Carl Feiss will give you an insight into the opportunities we can realize with a national land use policy.

Senator CHURCH. Thank you very much.

Mr. FEISS. Mr. Chairman, members of the committee, I am Carl Feiss, chairman of the Subcommittee on Urban Growth Policy Legislation of the AIA and a private planning consultant.

The reason I am speaking personally here is that some 35 years ago I was a staff consultant to the National Resources Planning Commission and later as the planning director for the city and county of Denver and later a member of the Denver Planning Commission, and still later as the author of the 701 planning assistance program, the Housing Act of 1954.

I have had a continuing interest and involvement in National, State, and local planning and environmental problems.

The slides which we are showing to you now are examples of how urbanization is occurring in the country and of some of the well-known factors of environmental blight that are before us which your legislation will do much to correct.



Chicago, Air View, Northside, winter.

Urbanization as it has occurred in the United States is a dreadful treatment of our land mass. This picture—



Chicago, Air View, Northside, winter.

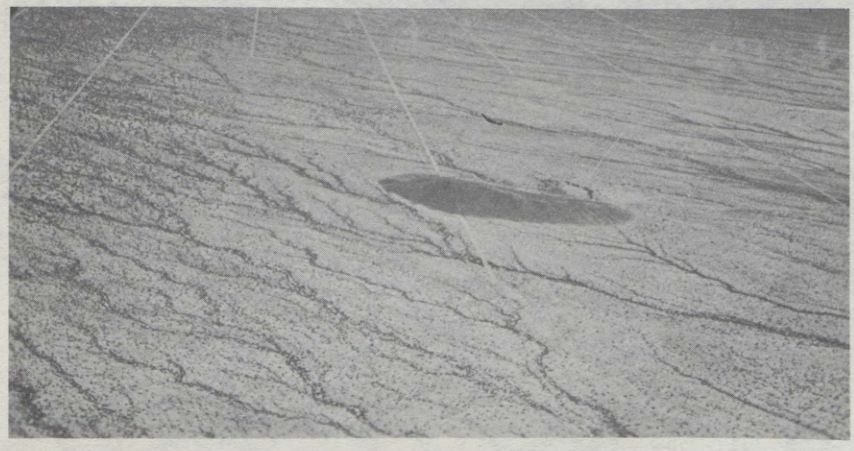
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Taken a couple of years ago while flying into O'Hare Airport, looking south over Chicago, is an example of the type of urbanization that has taken place in vast sections of this country. Unless we have some kind of direction and control over the use of land, it will continue as our population growth expands as Professor Caldwell explained in his very brilliant statement.



Tucson, Virgin Desert.

There are still large areas of open space and desert lands which are available for a wide variety of land-use purposes.



Tucson, Desert subdivision.

This picture, however, over Tucson, Ariz., illustrates what the bulldozer is doing to the desert by laying it out an infinite number of 1-mile squares for development—



Tucson, Desert subdivision.

Resulting in a high concentration of housing leaving little of the original natural resource and providing little of the amenities which comprehensive planning would provide.



Tucson, Rowhouses.

The top of the mountains in San Francisco—



San Francisco, Diamond Heights, from Red Rock Hill.

Provides an opportunity for the creeping blight of unplanned urbanization to occur on the hilltops and on the slopes adding to the problems of erosion. This continues as bit by bit the urbanization becomes more and more concentrated until—



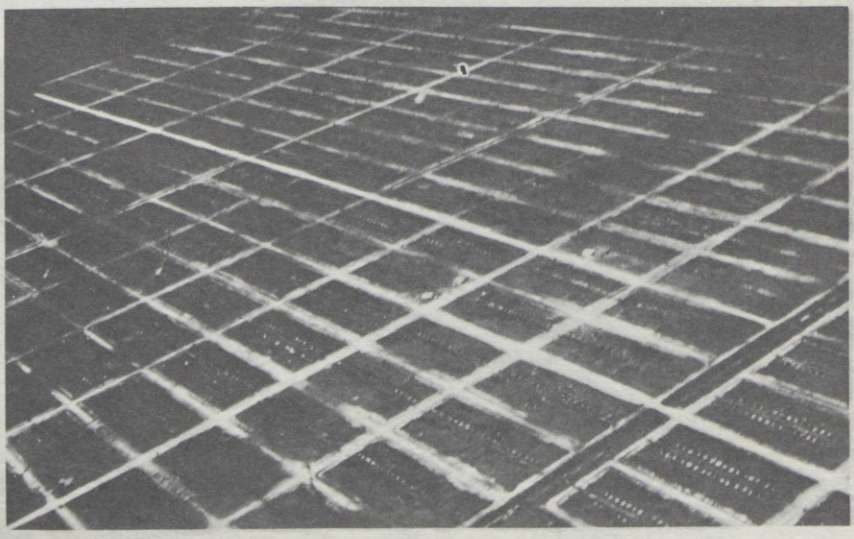
Oakland, Urbanization.

We get the total effect. This slide of Oakland shows almost 100-percent urbanization and loss of all or nearly all of the amenities that had originally existed there, again because of lack of some kind of urban, State and National land development policy.



Orlando, Fla., Central city.

As in Orlando, Fla., there is some recognition on the part of a locality of the amenities. This city has taken good advantage of a number of the lakes to be found throughout the city itself. Those of you know Orlando know it is a well managed and clean city. In the same State, however, only a few miles away, this type of development is occurring.



Daytona, subdivision grid.

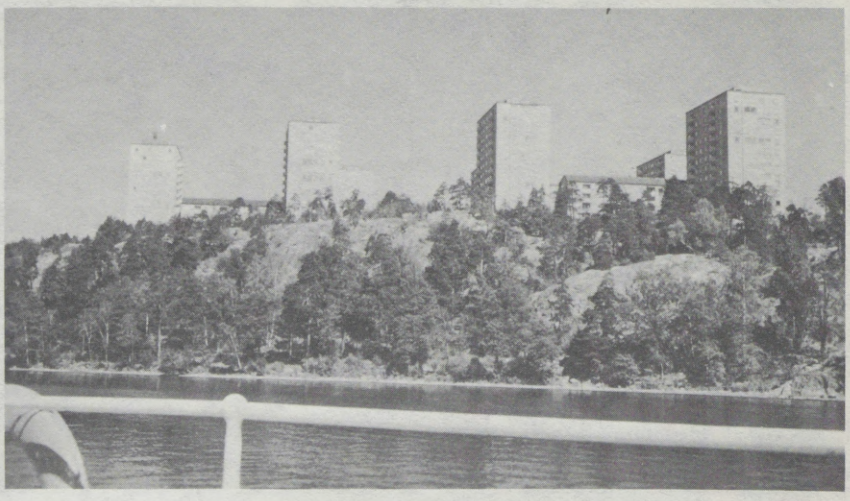
Hundreds of square miles have been subdivided irrevocably in land uses which can never be corrected because you could pull the State of Florida out from under the registered plats and they would still exist as a matter of law.

The next slides are a few examples of the advantages of advanced planning that have been tested in Great Britain, in the Netherlands, and in Scandinavia. This is a part of the city of Stockholm showing the use and retention of waterfront and the careful handling of highly concentrated population in relation to open spaces and water.



Stockholm, Housing across Lake Malaren.

The closeup of the same project shows the retention of topographic features and the natural features of the waterfront itself.

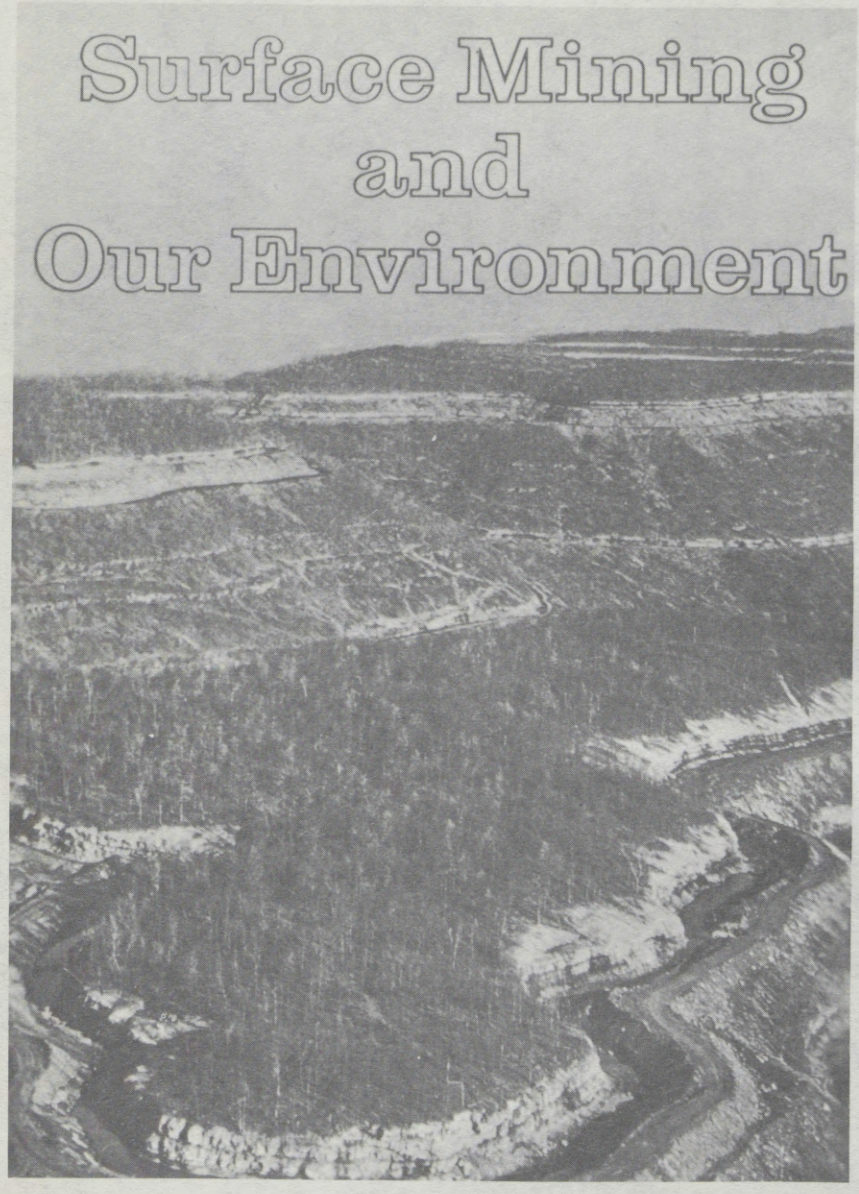


Stockholm, Detail.

In Tapiola, Finland, natural features and the amenities that people need are designed into the pattern of the city itself. Examples of quality urbanization while rare in the United States do occur in places like Reston, Va. Turning now to natural resources.



Tapiola, Finland.



Cover of national report.

This slide is the cover of a very important report prepared just 2 years ago by the Department of the Interior, the U.S. Geological Survey, on surface mining and our environment. I recommend it to those of you who have not had an opportunity to see it.



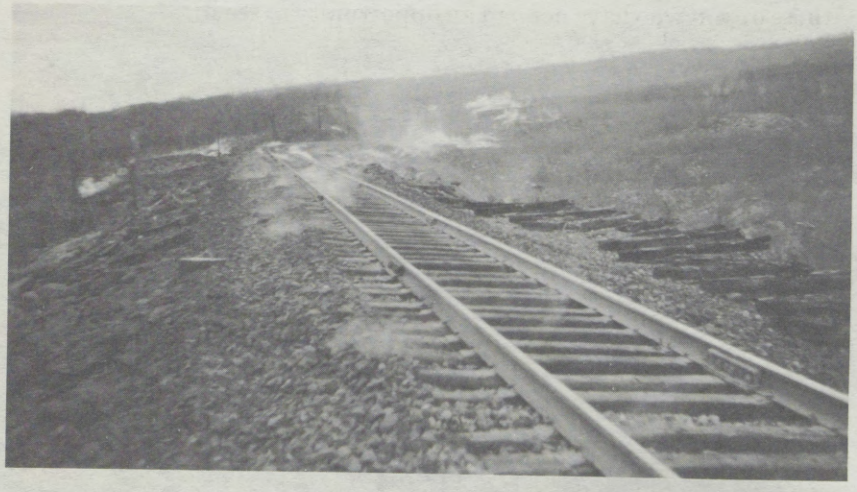
Unreclaimed coal lands—Tennessee.

Within this report there are many illustrations of the destruction of our natural resources and I am using this not to castigate the mining industry but as one example of uncontrolled and undirected industrial development.



Mine fire near Scranton.

Which has been polluting our streams, our air, and our land. This occurs largely because we do not have a national land use policy.



New Jersey Central Track—Scranton.

There are the burning mines at Scranton that are below the surface. Many millions of dollars are being spent to find methods of extinguishing these fires in the abandoned mine shafts.



TVA, Little Tennessee River, site of Timberlake new town.

In the TVA which is probably this Nation's oldest and largest Federal land use agency, many improvements have been made over a great many years in the handling of many aspects of environmental development and planning: Flood control, transportation, reforestation, recreation, and a multipurpose type of planning and programing. The TVA has recognized that it has been somewhat deficient in guiding urbanization. This slide shows the proposed new community town site, Timberlake, on the Little Tennessee River for which plans are presently being made. I had the honor of serving as planning consultant to the TVA on the design of this new community in which we hope to develop all of the amenities and advantages that some of our European counterparts have so successfully inserted in their planning.



Citrus groves, Orlando area (aerial view).

But in the State of Florida, for example, scattered urbanization is taking place, moving into the citrus groves. Next I want to illustrate.



Florida east central, natural district map.

The method that the planner uses today in approaching large scale land use problems.

We are still in a somewhat primitive stage of our understanding of how to develop land use plans and make them stick. My next illustrations are land use plans and slides from the east central Florida region which an associate of mine, Mr. Robert Anderson, of Chapel Hill, N.C., and I did 5 years ago. The east central Florida region is several thousand square miles larger than the State of Connecticut. You will notice in the center right, the Cape Kennedy area. The region has been divided into a series of natural geographic and ecological districts of which the St. Johns River is the major one running north-south through the center.



Pine Forests, Route 60, Indian River county.

These natural districts consist of a wide variety of ecological and natural advantages, and in some instances, disadvantages for the population growth——



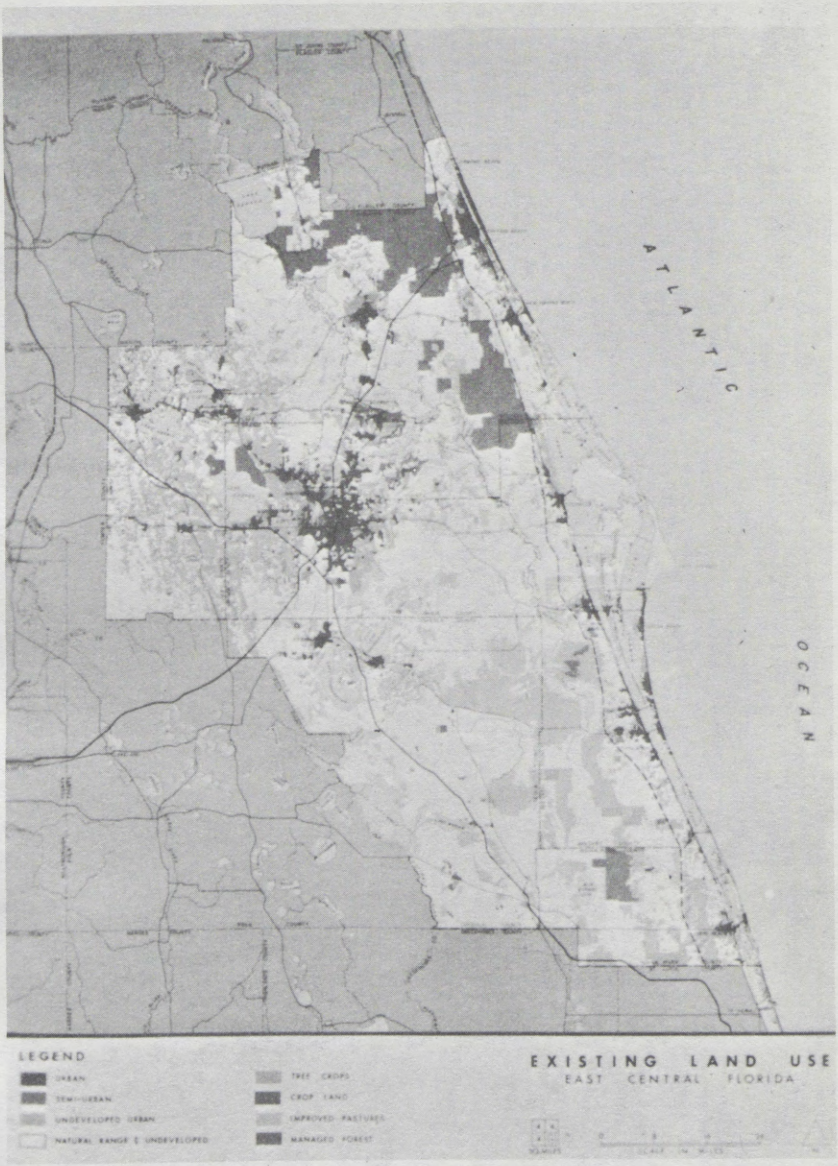
Florida, east central, old road lined with trees.

Which will double in this area within the next 30 years. The first Route 1, running north and south through Florida, was threatened with expansion not long ago but fortunately a group of conservationists fought and won the battle to preserve the trees on both sides of the highway. In a new Federal aid highway now under construction in the near vicinity, however——



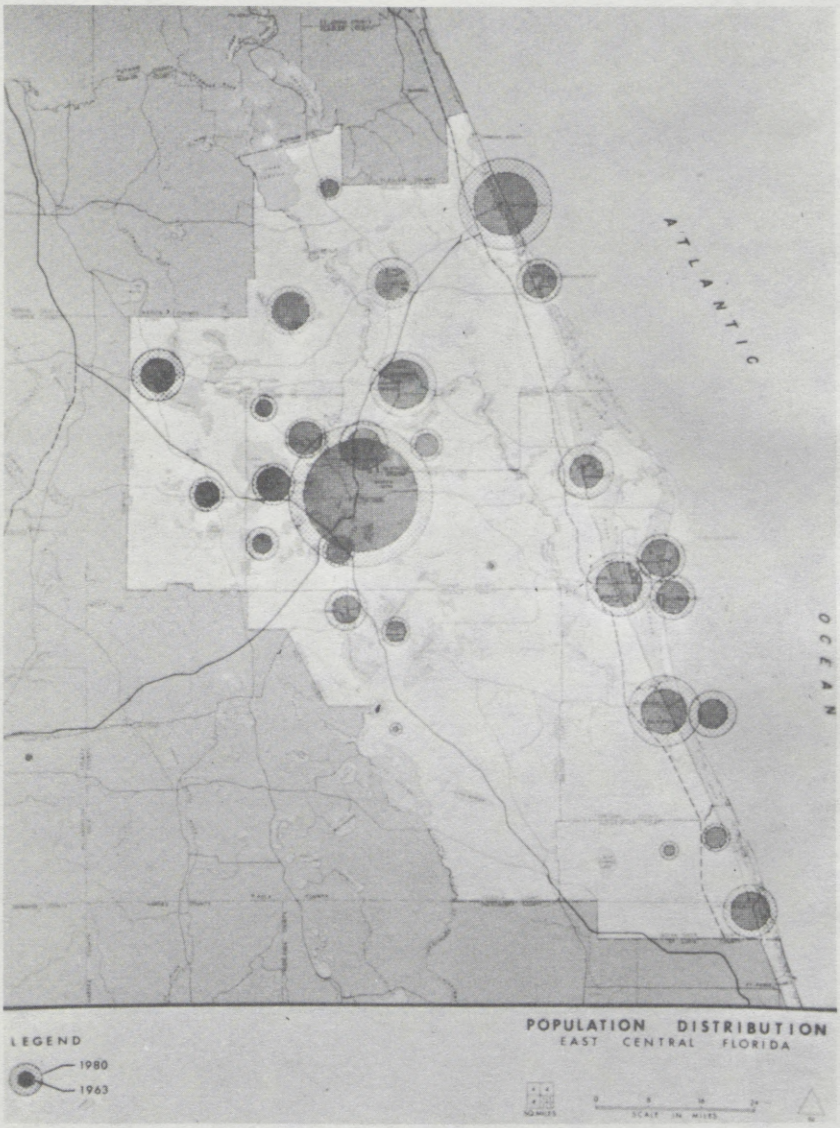
Sebastian Inlet road construction.

This particular type of landscaping or landscraping is going on. This is an example of the kind of downgrading that is occurring because of either ignorance or indifference to the natural features of our areas.



Map land use.

Existing land use in this region, as shown in this slide, is similar in nature, although on a somewhat smaller scale to Professor Caldwell's land use plans for the country as a whole, containing concentrations of residential and agricultural areas.

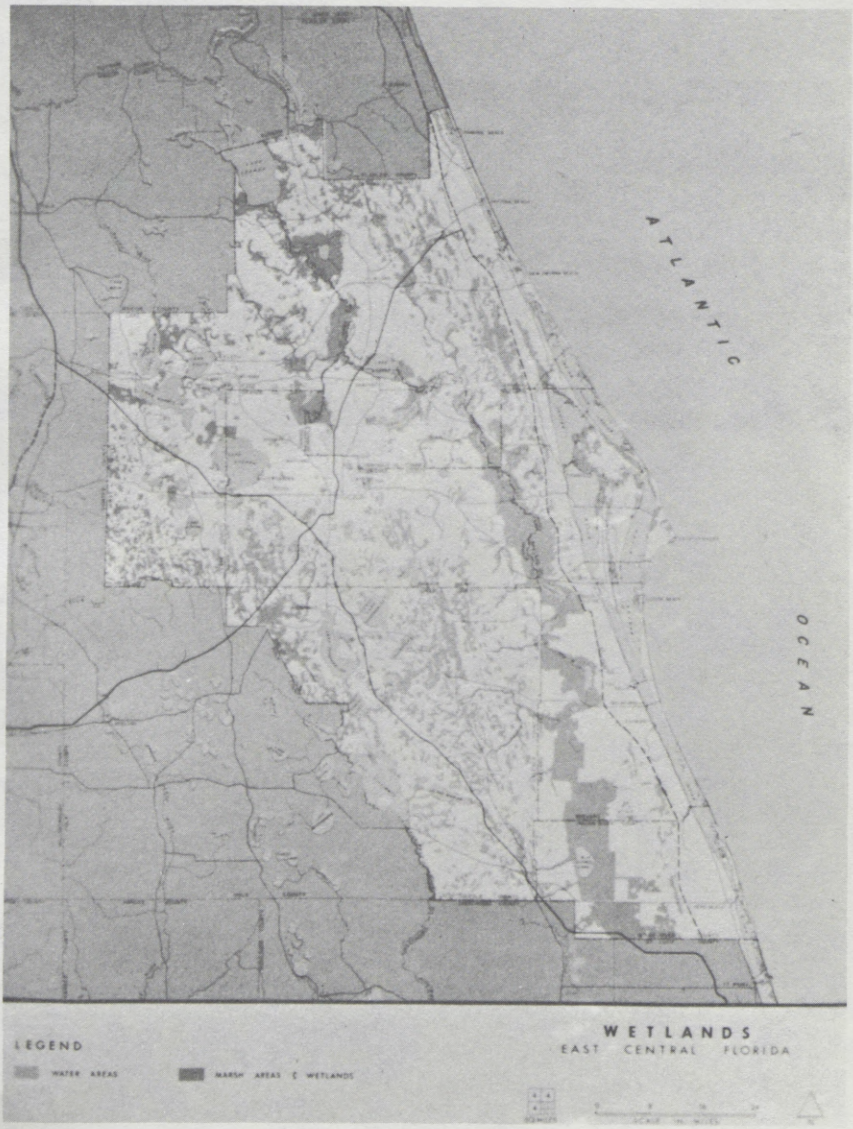


Map—population district.

The location and distribution of population. This reminds me, Professor Caldwell, of the difficulty of understanding the dynamics of growth at the national level. I am sure you remember the National Resources Committee report, "Our Cities, Their Role in the National Economy," which was prepared under President Hoover's aegis in

1937, and the other report of the National Resources Planning Boards. It would be interesting if you could compare at the same scale the population concentrations and other features of the 1960 reports with those of 30 years ago then with the 1970 census when it is available this coming year. You could get some idea of the sequence of what is happening in this country.

The gaps are large but still they could give us, and I hope that sometime they can be included in the records, an idea of what is happening and what has happened to the country in terms of magnitudes of growth and the locations of it.



Map—wetlands.

One of the things that planners must do is to make very thorough analysis of the natural features and relate them to urban growth, transportation, water supply, sewage disposal, and to a wide variety of other elements. Wet land studies are essential, particularly in a flat and very wet state like Florida.



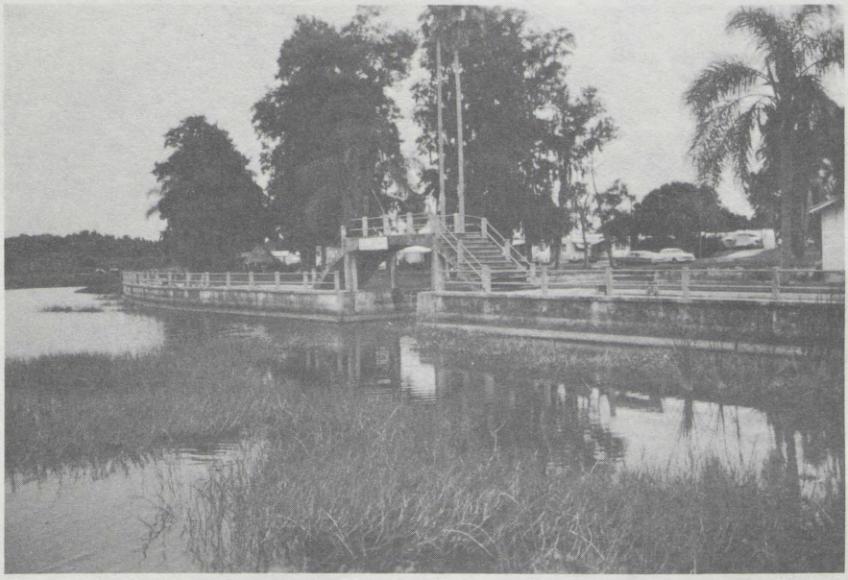
Indian River.

In these wet land studies we discovered much to our dismay that the St. Johns River which we had been recommending as a wild river, and which supplies water to a number of northern Florida cities, including Jacksonville, is already being polluted with salt water intrusion and also pollutants from paper mills and other sources.



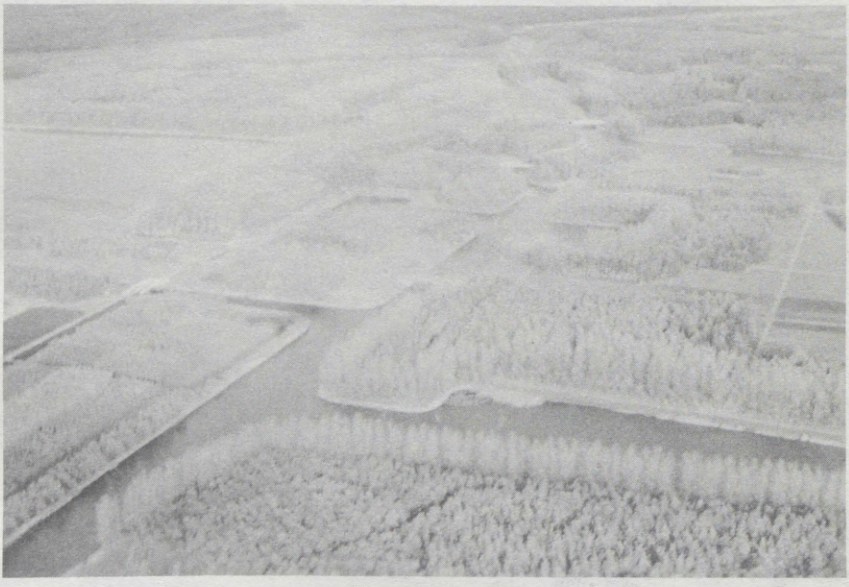
Lake Apopka silted up.

The Indian River, however, through which the intercoastal waterway runs and which separates the mainland of Florida from Cape Kennedy, is almost as polluted as Lake Erie. Although there are still some fish in the river, it is no longer safe to swim there and it is not desirable to go boating because of the smell. It is becoming rapidly a dead very large body of water. As the new castaways to Merritt Island and Cocoa Beach, and so forth, are thrown across this river, its opportunity to cleanse itself becomes smaller and smaller. These are good examples of a large-scale problem which we are facing in water bodies throughout the United States.



Holland—Amsterdam—Tree nursery and park.

Lake Apopka, which was a very large, beautiful lake in north central Florida, is now completely useless for water supply, recreation, and other uses. It is silted up, abandoned because the orange juice processing plants have used it for years as a place to pour the effluent from their plants. The biological contents of the water have destroyed it as a live body. There is now a multimillion dollar plan under way to drain this lake, scrape the bottom of the residum of many feet of deposit that has built up there over a number of years, and fill the lake again with fresh water. Then they must find a means of preventing this kind of pollution from occurring again. An expensive but essential operation.



East central Florida—Map, corridor development alternate.

In Holland they do it somewhat better. As you fly into Amsterdam, coming up from Paris, you will look right down on a perfectly beautiful nursery for trees and flowers. This is part of the park system, which is also a water purification and water storage area.

It is one of the popular recreation places in Holland and an example of what can be accomplished by trying to develop on a design planning basis.



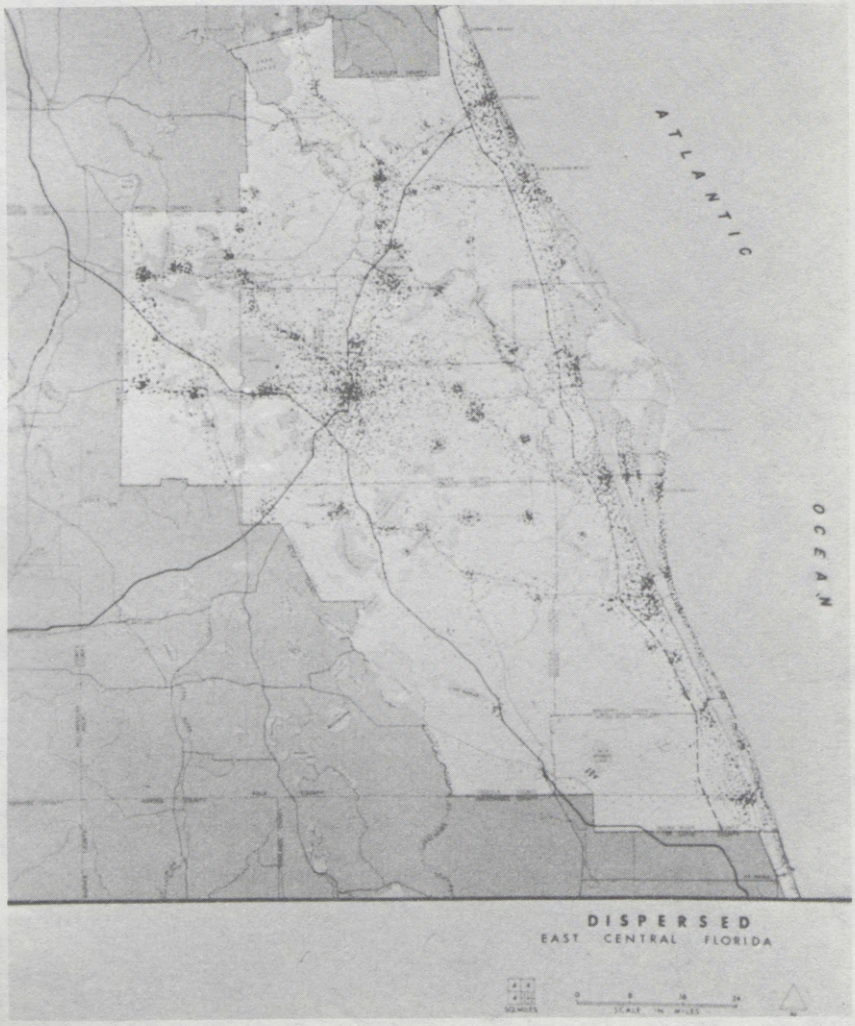
East central Florida—Map, dispersed.

In planning land uses for this country as a whole, or for any portion of it on a State-by-State or on a regional basis.

There are a number of interstate mechanisms that have been established of which the newest and, perhaps the most promising, are the interstate councils of government such as in Kentucky and Indiana, the Ohio Council of Government, Louisville, Jefferson County, and two counties in southern Indiana, Clark and Floyd Counties, and the Arkansas-Tennessee Council of Governments.

I have just completed a 5-year experimental work program for them concerning interstate cooperation on environmental and urbanization problems. I believe this experiment will succeed. Although it is early, it can and will be an important element in the national program.

In the planning and programing of a large scale development program for an area the size of the State of Connecticut in east central Florida, there are three major alternatives that are under consideration: one, a corridor form of urbanization——



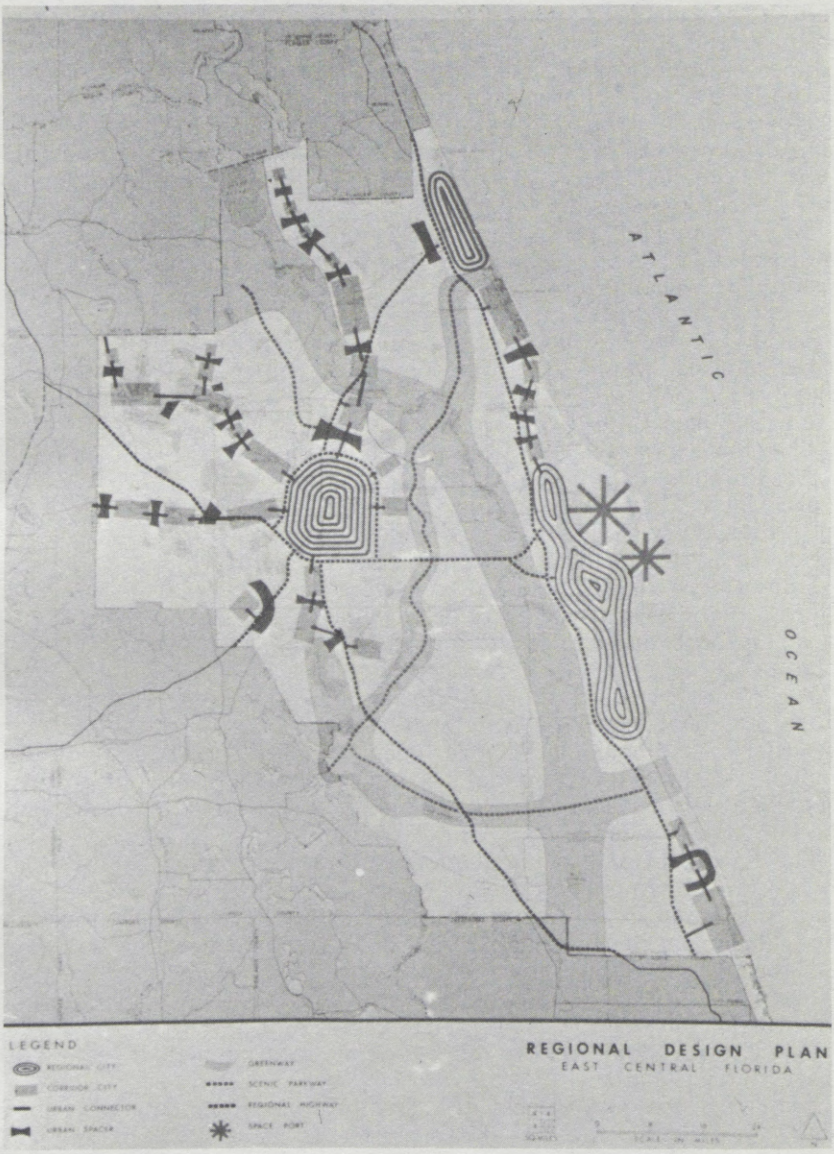
East central Florida—Map, compact.

Along major highways; second, a dispersed form of urbanization, scattering the urban growth as widely as possible and selecting areas that studies of land use indicated would be appropriate for urbanization in this region——



East central Florida—Map, regional design plan.

And third, a compact multiple nucleii development which would include new communities as parts of a total urbanization process.



The final result as shown in my last slide is a regional design plan which includes the recommendations for open space preservation and concentration and recommendations for urbanization which combine many of the elements of those three alternatives. I am happy to say both a regional agency, and the State and Federal Governments are taking cognizance of this plan and a number of its recommendations are under study or being carried out.

However, do we know how to implement, how to strengthen the plans being prepared, at the State level and in the sense the Federal? I say to you that we are only beginning to find out a few minimum means or mechanisms for doing this.

May I commend you again, Mr. Chairman, for your very farseeing approach to national problems. I thank you for this opportunity of speaking to you and this committee.

Senator CHURCH. Thank you very much.

Mr. FEISS. Excuse me, Senator. May I enter these slides for the record? Also I would like to have an opportunity of distributing to you individually a report prepared by the American Institute of Architects last June on environmental design legislation for States.

The CHAIRMAN. They will be received by the committee.

Are the slides in picture form?

Mr. FEISS. They can be put into picture form. They will be in black and white. We will have them made this coming week.

Senator CHURCH. I think that would be very helpful.

How did it come about that you were engaged to work out this Florida plan? Was it the State of Florida, was it privately arranged or was it local communities joining together in the request? How did it happen?

Mr. FEISS. Senator Church, Florida like a good number of the States has enabling legislation that provides for the establishment of either official councils of government or official regional planning councils. In the case of Florida, it has just passed a council of governments legislation. It has not yet put any of it into effect but it has had for a number of years official planning councils.

The East Central Florida Regional Planning Council is an official body established under State law receiving in this instance a Federal planning grant from section 701 of the Housing Act of 1954 through the Department of Housing and Urban Development, which was then the Housing and Home Finance Agency.

Senator CHURCH. What means does Florida law provide for implementing and enforcing this plan?

Mr. FEISS. I don't believe any other means than will be found in other States, Senator.

They have to adopt or they are attempting to adopt a water policy plan. They do have, as all other States do, the powers of eminent domain, if they have the funds, for the acquisition of land for forest, recreation, and water areas. In their case, they have very strong water conservation funds in which the Federal Government has been very deeply involved.

Senator CHURCH. But apart from what can be purchased with public money for public purposes, whether it be transportation or recreation, how can compliance be secured where private landowners are concerned within that area?

Mr. FEISS. First, the Council has held innumerable public meetings with local public officials as well as State and Federal agencies, frequently jointly with public and private agencies and organizations such as the local Chamber of Commerce, and with banking and real estate concerns in other instances. It has recommended, as have many other of these planning councils, special land use regulatory documents: a zoning manual, subdivision control manual, with recommended local regulatory measures, some of which have been adopted by municipalities and counties in the area.

Mr. SLAYTON. Let me just add to that if I might, Senator Church. In effect there is no mechanism for translating the plan that Carl Feiss has produced unless the local units of government wish to adopt zoning plans and enforce them. The only method is persuasion. There is no governmental mechanism for translating that into action.

Senator CHURCH. That was going to be my next question. Actually in the last resort, you must depend upon the willingness of the local units of government to adopt zoning regulations that conform to the overall plan.

Mr. FEISS. In many instances, Senator, the regulations have been adopted well in advance of plans. Many of them are really obsolete on the books and on the maps. They constitute a very serious problem when it comes to revision.

The State of Hawaii has taken a very liberal and very farseeing point of view retaining in its owns hands the responsibility for the zoning of open spaces. This is a responsibility which all States have in the first instance since State enabling legislation was required for the adoption of the zoning mechanism which was then turned over to the counties and the municipalities many years ago as a way of absolving the state of responsibility for land use and zoning plaanning.

Whether they can ever recapture this responsibility is a very moot question. This has been discussed, for instance, in the State of Connecticut for 7 years. We brought this matter up politically. It is almost impossible at the present time unless this committee can find some mechanism of persuasion, some of which may be built into the act already.

The CHAIRMAN. Who is the next witness? Will there be Mr. Monasch? Or Mr. Roberts?

Mr. MONASCH. I am Walter Monasch, gentlemen.

Senator CHURCH. Do you have a statement?

Mr. MONASCH. Yes.

I am the president of the American Institute of Planners which is a national organization of professional planners in this country consisting of about 5,500 members. With me is Mr. Thomas H. Roberts, executive director of the institute.

Just to point out the interdisciplinary nature of the institute, both Mr. Feiss who just spoke, is a full member of our institute also and Mr. Slayton is an affiliate member, so we do spread our wings quite broadly in our associated professions.

As an organization, the American Institute of Planners has given considerable recognition to environmental problems. In 1969, AIP supported the creation of the Senate Select Committee on Technology and the Human Environment, the Environment Quality Avt of 1969, and full funding of the Clean Waters Act. Also, on our Board of Gov-

ernors, board member, Dorn McGrath, heads an AIP task force working with the House Ad Hoc Subcommittee on Urban Growth with emphasis on the relationship between urban growth and the environment.

AIP is dedicated to the advancement of comprehensive, integrated planning for the Nation's urban areas, regions, and environment. Such planning has physical, economic, and social aspects, and may alo be described as a melding of planning in such functional areas as transportation, housing, natural resources, health, education, and human resources. On behalf of the Institute, I would like to than the committee for the opportunity to comment on the subject bill, S. 3354.

We recognize fully the need for timely legislative response to the pressing environmental problems of this day. In an era characterized by growing and frequently conflicting demands made upon our total resources, the need for coordinated Federal, State, and local action is apparent. By total resources, we mean not only the natural resources but also the fiscal and human resources, all of which must be considered in the development of positive public actions and programs. Legislation which will insure the protection of the public interest is needed and welcomed.

RELATIONSHIP TO COMPREHENSIVE AND FUNCTIONAL PLANNING ROLES

The Institute supports the general purposes of S. 3354. We are pleased to know that this legislation concerns land use planning in terms of its relevance to the broad questions of environmental protection and management. As a Nation, we are just beginning to appreciate that our environment consists of land, air, and water intimately related within a comprehensive ecological system.

Earlier this year the President signed the National Environmental Policy Act of 1969, which established a Federal policy for environmental management. In introducing the subject bill, Senator Jackson stated that a national land use policy is the next logical step in providing a quality environment for present and future generations of Americans. The Institute subscribes to this, particularly when this is done as an integral part of the development of comprehensive policies, plans, and programs for the guidance of all public decisions.

The American people are beginning to appreciate that the despoliation of our natural resources cannot continue unabated. At the present time, scientists agree that a continuation of present trends can result in significant ecological modifications. Air pollution, for example, promises to produce an environment so befouled by the instruments of our civilization the future may bring a return of the ice age. Not a pleasant prospect, but it is avoidable if appropriate measures are taken.

Let me say that the Institute appreciates the complexity of environmental issues. Pollution is related to the location as well as the character of certain activities. For example, smog would be less of a problem if Los Angeles were not located in a coastal mountain bowl. And the effects of air pollution would be much more severe if New York City, like Los Angeles, were located in a basin.

So it is with water pollution. The amount of effluent which has transformed pristine bodies of water into open sewers varies with the sources, volume, aeration, and other characteristics of the individual water body.

Unlike air and water, which are capable of reconstitution through natural recycling processes, land is a considerably more finite resource. For this reason, the Institute supports the major premise of the subject legislation that:

> Intelligent land use planning and management provides the single most important institutional device for preserving the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality of life and providing the material means necessary to improve the national standard of living.

If this premise is understood in its broadest sense, the necessary interrelationships between land, air, and water become quite clear. A noxious industrial enterprise, for example, befouls the air around it and the stream on which it is situated—not to mention its effect upon the neighborhood. It is the position of the American Institute of Planners that planning for natural resources is required to find the solution to these interrelated problems.

The Institute generally supports the development of separate statewide plan approaches, which taken together in a national context and within broad general guidelines will contribute to the creation of national policy on the environment. We do not see any particular advantage to Federal legislation mandating identical administrative and organizational arrangements in each State. The important thing is that such plans become a major element of the comprehensive planning process in each State.

FEDERAL-STATE RELATIONSHIPS

The subject bill requires each State to develop a plan within a specified number of years following passage. This deadline eliminates the opportunity for tardy compliance, but there may be States which, in spite of their best efforts, are unable to develop a soundly prepared environmental plan in the time provided. Recognizing as we must the uneven quality of existing planning operations among the 50 States, the Institute would suggest some flexibility on this point. The committee might consider a provision which would require States to file a statement of intentions with the appropriate Federal agency or this committee within 6 months after the effective date of this legislation, in effect creating a mandatory "plan to plan."

FEDERAL AID ARRANGEMENTS

While the Institute appreciates that the demands for Federal financial resources require the Congress to apportion moneys among many programs, it is our position that this and kindred legislation is indeed worthy of full financial support to start a balancing of the priorities of our national system of supporting requirements. If the mistakes of the past in the area of natural resources use are to be avoided, Congress must encourage a sound and continuing planning and management program in this area.

In closing, gentlemen, I would like to emphasize the necessity for understanding the relationship between man's activities and their effect on the environment. Dr. Vincent J. Schaefer, director of the Atmospheric Sciences Research Center, State University of New York at

Albany, predicted recently that if present trends continue the United States can increasingly expect temperature inversions in areas of concentrated human activity. If such pollution entrapments last more than a day or two, the potential loss of life will be considerable—in the range of thousands of tens of thousands of lives.

As Senator Jackson said when he introduced this legislation, "The hour is late and much has already been lost." We can only hope that it is not too late.

If I may, however, Mr. Chairman, I would like to make one comment following the questions that were raised previously.

There is one example that I am familiar with where a region, in fact, has through State action reconstituted itself governmentally to undertake in fact direct control provisions. And this has happened in a State which is not normally in the forefront of effete intellectual progressive movements necessarily. I don't mean to be snide really.

In the State of Indiana, the county of Marion today is the governmental agency for the city of Indianapolis and all the cities in the country itself by last year's legislative action of the State legislature and the county, the mayor of the city is now the mayor of the county with a totally new structure called Unigov and all zoning, land use decisions, renewal decision, development decisions are made at that level. Admittedly, this is still a limited range. It is by far not regional enough. It is to my knowledge at least the first clear change of shifting local autonomy and local responsibility recognizing the development of conditions and facing of the needs as they are today.

Senator CHURCH. That may be a kind of breakthrough.

I hope that we can go ahead with the final statement here and then perhaps conclude with questions. We haven't heard as yet from the gentleman representing the landscape architects. Professor Wilkinson, are you going to present a statement?

Mr. MILLER. Senator, may I briefly introduce the position of the American Society of Landscape Architects? And then Professor Wilkinson will——

Senator CHURCH. Yes.

Very well. Mr. Miller.

Mr. MILLER. My name is Campbell Miller. I am a landscape architect in private practice and president of the American Society of Landscape Architects.

For several centuries now our country's magnificent natural endowment, our basic land resources, has been plundered by the greedy, despoiled by the ignorant, wasted by the indifferent, while our people and our government first lacked concern and then the means to prevent the disaster we could see developing.

For more than a century landscape architects and the American Society of Landscape Architects have been concerned over what was happening over the pillage of our natural endowment, over the decline in the quality of our natural environment. We have seen what happens when local government lacks the foresight and policy to guide land use intelligently as in the strip-lands country of Kentucky.

We have seen what happens when Federal and State agencies, attempting conscientiously to carry out their assigned tasks, are drawn into actions which conflict with each other and, indeed, with broadest public interest, as in the recent Everglades controversy.

We have seen what happens when State governments cannot control extraterritorial influences as in Lake Erie and Lake Michigan.

Landscape architects have been deeply involved in the struggle to conserve and preserve our environment and I believe our profession has made significant contrbiutions to development of national policy. We appreciate the opportunity given us to be present today.

We have just reached a pioneering review of the first State land-use act which has recently been made by one of our members for the State of Hawaii. I should like to leave it with your staff today.

Senator CHURCH. Thank you very much. We are pleased to have it.

Mr. MILLER. We are greatly encouraged that the Congress now has before it the National Land Use Policy Act of 1970. We believe this bill provides the essential framework within which the Nation can pursue the goals of conservation, of natural resources, of environmental quality, of the orderly growth and development. We think that bill is thorough and far reaching in its approaches to the problem and most importantly, we think it is enforceable.

We are grateful for the concern of this committee and the American Society of Landscape Architects supports adoption of the National Land Use Policy Act.

I should like to ask Professor Wilkinson to present a statement which further explains our position.

Senator CHURCH. Thank you.

Professor Wilkinson, we will be happy to hear from you at this time.

Mr. WILKINSON. Mr. Chairman, members of the committee, I appreciate the opportunity to be here today.

As a representative of the profession of landscape architecture, I should like to place their form of activity in its context along with the other design and planning professions. The profession has as its major objective the stewardship of the landscape and a prime function within that charge is the development and application of the skill to arrange man-made features on the landscape for their use and enjoyment by society. There are approximately 7,500 professional landscape architects practicing in the United States and their activities range from residential site planning, community design, park and open space planning to design of regional facilities. The Federal Government, particularly the National Park Service and United States Forest Service, is the largest single employer of landscape architects. The majority, however, are distributed through the several hundred private consulting offices engaged in community and institutional development planning located across the country.

The profession, as I perceive it, is in the state of dramatic change and the major issue is precisely the state of affairs that prompted Senator Jackson to develop this legislation we are here to discuss. I think that our problems as planners and designers are precisely those facing the larger society. In the past, we have been so involved with the process of development and its dependence on small externally unrelated projects that the larger contextural situation has been ignored. It takes a great deal of skill to fabricate out of raw materials a house, park, road, and other facilities in which man can function. It is also simpler in the process of doing this to discount as many variables as possible and focus on the basic need for the facility. This

is the fundamental American trait. I think we have created our entire technology and its delivery system to neutralize contextural considerations and focus on the product. This is as true of the land as it is of our production of automobiles and television sets.

The aspiration for a decent, safer and well equipped living situation has been inculcated into our society and has been the energy on which it thrives. A working concept of environmental quality is the notion that it can only exist when the legitimate aspirations of every citizen are satisfied. There is an extremely powerful force, particularly when coupled with the efficiency and fragmented, narrow focus of our many production technologies.

The institutional framework that fragmented development has fostered is the condition within which change must be accomplished. This is the fundamental problem, to increase the level of productivity in critical areas, extend resources to the disadvantaged and broaden the scope of each individual act of development to include contextural considerations.

In regard to the land and its development this is a critical concern. We have been able to convert a total landscape into an abstract system of real estate that has fostered institutions that can understand and deal with it only by virtue of its capacity to deliver goods. Any other interpretation has been the work of dedicated men in conflict with the more established practical systems of awareness. Parks, public beaches, scenic roads, recharge areas, drainage ways, and other similar facilities are still subject only to classification as a category of real estate and use. The use can then only be justified in the economic terms of production priorities.

I see this syndrome as being the critical condition for change in the focus of national policy in the next several generations. There is a general precondition on which this thrust might grow. A continuation and extension of the debate about the environment must occur. The goal being a common understanding throughout the society of our utter dependence upon natural forces for survival and that our interdiction of these forces should not exceed our capacity for control. This implies both a political awareness and a technological control capability. A major purpose of the debate should be the creation of a political climate that will permit the conversion of present real estate orientation toward an integrated capacity to deal with the landscape. We must arrive soon at the point where control of critical conditions for survival, future growth quality are in the hands of the public at large. I don't think we yet have a systematic understanding of the complexities of the land resource and this must be developed quickly and then translated into the practical terms of public awareness and policy. This is an on-going activity that began with the right of eminent domain, riparian practices in the East, zoning and other means of exercising the police power for the general welfare. These are crude instruments but generally indicative of the crudeness of our knowledge and skill in exploiting the landscape.

I perceive the awareness and coordination of the small and fragmented decisions to be long-range goals. The proposed legislation was reviewed as a part of the strategy for their accomplishment. In this sense there are several facets which I believe to be instrumental

to meet the long-range needs; development and training of public officials and creation of national data bank of land information.

The former is of great importance. Most of the small decisions about the use of the land are made at the local level and involve the conversion of private lands from one use to another, or the development of public facilities. Officials at this level and the form of government are notoriously unequipped to make and enforce informed decisions. The State-level agencies are also poorly equipped. The backlog of crises have so overwhelmed those agencies and staff people assigned to environmental tasks that creative program development is not possible. The situation is further complicated by the prevailing low level of awareness of their constituencies and the level of their own training in environmental processes. Any program of land-use planning if it is to be successful must devote great resources to establishing cadres at the State, regional, and local levels. I doubt that retraining of existing personnel is the total answer. There are simply not enough of them nor is the state of the art advanced or challenging enough to be inviting. I expect we are speaking of a 10- to 20-year program.

Without this provision of the bill being enforced, the rest of its general conditions will be seriously hampered. In the interests of revitalizing existing rural communities and establishing new ones this is of central concern. New communities are being established, but by the same fragmented practices that we now have. The major characteristic is to overwhelm local government and destroy the existing fabric of the community as well as the environment. Until we have well-trained people capable of exercising creative judgment, sustaining this judgment and gradually increasing the influence of the community in behalf of the environment little progress will be made.

One further point on this issue in regards to the development of a State level of land-use policy and control: A major responsibility of the State agencies in the preparation of the State land-use plan can be an analysis of the entire enabling and development control framework. This could be the initial component of the plan and function to define more clearly what programs are lacking and which seem to be working. It would also provide a framework for elaborating the required new institutional forms for planning and management at the State level. I have an unsubstantiated observation that presently there is very little hard State money being spent directly in land planning. There is probably a great deal being used for this purpose by agencies at the field level, particularly in the resource management and land policy areas.

If it can be aggregated and viewed within a comprehensive framework, then a much better start can be made in developing the overall plan. This is particularly true when it comes to soliciting grants-in-aid from the fund set forth by this bill. It will also delineate the array of environmental control instruments which are on the books for one purpose that can be generalized to another and it will give a quick picture of which programs are subverting another.

Returning briefly to the need for a local infrastructure, there is a means to establish a training and opportunity perspective. Presently much of the land-oriented activity either in the farm or nonfarm category is sponsored in some way by Federal programs and subsidies. There also seems afoot in the Nation a great urge to begin new town

development projects. Instead of sponsoring new towns under total government control or monolithic ownership such as Columbia, Md., the effort should be to experiment with projects that integrate diverse developers.

The projects could pose the following formats: (*a*) an experiment in integrated application of all Federal subsidies and model forms of local government (*b*) heavily subsidize construction techniques that will permit (*c*) a prototypical community type based on environmental considerations. Within several of the physiographic regions of each State a site complex could be identified as posing distinct environmental challenges. As the towns develop they could be used as a training institute for public officials and the lessons learned could be generalized to a public format. A particular control device could also surface in such a situation; the use of open space as a public utility giving community control over its conversion to other uses. Should the "Operation Breakthrough" project produce offspring they can be tested in nonurban environments, as well as other presently operating programs. Such experiments could prove useful training grounds for scientists concerned with applications of ecological principles in a controlled situation. This may sound more closely akin to a policy of urbanization than to land, but I can see no disparity between the two. I think the ultimate aim is the use of the land controls to guide and form urban development. The second point, the development of a national land inventory, is another major facet of the legislation. We view this as the only consistent means of establishing land use and management decisions.

The data about land and its processes that presently exist is a constraint to efficiency and wise decisions. There is no common means for its interpretation. It exists in hundreds of different modes and formats and is located in as many places as there are people collecting it. Given the somewhat dilatory nature of many local governments it is beyond reason to saddle them with the hopeless task of assembling information and then expect creative decisions to come from it.

The technology of data gathering is advancing rapidly; aerial photography, multispectral sensing, telemetry and other devices are available. The costs to instrument a massive project are huge and legitimately the role of the Federal Government. The problems of equipping an expedition and giving the guidance to its development are also great. The payoffs are of greater importance. One breakthrough could produce more benefit to the cause of this legislation than any other; the resolution of relevant environmental information to a common format. The purpose would be to digitize the data. Then any official in any locale in the country can give coordinate data to a machine and instantaneously have fed back all the relevant information about a segment of land.

The basis of the data should be the explanation of natural processes, and the portrayal of land and its environment as a coherent functioning process. Many such models exist as the product of individual scholars. They are, however, the province of their discoverers and may have only mathematical interpretations. Such information is only now beginning to appear in a spatially relevant context. Colleagues of ours in landscape architecture profession who are pioneering in this field are Ian McHarg of Pennsylvania, Ervin Zube of

Massachusetts, Carl Steinetz of Harvard, Philip Lewis of Wisconsin, and Donald Appleyard of California. Their work is embryionic, but its ability to provide a coherent picture of the landscape is startling. The major point about this work is its grasp of process and ability to display concepts that have meaning in the decision area.

If we are ever to make effective inroads into the real estate mentality of the Nation, the requisite information will need to be so compelling that even the most recalcitrant will feel its power.

In review, the major issues this bill can effectively address are education of local officials and equipping them with the power of programs and effectiveness to make the chore challenging. An arena for accomplishing this is new town development using environmental criteria for control and elaboration of the built environment. If enough are started they can be used as institutes for training local government officials. The coordination of State planning should be turned over to competent and well staffed State agencies. The principle Federal role in the long haul can be the elaboration of a land inventory and taxonomy.

These are somewhat sketchy and general concepts for your consideration. The bill in its entirety is a dramatic stroke and can only produce a much needed infusion of energy into an area of critical concern. The American Society of Landscape Architects urges its passage into law.

Thank you.

Senator JACKSON. Mr. Chairman, I have got another engagement. I will be back in just a little while. But I just want to express my appreciation to this distinguished panel for making what I think has been an invaluable contribution. You have honored the committee because you have brought together here some of the finest expertise in the country and we all know that it is not just one discipline. There are many disciplines involved. The fact that you have seen fit to participate in the inaugural hearings means a great deal to us. I just wanted to observe that I will be introducing new towns legislation, and we will be holding hearings on it.

Some of us felt that the present bill was a condition precedent to the consideration of new towns legislation. If we combined it in one bill, we might be just biting off more than we could digest.

I just wanted to make that observation and to assure you that we are going into that area without delay.

Certainly population growth and I think even more important, population concentration, are matters of major environmental concern. Where people are going to live and whether it is going to be in congested areas or whether it is going to be in open areas is a vital matter in trying to resolve the environmental problem as a whole.

Senator CHURCH. Thank you very much, Senator Jackson. I join in expressing appreciation to you gentlemen for your very important contribution this morning. When one considers the enormous migration out of the countryside of America and into the cities that has occurred in the past 30 or 40 years, it might well be the greatest single failure of government during that period that so little attention was given to it, no effeort at all toward tempering or directing or ameliorating the effects of this massive movement of people. It is hard to understand how government could be so indifferent to the movement

of its own population in a way that has fairly crushed our cities and now confront us with problems that may well prove unsolvable.

But at last I think we are beginning to develop an awareness and we hope that this bill is a step in the new direction.

Mr. ALLEN. Senator Church, may I add one comment, that results from your discussion with Governor Sargent about the acceptance of planning and that is that I would hope that in accepting planning, we all recognize that it needs to be a dynamic process and that it is not a static process. It needs to be a continuing thing and no plan is ever final.

Senator CHURCH. Yes. I think plans must be living plans.

Gentlemen, we have reached the hour of 12:45. We have a luncheon planned and that will take place in room 1202 on the first floor of this building, the New Senate Office Building. Mr. Russell Train will be our guest, among others, and you are all cordially invited.

I think that it might be well to adjourn the meeting at this time. We can continue the questioning at the luncheon itself.

It will be informal.

Thank you very much, gentlemen.

(Subsequent to the hearing the following statements and communications were received:)

U.S. SENATE,
COMMITTEE ON COMMERCE,
Washington, D.C., March 23, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SCOOP: I am pleased to note that the Committee on Interior and Insular Affairs is beginning hearings this week on your National Land Use Planning Bill, S. 3354. The concept on which the bill is based is a vitally important one, and I am sure your hearings will illuminate the need for national land use planning to be adopted.

As Chairman of the Committee on Commerce, which has jurisdiction over matters of and pertaining to transportation, I would like to make a few comments about one or two aspects of your bill as it relates to transportation, and request that they be made part of the hearing record.

As you know, the Commerce Committee has long been concerned with the environmental impact of transportation facilities and has already taken many steps to provide environmental safeguards in future transportation development. This concern for the environment is an important feature of the National Transportation Act that I introduced last June and on which the Commerce Committee has been holding hearings this year. The National Transportation Act provides for the establishment of regional transportation commissions throughout the United States, whose responsibility it will be to plan and oversee the development of integrated transportation systems that serve the entire region and take into consideration land use factors such as those outlined in S. 3354. All transportation development within a region would be required to be consistent with a total regional transportation plan. The Committee with jurisdiction over transportation has thus taken important steps already to provide for land-use planning with respect to future transportation systems.

Our experience in the field of transportation and our hearings thus far on S. 2425 make it clear that the environmental dislocation caused by transportation and the "proliferation" of transportation facilities you mention in Sec. 401 of S. 3354 are only aggravated by transportation planning that takes place on simply a state-by-state basis. Transportation, although it extends to sub-state units, is inherently a continuous process from the neighborhood level to the national and international level. The failure of transportation planning in the past has been that the discrete planning unit did not embrace the scope of the planning problem nor have they been compelled to do so. With the growth of transportation corridors around the nation—the Northeast Corridor being the most well-known—the inability of the individual states to plan transportation systems on their own

that serve regional, national and international transportation requirements is clear. I hope, therefore, that Sec. 403(b)(2)(F) and Sec. 406(b)(3)(D) of S. 3354 can be changed to explicitly state that planning by the states in the transportation field be consistent with regional plans developed by the regional commissions as would be provided under the terms of the National Transportation Act.

In addition to these considerations, I cannot concur with Sec. 407 of S. 3354—the "big stick" of which you spoke on March 9 at Princeton—insofar as that section would affect transportation programs whose need has already been established by Congress. As author and floor manager of the Airport and Airways Development Act, for example, I cannot support any action that would make nonfeasance by an individual state grounds for the reduction of Airport and Airways funds essential to our national airport/airways system. The Airport and Airways Bill was written with the assistance of our Subcommittee on Energy, Natural Resources, and the Environment, and contains strong environmental safeguards. More importantly, it is designed to make possible the continued safety of air travellers—safety that would be dangerously jeopardized if airways development were contingent upon overall land-use planning by each of the several states. It is our hope that the Airport and Airways Development Act will prove compatible with the National Transportation Act, and that total transportation systems planning will grant us even further control over the environmental impact of these facilities. Since such planning must be regional in nature, however, and since the need to provide for air safety is immediate, the construction and improvement of airport and airways facilities must not be tied to individual state action.

With these reservations, I am happy to support your bill and to pledge my cooperation for its early enactment. I hope that you and the Committee staff will have an opportunity to review the work of the Senate Commerce Committee on S. 2425 in your concern for the environmental and land-use impact of planning transportation facilities.

Warm regards.

Sincerely yours,

WARREN G. MAGNUSON,
Chairman.

STATEMENT OF THOMAS L. KIMBALL ON BEHALF OF THE NATIONAL WILDLIFE FEDERATION

Mr. Chairman, I am Thomas L. Kimball, Executive Director of the National Wildlife Federation, which has its national headquarters at 1412 Sixteenth Street, N.W., here in Washington, D.C.

Ours is a non-governmental organization which seeks to attain conservation goals through educational means. The Federation has independent Affiliates in all of the States. These Affiliates, in turn, are composed of local groups and individuals who, when combined with associate members and other supporters of the National Wildlife Federation, number an estimated 2½ million persons.

We are pleased to have the invitation to make these comments on S. 3354, the proposed National Land Use Policy Act of 1970.

To begin, Mr. Chairman, we wish to congratulate you and this Committee for initiating what became the National Environmental Policy Act of 1969. In the minds of many competent legal experts, this Act is among the most significant to be adopted in many years. We are confident that it will be of increasing importance throughout the years in protecting environmental values which make life worth living for so many millions of Americans. This Committee also is to be congratulated upon the enactment of many other pieces of landmark, policy-setting legislation such as the Wilderness Act, the Land and Water Conservation Fund Act, the Wild and Scenic Rivers Act, and the Scenic Trails Act. The Congress, in the last decade, also has laid down additional national policy on clean air, on clean water, and on waste disposal, among other things. And, in our opinion, a national land-use policy is both desirable and necessary as a corollary step toward proper protection of the environment.

As a matter of fact, we long have felt that an inventory and investigation of private land and water resources well might be the subject for a project or effort similar to that being completed on public resources by the Public Land Law Review Commission.

Probably the most important single device for preserving and enhancing natural values of a quality-type could be a sound national land-use policy. It could, in effect, set out a coordinated Federal-State-local governmental plan for molding the future of this country. It could, or should, resolve inconsistencies such as one agency of the Federal Government aiding and abetting drainage of wetlands while another sister agency endeavors to protect them; of Federally-supported highways and airports invading Federally-supported parks and recreation areas and wildlife refuges. It should set out national objectives and goals, determine priorities for attaining them, and delineate procedures whereby intelligent decisions can be made on land uses in the best public interest. Carried out, such a policy should result in the development of master plans for land use, including open space. In effect, this might be considered as rural zoning of a sort on a national scale.

Now, as we read it, S. 3354 does these primary things: (1) Provides a grant-in-aid program to assist State and local governments in developing personnel capable of improving land-use planning and management in the States; (2) Encourages the States to inventory their resources and develop a Statewide environmental, recreational, and industrial land-use plan within three years; and, (3) Assigns Federal administration of the program to a new Land and Water Resources Council which replaces the present Water Resources Council. The Council will be composed of six Cabinet officers and the chairman of the Federal Power Commission.

This committee already has been exposed lengthily to detailed, consideration of the bill and we will not attempt a section-by-section analysis. Rather we can better serve this Committee by giving it our impression of those sections having major import and our overall reaction to the proposals.

Sec. 401 of the bill partly is a statement of policy and partly an enumeration of some of the land planning ills of the past and present. We believe it would suffice to enumerate the findings in broad aspect rather than to specify in some detail as is done in subsection (b) of Sec. 401. We favor a straightforward brief declaration of policy more in the fashion of Public Law 88–606 which established the Public Land Law Review. The difficulty of interpreting the intent of Congress will be lessened.

Some of our people also caution that careful thought must be given to the manner in which emphasis on state and local participation is set out. For example, section 401(e) says ". . . land use decision of the Federal Government . . . national land use policy ought to be formulated upon an expression of the needs of . . . private groups and individuals . . ." In fact, we can visualize situations wherein economic considerations might become dominant unless greater emphasis is placed on public non-economic values. Most local pressures will relate to grazing, timber, irrigation and land disposal. Conservation groups have been fighting for recognition of and appreciation for intangible values and this will never be truly realized if economic interests are given dominance. This fear exists even though we appreciate that recreational and fish and wildlife values are given prominent mention in the proposed Act.

Sec. 402 quite adequately outlines the purposes of the bill but, unless we are misreading the purposes, we feel that they are too restrictive. Certainly the scope of the effort should be more than "the development and implementation of statewide Environmental, Recreational and Industrial Land Use Plans."

Perhaps the misunderstanding arises because there are no definitions in the bill. There are many more uses to land than those enumerated. Was it the intent not to zone (or classify) land for say agricultural use or for a protected watershed? Sec. 403 in authorizing the council to make grants-in-aid enumerates a number of areas of activity. This implies a larger order of activity than the uses enumerated in Section 402.

There are a number of related sections of the bill which we commend to the attention of the Legislative and Executive branches of government. This has to do with categorizing, developing, coordinating, exchanging and using land and resource information. Sec. 403 (b) (5) and (6) provides for arranging for exchange of information at all levels of government, and all kinds of agencies, commissions and the like. Sec. 406 (a) (3) provides for the use of already gathered information. Sec. 409 establishes a Federal Planning Information Center to file all plans which involve having more than local significance.

We think the drafter of these sections was pointing in the right direction but did not go to the end of the road. This nation had the ability and systems to put

a man on the moon. It had the ability to place sensors and resource information satellites in orbit. The ability of these satellites to gather land use and resource data in the future is unlimited. This nation is, by far, the greatest accumulator of land and resource statistics and data. Agencies at every level of government are going at it with a vengeance. Each project is designed to gather specific bits of resource data. Whether it fits a total system for national analysis seems not to be material. Just so long as it fits an 8½ by 11 file cabinet. And the National Water Resources Planning Council is no exception. Neither are the Departments of Agriculture, the Interior, Housing and Urban Development, the Army Corps of Engineers, and others.

We call this the 8½ by 11 syndrome. We do not mean to be critical of these agencies of government. We are critical because there is no mechanism or no system to easily retrieve, assemble, and use the vast resources data files stored who knows where. In short, we think the time has arrived to establish a "National Natural Resources and Land Use Information Center." The technology is available through systems development and analysis and the use of computers. It is now possible to provide a spatial relationship to all attributes of land and its resources. We do not believe it possible to do land use planning without considering the geographical (spatial) location of land and all of the economic and physical factors bearing on its use. S. 3354 recognizes this.

The United States has recognized this need in underdeveloped nations by providing monies and technical assistance so that these nations could establish national resource inventory centers to aid planning for national goals. Meanwhile we are burying ourselves under tons and tons of unassimilated and uncoordinated data here at home.

Again S. 3354, by inference, recognizes the lack of coordination. It would require all Federal agencies to consult with the council or such other agency designated by the President on major land use plans.

While we have concern that something be done to coordinate gathering and use of resource information, we are equally concerned that the agency designated in S. 3354 does not become a super zoning agency. As an example, would the council or designee make the recommendations to the Congress on additions to the wilderness system or the wild river system? Or would we continue to do this in the traditional manner? This should be clarified.

We see the tremendous need for coordination of information gathering and coordination of the land and resources planning. We believe that this coordination would be useful in setting local, state, regional and national goals for land use and resource planning. We are a little uncomfortable in attempting to discern how it would affect the day-to-day operations of federal resource management agencies. No doubt state governments in complying with the grant-in-aid program also will be uncomfortable.

Although we do not have specific suggestions in this matter, we do suggest that the bill detail more policy considerations in this field. Also, we do not find where the bill provides for publication of rules and regulations whereby the Act may be administered.

The bill would establish the Land and Water Resources Planning Council. We suggest that this title might be too restrictive. Perhaps a more adequate title might be "Natural Resources Planning Council." This would include land and all of the resources derived from land, including water. In any event the bill needs some definitions.

Consideration of the bill raises additional questions which we hope the Committee will clarify. What are to be the functions of the River Basin Commissions? Are the personnel who constitute the present Commissions sufficiently broad in scope to take on these new responsibilities? What function will the new Council on Environmental Quality serve in the administration of the program?

In summary, we generally are favorable to the intent of the bill. We think that if some of these things can be accomplished it would tend to improve our goals settings and policy determinations in the field of natural resources. We do, however, feel that the scope is so great that a national natural resource data system must be established. In this way the zoners, economists, biologists, foresters, geographers, hydrologists, geologists, local planning committees, federal agencies, state agencies and what have you will have access to a common resource data file having common attributes of the land.

Thank you again for the opportunity of making these remarks.

STATEMENT OF JOHN W. SCOTT, MASTER OF THE NATIONAL GRANGE

The National Grange is in strong support of S. 3354, a bill to establish a "National Land Use Policy", introduced by the distinguished Chairman of this Committee.

The Grange has consistently fought for wise land use and as early as 1966, passed the following resolutions calling for a study of land use:

"LOSS OF AGRICULTURAL LAND FOR NON-PRODUCTIVE USES"

"*Resolved*, That:

"1. the National Grange and State Granges encourage efforts in all states to slow or stop the loss of agricultural land for non-productive uses.

"2. study to be made by competent authority whereby a land owner who foregoes sale of agricultural land for a higher *economic* (*non-agricultural*) use category and then (*might*) be suitably reimbursed for maintaining this resource for the benefit of all.

"3. zoning and tax studies by appropriate agencies of state and Federal Government be enacted and expedited in order to develop a land and fiscal policy harmonious with private free enterprise and needs of oncoming generations."

"FEDERAL LAND WITHDRAWALS"

"*Resolved*, That:

"1. the National Grange urge the United States Congress to enact legislation requiring all Federal agencies who propose acquiring private lands to hold public hearings.

"2. they be required to assess the impact on the local economy.

"3. they justify the need and location of such withdrawals.

"4. the hearing pertaining to each withdrawal be held within the community where such land is located."

"We have used, wasted and destroyed more natural resources in the past 150 years than the entire Middle East has used in the last ten thousand years—and, my friends, when our country is six thousand years old, what will we be using for soil, water, timber and minerals?

"These things we say because we are so complacent, because we take our wealth and good fortune so much for granted. As a people, we are very much like a man who needs only to produce an item and an eager public buys it without much, if any, effort on his part—he is called a businessman, but little individual ability or judgment is required to be successful in his business.

"We as a nation have been blessed of God with so much wealth in the form of rich soil, abundant rainfall, timber, minerals, oil, etc. that—up till now. we couldn't help but have plenty. It has not required too much imagination or judgment on our part to be prosperous. But population is gaining on productive ability, use of water is overtaking water supply. God stopped making land in the First Chapter of Genesis, but he keeps right on making people.

"Our rural population continues to decrease and our cities continue to spread and burst out at the seams like a growing boy with only one pair of pants. This imbalance of population has upset normal economies and social relations and spread havoc throughout the land. Rural slums and city ghettos cause equal or perhaps a greater volume of political rhetoric than the outworn 'farm problem'. Yet, the problem continues to grow rather than to decrease.

"The Grange has long taught that the 'Welfare of each is bound up in the good of all'. The cities suffer equally or even more as a result of the rural depression from which we seem unable to extricate ourselves. Families unable to make a living on the farm migrate to the city. If there is no job to be had, they are added to the welfare list, or relief rolls. If they take a job that was being held by another, they simply change places. Either way, the city is worse off and so is the country."

The above policy statement was adopted by the delegate body of the National Grange at our 1967 Annual Session.

A very important part of national planning, if not the most important part, is wise land use planning. What seemingly is the answer today may be a bad judgment mistake tomorrow and we have reached a point in the history of this great land of ours that we can no longer continue to exploit—but must plan for wise land use.

In our judgment, S. 3354 is a step, a very important step, in the direction of Federal-State cooperation in developing plans to use our land wisely, as if our very life depended upon proper use of every square foot of land—and well it might in the years ahead. If we are to preserve our heritage, land, for tomorrow's generations, we should have started yesterday, because that's how far behind we are in comprehensive land use planning.

We should not permit the complacency of "food abundance" to lull us into continued misuse of land as well as all of our natural resources. We must not allow ourselves the privilege of thinking that American agricultural "know how" will somehow be sufficient to feed the multitudes of the future.

S. 3354 places proper emphasis on the states taking the initiative in proper land use planning but protects the national environment interests by bringing the governmental apparatus into land use decisions in an orderly manner. In addition, it proposes a national rather than a haphazard approach to the allocation to specific uses of the precious and varied land resources of the United States.

The following resolutions have been adopted by the Delegate Body of the National Grange regarding land use:

"LAND-USE PLANNING"

"In the field of proposed land acquisition by various departments of the Federal Government, we recommend that these Federal Departments as soon as their capital improvement plans are approved, consult with local and state planning boards. We further urge that any Department of the Federal Government desiring to obtain property for any purpose in any State investigate the possibility of using for their purpose, property already owned by another division of the Federal Government that might be available in that particular area."

"LAND USE"

"*Resolved*, That our Federal and State legislatures should enact without delay legislation which shall evaluate and preserve land most suitable for agricultural purposes and use; and be it further

"*Resolved*, That the government on all levels—Federal, State, County, City and communities—make available and/or avail themselves of the resources and technical knowledge and manpower of the Soil Conservation Service and other governmental agencies to establish land use criteria and evaluate the domain of the county and direct the use of land to those purposes for which it is best suited."

"PLANNING FOR THE BEST USE OF LANDS"

"Whereas, increasing population continues to place additional demands upon agricultural lands; and

"Whereas, it is recognized that wise use of all lands is necessary to take care of the population in the not too distant future in providing housing, as well as food; therefore,

"*Resolved*, That the National Grange support legislation which would provide for comprehensive planning, so as to get the greatest benefit of our lands and natural resources."

The National Grange, therefore, respectfully requests early and favorable action on S. 3354, as it is the next step, and the most important step, in preserving land for its proper use and the assurance that agricultural lands will be protected from exploitation by those who seek their own private gain.

Thank you, Mr. Chairman, for allowing the Grange to express its views on this important subject, one in which Grangers, as stewards of the soil, have had a lifetime of interest.

BERKELEY, CALIF., *March 23, 1970.*

Hon. HENRY M. JACKSON,
Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SENATOR JACKSON: Please enter my statement, as follows, into the Official Hearings Record concerning Public Hearings, on this date of March 23, 1970, pertaining to proposal to establish a *National Land Use Policy Act: S. 3354.* I wish to advise you of my support of this proposal, such being an im-

portant effort to provide a permanent Land-Use Plan and Program of a viable nature for the United States.

May I suggest that you *amend* this proposal: National Land Use Policy Act, to provide the following features:

We need to establish a Federal Department, on a Cabinet level, such as a Department of Conservation—Environment, Ecology and Population. Such would combine current Departments and Agencies now involved with Land, Air, Water and population problems and planning.

And, should establish same type of State level Department for each State.

Also, same for county and metropolitan area governments. Include regional areas, too.

Establish a Federal, State, county-Local Land, Water and Air Use Plan and Program.

And, possibly *stress* county-Local participation in such a planned program since so much of our government in America is on a county and Local basis.

Also, such a program would involve local residents in a local program, rather than simply a Federal program, only.

Establish, initially, a Land, Water and Air Use Plan and Program for all of our Federal Lands and Waters.

Such Plan-Program to include ample consideration for Scenic, Wilderness, Wildlife and Outdoor Recreation Resources.

And, establish a similar Plan and Program for State and County-Local Lands and Waters. Again, bringing in local residents to consider such local Land, Water and Air problems and issues.

Establish Regional Conservation and Environmental Areas. To preserve and restore Scenic, Wilderness, Wildlife and Outdoor Recreation features and values. Such Regional areas to include, in part: Big Sur area, California; Northwest California, Sierra Nevada, California; Coast Area of California; Oregon Cascades; Washington Cascades from Oregon to Canada; Olympic Peninsula of Washington; Ozark area of mid-America; Northeast Minnesota; Northern third of Wisconsin; Miami Coast; Gulf States Coast; West Virginia and many other similar Regional areas.

Special Plan and Program consideration to Preserve Natural and Human Resources of Alaska and Hawaii.

And, same for all Uplands areas in America.

Establish a specific Wildlife Preservation and Conservation Program for America.

Complete America's System of National Parks, Monuments, Recreation Areas, Wilderness Units and Wildlife Refuges.

Terminate *now* Wildlife Bounties, Killing and Destroying Habitat of Birds of Prey and so-called Predators.

Terminate oil exploitation in Water Areas.

Ask *all* Foreign Nations to join with us in *all* of above efforts.

Sincerely,

JOHN R. SWANSON.

(Whereupon, at 12:45 p.m., the hearing was concluded.)

NATIONAL LAND USE POLICY

TUESDAY, APRIL 28, 1970

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The committee met at 10 a.m., pursuant to notice, in room 3110, New Senate Office Building, Senator Henry M. Jackson (chairman of the committee) presiding.

Present: Senators Jackson, Burdick, McGovern, Jordan of Idaho, Hansen, and Hatfield.

Also present: Jerry T. Verkler, staff director, and Stewart French, chief counsel.

The CHAIRMAN. The committee will come to order.

The legislation under consideration today is S. 3354, a bill to establish a National Land Use Policy. It provides for grants-in-aid to the States for development and implementation of statewide land use plans, and directs coordination of Federal programs with the State plans.

The initial hearing on the bill was held on March 24, 1970, at which time several distinguished witnesses gave the committee the benefit of their experience and training in matters relating to land use and the environment. The leadoff witness was Gov. Francis Sargent of Massachusetts, who spoke of the urgent need for land use planning as a fundamental ingredient in our efforts to preserve and enhance the quality of our environment. He talked of providing natural amenities for the people where they live and of balancing our desires to use land for development and for enjoyment.

Professor Lynton Caldwell of the University of Indiana, a consultant to the committee, called land the basic resource of environmental management. He urged a national commitment to wise use of our land resources to protect them from being ravaged by the pressures of population and technological growth. He pointed out the national scope of our land use problems by means of a series of plastic overlays depicting various aspects of development in our country. Professor Caldwell suggested consolidation of governmental efforts in the land use field in a manner consistent with our democratic traditions.

Mr. Rex Allen, president of the American Institute of Architects, testified of the need to accommodate population growth around our urban areas. He recommended giving governmental authorities broad power to implement comprehensive development plans in metropolitan areas.

Mr. Carl Feiss, also representing the American Institute of Architects, showed us an excellent group of slides showing blight that can result from failure to plan land use, as well as instances in which consideration of land use consequences has produced very desirable environmental results.

The planning profession was represented by Mr. Walter Monasch, who stressed the finite limits of our land resources, which cannot be recycled or purified like air or water. He talked of new governmental concepts to deal with comprehensive environmental problems and asked for a substantial federal financial investment in land use planning.

Prof. Richard Wilkinson of North Carolina State University, speaking with Mr. Campbell Miller for the American Society of Landscape Architects, concluded the session by stressing the need for a Federal commitment to training personnel in land resource analysis and planning. He also pointed out the value of a Federal land planning information center in systematizing collection of data and analysis of resources and alternative uses.

I think I speak for all my colleagues on the committee in saying the March 24 hearing was exceptionally valuable in highlighting land use problems and pointing out the need for a national commitment to wise use of our land resources.

Today and tomorrow we will focus on the specific provisions of S. 3354 and examine closely the alternative ways its policy goals might be most effectively implemented. We will hear first from the Honorable Russell Train, Chairman of the Council on Environmental Quality, representing the administration.

Later today and tomorrow we will receive testimony from spokesmen for professional, industrial and conservation groups, as well as members of the general public.

I am pleased to welcome our distinguished witnesses.

Chairman Train, we are delighted to welcome you once again to the committee. I believe you have a prepared statement which you would like to present at this time. You may proceed in your own way.

STATEMENT OF HON. RUSSELL TRAIN, CHAIRMAN, COUNCIL ON ENVIRONMENTAL QUALITY

Mr. TRAIN. Thank you.

Mr. Chairman, Senator Jordan, it is a privilege to appear again before this distinguished committee. You will recall I was last here before you in February, a little over 2 months ago with Mr. Cahn and Dr. MacDonald at our confirmation hearing. Since then the Council on Environmental Quality has launched on the plentiful agenda you set before us in the National Environmental Policy Act.

Last week I was out talking to the students at environmental teach-ins that literally ranged from coast to coast and I think the National Environmental Policy Act has given hope that our mechanisms of government can respond to the challenge of the problems of the environment.

In my last appearance before you I said that the development of effective land use policies would be part of the long and hard road to environmental quality. We in the Council believe that a national

land use policy underlies the concept of conscious protection and enhancement of the environment set out in the National Environmental Policy Act. In short, we need a national land-use policy.

Our land is a finite resource and the decisions we make about its use today will persist in their effect. In many ways the misuse of our land does more to degrade the quality of our environment than the pollution of air and water. I believe the issues you have raised in S. 3354, the proposed Land Use Policy Act, are basic questions which should receive widespread public discussion and analysis, so that the alternatives may be fully developed and effective policies be evolved.

An illustration of the administration's belief in the need to develop more effective land use policies is the coastal zone management bill, S. 3183, now in hearings before the Senate Commerce Committee. That bill provides a useful start on a massive national problem. It is aimed at reform of land and water use in the coastal regions of our country where intense development pressures and overlapping regulatory jurisdictions are causing alarming and unnecessary damage to the natural environment.

The coastal zone management bill is addressed to a priority geographic sector now under the onslaught of speculative development, where population is concentrated, and where the States are attempting to institute effective planning measures.

In other words, we have acted here because the coastal zone is an area where something must be done now, and where it is not difficult to demonstrate the need or to find support at the State level.

In contrast, evolution of a national land use policy requires no less than the development of planning criteria by which urban decay can be arrested, rural decline reversed, and suburban sprawl regulated across the Nation. This is a massive undertaking. It will require a new approach to our use and enjoyment of this Nation's land and natural resources.

At the base of many of our environmental problems is an attitude that we have unlimited resources and unlimited rights in our time to use them as we please. Our land has taken a major portion of this abuse. We have begun to realize this, but the changes which are necessary to insure proper use of our land, public and private, will take time and will be fundamental.

You have raised many of the most important issues in your proposed legislation, S. 3354, the National Land Use Policy Act. We on the Council on Environmental Quality have been concerned about many of the same issues as we attempt to define the Federal Government's role.

We believe that the Federal Government approach to the land use question must be twofold:

First, any land use program involving the Federal Government must identify and coordinate those activities of the Government which have an impact on the use of land in private as well as public ownership. In some cases, this impact is a side effect; sometimes it is not even recognized.

Secondly, any effort by the Federal Government to promote national land use policies must take into account the existing relationships between those local, regional, State and Federal agencies which are involved in land use planning. We believe that in many cases these

relationships are not understood even by those who make decisions within the agencies.

Looking at the first aspect of the problem—the impact of Government activities on the use of land—we have identified many areas of Federal activity which need to be better understood and coordinated. These will require attention in the formulation of legislation on land use policy.

In his state of the Union address the President proposed that we develop a national growth policy addressed to the impact of the growth and shifting location of our population. We need to relate this to our use of land and natural resources and to our needs to build new cities and to rebuild old ones.

We must develop a better understanding of the effects on nearby areas brought about by the establishment of major Government installations. For example, the development of the NASA complex at Cape Kennedy has caused a massive influx of population in Brevard County, Fla., resulting in huge tracts of poorly planned subdivisions, little open space preservation and unsightly commercial development.

We should understand the effects of location and construction of federally assisted highways on our urban, suburban, rural and natural environment. At the present time, there are numerous highway projects in this country where the effects on people, wildlife, water resources or land are alleged to be unnecessarily damaging.

We need to examine more closely the environmental impact of airport location and expansion. In addition to the difficulties caused by the highway construction program, airports have the additional environmental problem of noise.

We should explore new agricultural land use policies that will insure the preservation of open space and bring some semblance of order to development patterns where suburbs are spreading onto agricultural lands.

We must seek ways to redirect Government-insured home ownership programs toward the encouragement of more creative planning of subdivisions and communities.

We need to relate existing federally assisted land use planning programs, including the HUD section 701 regional planning grants, to mechanisms which will effectively control actual land use decisions.

We must work to develop new approaches at appropriate Government levels to preserve open space through the use of such devices as conservation and scenic easements, compensatory regulation, purchase and lease-back mechanisms, purchase or donation of development rights, et cetera.

We should strengthen the relationship of Federal water resource development activities to broader concepts of land use planning.

We must not forget that one-third of all the land in the country is owned by the Federal Government; we need to include in any national land-use plan the highest and best use of our public lands. To aid in this, we will want to study carefully the report of the Public Land Law Review Commission, due June 30.

Finally, we must concern ourselves with the effect of our present tax structure on patterns of land use. I refer here primarily to the need to reform our local property tax structure, and the possibilities for modifying the Federal income and estate taxes in ways that will

reduce present negative impacts on land utilization, and encourage desirable land-use patterns. Our council has recently appointed a task force on the impact of the tax structure on the environment. Under the direction of Professor Dan Throop Smith this group will be giving particular attention to the relation of tax policy to land use.

Moving now to the second aspect of the problem of Federal participation in land-use planning, a firm relationship must be developed between local, State, and Federal levels to assure effective implementation. The Federal Government must be more than an occasional club over the head of local and State officials. It should provide for the States and localities a creative and interrelated interdepartmental program of aids for the formulation and implementation of land-use plans.

The State government must be more than a delegator of powers to local unit. It should establish the guidelines which will prevent the advantage being given to those who are after the quick buck. The local government must be more than a victim of forces and trends beyond its control. It must bring home to all the citizens of the community the fact that proper planning and land use are essential to continued enjoyment of life there.

Much remains to be done before these land-use planning relationships between the levels of government can be properly established. Your committee has examined a recent episode. I refer to the conflict between the local interest of the Dade County Port Authority in developing a Miami jetport, and the national interest in preserving the Everglades National Park.

The important lesson that we should learn from the Everglades experience is not that the local decisionmaking authority neglected important environmental considerations, but that it took a major Federal Government effort to stop what never should have been started.

Rather than imposing a national environmental interest in the form of a veto over development decisions made by local authorities, we must develop a positive planning process by which local, State, and Federal authorities will cooperate to insure that development is in harmony with our policy to protect and enhance the environment.

As another example, there is a need for greater cooperation between the private sector and all levels of government in the choice of sites for powerplants and rights-of-way for transmission lines. We are only beginning to realize the need to plan now in order to assure both adequate power for development and adequate protection for our natural environment.

There is an interagency study group at work on this problem. Although their report is not yet ready, we understand that it will urge that public utilities be required to plan their power needs on a long term basis in accordance with land-use plans. Since final site selection usually requires approval by local governmental units, there is potential here for an imaginative intergovernmental planning process which will deal effectively with a major environmental problem area.

Mr. Chairman, we regard these hearings as a valuable and timely forum in which to discuss the complex issues related to developing policies on the use of public and private land in this country. As you know, our staff has had the opportunity to make a number of tech-

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nical suggestions concerning S. 3354, and, in fact, has met with your staff. In the case of any legislation as important as this, evolution of a policy will result from public debate over time, both in Congress and elsewhere. The Council on Environmental Quality looks forward to continuing its contributions to this debate.

That concludes my prepared statement, Mr. Chairman.

The CHAIRMAN. Thank you, Chairman Train, for a very fine statement concerning this problem.

You mentioned the report of the Public Land Law Review Commission, which is due June 30. Actually, that report will be made public at that time, but I am sure the information can be obtained earlier as to the views of the Commission.

We are anxious not to rush this legislation, but we do feel there is a need here to act promptly.

You have referred also to one of the most pressing problems, and that is the decisions that must be made with reference to the obvious conflicts that have arisen, the siting of thermal plants. We know that if a plant is located near the load center that this is the most economic way to proceed. We also know that it can raise some real environmental problems.

On the other hand, if the thermal plant is located some distance from the load center, one is confronted with the environmental problems that are raised by reason of transmission lines.

I think the most troublesome aspect of this one case example—that is, the power industry—is the fact that we do not have at the State and local level an adequate forum to adjudicate the conflicting interests of energy requirements on the one hand and the need for environmental quality on the other.

Our power requirements are going to double, as I recall the figures, by the end of the 1970's. It seems to me that the Federal Government, particularly the Congress, has a responsibility to encourage the States through legislation of this kind—not identical necessarily, to provide the necessary adjudicatory machinery to resolve these conflicts without delay.

You would agree with that statement in general, Mr. Chairman?

Mr. TRAIN. Very definitely. I certainly agree that the Federal Government has a responsibility in the specific case of the siting of generating facilities. Just how to go about this, I am not sure at this point. But I certainly agree that this is a national problem, not just a local matter, and it should be approached nationally.

The CHAIRMAN. This, too, is a case in which the Federal Government must coordinate its work very closely. John Carver of the Federal Power Commission will be testifying after you.

I mention this because of the need for a proper national forum designed to solve the problem of siting these plants. This is a good example, it seems to me, of the need for proper planning at both the State and national levels.

The other broad area that I think deserve comment is the obvious need for orderly economic growth in the 1970's. We have 26 million people at the poverty level. We know there are those who have a simple solution to some of the problems of the environment, the simple solution being a program of no growth.

This hardly measures up, however, to the realistic problems of the 1970's. It seems therefore that there is an urgent need for an adequate

forum at the local level to provide properly for the adjudication of conflicting requirements, the location of factories and plants to provide for orderly growth and, at the same time, provide for quality life.

Would you agree in general?

Mr. TRAIN. I very definitely do agree. I think that we need here not only a process of coordination between the Federal, State, and local governments. We also need a much more actively developed and more sophisticated process of public involvement, citizen involvement in the process of planning and conflict resolution. I think this can be gotten at in part by the kind of long-range plans which it is my understanding the Federal power siting study will probably suggest.

But I think in addition, we do need a very positive involvement, participation by private citizens and citizen groups in this whole process. because it is only with the openness of information and an identification of available alternatives that I think the public will in the future accept the kinds of decisions that have to be made.

We have seen so much of this in the recent 2 or 3 years where development of all sorts has been held up, rightly or wrongly, often rightly I suspect, because of lack of public information basically, and I think this is one of the very real concerns that any kind of national planning approach must take into account.

The CHAIRMAN. Certainly governmental institutions at the State and local level have not been able to keep pace with the problems of the environment. I think we can all agree on that. The testimony here earlier has indicated to us that the governors find it difficult from a political point of view to streamline, to reorganize State and local governmental institutions in such a way as to cope with many of the problems of land use within their States.

Senator HATFIELD. Would the Senator yield at this point?

The CHAIRMAN. Certainly.

Senator HATFIELD. During a hearing that we held in subcommittee relating to the proposed moratorium on hydroplants introduced by Senator Jordan and Senator Church, I pursued this line of questioning that the chairman of our committee is pursuing this morning, only with other witnesses.

When you discuss this matter of siting of such plants as sources of energy that we will require and let's assume for the moment that we will support the moratorium on any further hydroplants, taking this area as a specific example, what kind of character area would you say or what kind of areas for possible site locations, or characteristics of such areas that you would feel would be appropriate for siting these plants or plants of this type, these generating plants under our new hydrothermal agreement?

Have you made any studies on that or have you come to any conclusions on that? I will ask Mr. Carver that question later. But since you are on this subject, I would like to ask you, Mr. Train.

Second, not only land characteristics, but in reference to population, in reference to markets, in reference to the possibility of clusters rather than single plant locations—all of these things, do you have material at this time that you could provide this committee or comments you would like to make?

Mr. TRAIN. I am afraid that we really have not had an opportunity as yet in the Council to really get into any detail in the kinds of ques-

tions which you have just asked nor have we developed any material of our own on this.

We will in due course, I feel sure. I think that your suggestion of clustering development is one that we certainly must get at. It has become recognized in the real estate development field as a protection or rather a wise use and allocation of space. And I have no doubt that in the industrial-commercial development field that this is likewise true.

There is simply no point in spreading development over the entire landscape when you can more effectively, probably more efficiently, concentrate and leave a larger proportion of the land undeveloped for other human uses.

I might comment at this point—you are all familiar with the fact that the National Environmental Policy Act, which is the basic charter for our Council, contains a section 102, which requires all Federal agencies to submit an environmental impact statement to the President and to the Council in connection with any proposed legislation or other proposals for Federal action with a potentially significant environmental impact.

We have been developing draft guidelines for the use of the agencies in this connection, because this is a new field where really we are suggesting a fairly revolutionary approach to decisionmaking in government.

These guidelines which are presently under discussion with the agencies include at the present time, for example, the necessity for evaluating the impact on population distribution and population patterns as a result of some proposed action.

So that if an irrigation project or a dam, what have you, is proposed, consideration must be given as part of the planning process as to what this is going to mean in terms of community development, and population shifts in the future, a very vital part of the environmental picture which has been largely overlooked in the past or at least not dealt with effectively.

So, we are getting at that through our existing authority.

Senator HATFIELD. So, when you consider cluster as a possibility you would have to incorporate both existing patterns of population and projected future population development as well as immediate markets and future potential markets and many other components and not just the situation as of this time that one would make a ruling on a cluster location.

Mr. TRAIN. Absolutely. I think implicit in all of this is the need to look sufficiently far down the road so that planning is effective as to the future and not just for the short term.

The real problems are down the road and not today or tomorrow.

Senator HATFIELD. Thank you.

The CHAIRMAN. Just to pursue that a little further, of course the States will have an opportunity to decide on what options they wish to follow in connection with powerplant locations.

Obviously, if plants are located some distance away from the load centers, the consumer will have to pay more for the power. They will have to balance that cost against the environmental impact. Unless transmission lines are put underground, they can of course raise serious problems with respect to the amount of land that is to be taken and the general impact on the environment as a whole.

Wouldn't you say that these are options that should be spelled out at the local level, or by the State through its appropriate agency in behalf of the people of the area?

Senator HATFIELD. And present land availability.

The CHAIRMAN. Yes, all of these are factors or optional considerations that must be borne in mind.

My point is that today we lack the appropriate kind of forum in virtually all 50 States to make these decisions. The result is a crisis everywhere on the siting of thermal plants. One can hardly pick up a newspaper without reading of local opposition to plant A or plant B as suggested by a utility. This goes on and on without any resolution.

I merely make this observation because local citizens must keep in mind that there are price tags as well as environmental tags on the options that will be available to them. This is true not only in the siting of powerplants, but also in other areas of economic endeavor.

Mr. TRAIN. One matter I would like to comment upon relates to local responsibility in this whole area.

At the present time, I think it is true that by and large planning and land use responsibilities are pretty much vested in local government units. The Federal Government, except for our own public domain, has no planning or land use authority whatsoever.

The States in turn have to a very great extent delegated either constitutionally or by legislation control over land use, specifically the zoning authority, to local units of government.

Here I think is a very sensitive and yet a very crucial element of any consideration of land use policies. Many of the issues are necessarily local in character—in fact, their direct impact is almost always local—yet, most of these today have at least regional implications and often broader.

For example, the jetport in the Everglades that we mentioned earlier.

So, if the ultimate decision remains in all land use matters at the local level, there is a very real question in my mind as to the ultimate effectiveness of State and regional planning mechanisms.

The coastal zone management legislation submitted by the administration last year, as I recall, requires for qualification that a State either have the zoning authority or have the right to set aside a local zoning act which is inconsistent with the State plan.

I mention this simply to suggest that this is an area where I think public attention and discussion needs to be focused, because as I said earlier, it is a highly sensitive area, it is a matter of very strong local interest and if there are going to be any major changes in this area, I think it has to come about by evolutionary process and a great deal of public discussion and more understanding than there is today.

The CHAIRMAN. On the other hand, if we wait for that discussion to just go on and on, I am afraid critical decisions that need to be made will not be made.

The States have struggled with the problem of conflicting jurisdiction between various subdivisions of the State, governmental entities, over a period of many, many years. Some of these entities, I know the chairman is aware, go back to colonial times.

The problem that the States face is that they have not been able to amend the laws or the constitutions of the States in such a way as to

provide for overall statewide or regional land use planning. This is what we have before us. The evidence that has been submitted is pretty clear on this.

It is true we do not have constitutional authority to provide by Federal law for local land use planning except as it pertains to Federal lands. As the chairman knows, what we propose here is the old carrot and stick approach to, in effect, call upon the States to exercise their States' rights.

It seems to me that this is the right approach. It seems also to me that there is this opportunity under proper statewide planning to coordinate such plans with the other States and with the Federal Government as a whole.

I know of no other way in which this can be done. I agree with you that there needs to be as wide a discussion of this problem as possible. I am afraid, however, that time is running out on us. I don't think there is much opportunity for any great and lengthy debate that will go over a period of time.

Under the Federal highway trust funds the Federal Government has granted billions of dollars to State governments for highway construction. Do you feel there should be a requirement of planning in transportation corridors before these funds are granted, so that we can avoid trouble later on? Of course, this same question arises in connection with water resource projects, airports, and a long list of Federal development projects.

Mr. TRAIN. I certainly agree that any allocation of Federal funds to major projects of that sort should only be made where the project itself is the subject of what I would call comprehensive planning which would be fully coordinated with other Federal projects and to the extent possible, with State plans.

The CHAIRMAN. This is all the more reason, of course, why time is of the essence in connection with some resolution of this problem, because highway construction is now being undertaken without a comprehensive look at the State as a whole. It is not just the highway program, but a long list of other Federal activities. I assume you are getting into some of this with your 102 requirements as they pertain to Federal agencies.

Mr. TRAIN. Yes, we are.

The CHAIRMAN. However, when the Federal agencies come in they are not able to give an adequate response, I would assume, until they know what the State plan is going to be. Isn't this true?

Mr. TRAIN. It is my understanding that many of the highway decisions are really made in the States and taken to a point beyond where the Federal interest can be really effective in many cases.

Also, by the same token, although I am not fully informed on this subject, I have a feeling that many of the State highway plans really are not very closely coordinated with the State government itself. In some cases the communication between Governor and highway department may be not as god as one would hope it should be.

The CHAIRMAN. I might point out, too, there is very little coordination sometimes between highway departments and the city fathers concerning freeways running through city areas where there are local plans concerning ghetto improvement, and so on.

Frankly, it is frequently anarchy at the local level when it comes to any effort to coordinate the various requirements in an attempt to come up with some kind of a sensible land-use plan.

Mr. Chairman, I gather that at this time the administration has decided to reserve its options on the pending legislation.

Mr. TRAIN. I think that is a fair statement while I strongly endorse the need for effective approaches to this problem.

We intend in the council to move ahead in this area just as rapidly as we can.

The CHAIRMAN. Do you plan to submit legislation or will you be in a position a little later to suggest amendments to the pending measure?

Mr. TRAIN. I would hope that the administration would have legislation in due course. But I cannot assure the chairman of that.

The CHAIRMAN. But you will be in a position to discuss with us possible amendments.

Mr. TRAIN. Yes, Mr. Chairman. My information is that we have been doing that with your staff, have raised several questions which have come to our minds about details of the bill. And as I indicated in my statement, we will be more than happy to continue to work with you in that fashion.

The CHAIRMAN. We appreciate that cooperation. We will proceed along those lines.

Senator Jordan?

Senator JORDAN. Thank you, Mr. Chairman.

Mr. Chairman, I want to welcome you before this committee in your new role as working wholly in environment now. We miss you in the Department of Interior, as you well know. I appreciate your statement and I find myself pretty much in agreement with it.

You give one illustration of how the Federal Government had to intercede and prevent the damage to the environment at the construction of an airport in Florida. I would like to cite to you an example where local citizens had to intercede to prevent damage to the environment by the invasion of an interstate highway through a college campus and through a park in Boise, Idaho.

The interstate planners were determined that they were coming right down through the college campus and down along the river through a 160-acre park that has been donated to the city and it took a substantial effort on the part of local citizens by passing the hat among citizens who were concerned with the environment to head off the Federal highway people and the State highway people and prevent that invasion.

We were successful in doing that.

But I wanted you to know that it works both ways, too.

Mr. TRAIN. It does. I know it does, Senator.

Senator JORDAN. You have said we need a land-use policy. I agree. Yet, I think we have a surfeit of agencies working in public land affairs already. The Idaho Commission on Federal Land Law appointed to work hand in hand with the Federal Public Land Law Commission did a very fine job in bringing to light a number of things.

In their studies they took eight counties in central Idaho and comprising an area about 50 by 75 miles and they enumerated and inventoried a number of Federal agencies presently engaged in land management planning in what they call the Idaho Quadrangle.

So, even though we need a land-use policy, an overall plan, I wonder if we are going to superimpose it on top of the planning agencies that are already in the field.

Let me just tell you what this disclosed. By the way, this area includes eight counties, an area about 50 by 75 miles and 150,000 people.

The Department of Agriculture is in there with 13 soil conservation stations and work units. The U.S. Forest Service is in there with four forests, Caribou, Challis, Sawtooth and Salmon; Farmers Home Administration is there, Rural Development Council, Agricultural Stabilization and Conservation Service, and the Rural Electric Administration; all of them having to do with more or less land-use planning.

Then the Department of Interior is there with the Bureau of Sports Fisheries and Wildlife, with a Minidoka Wildlife Refuge and the Camas Wildlife Refuge. The National Park Service is interested because of the Craters of the Moon National Monument that is in this area. The Bureau of Land Management has three district offices in the district, the Burley District, the Idaho Falls District, and the Shoshone District. Then the Bureau of Reclamation is there with them. The Bureau of Indian Affairs is concerned by reason of an Indian reservation. The Federal Water Pollution Control Administration is in there, the Geological Survey is active, the Bureau of Mines is there. Then the Atomic Energy Commission supervises land use at the National Reactor Testing Station. The Department of Commerce is there with the Economic Development Administration and the Department of Transportation of course is there with the Federal highways and the Federal Aviation Administration.

This is one area where the Federal Government is already involved. There are still eight county governments.

Mr. TRAIN. That sounds like an understatement.

Senator JORDAN. There are still eight county governments involved here with zoning authorities. This is before the State enters the picture in any case. This is before the State of Idaho enters the case at all.

I am simply saying how do we initiate a plan? Are we to superimpose it on the part of all the various agencies that are presently working? If so, which ones will we eliminate? If not, how does it work?

Mr. TRAIN. I think certainly speaking for myself that the last thing we want to do is simply put another layer on what would seem to be an already overlayered process. I think without question a crucial element in any national land planning effort must be coordination of existing planning activities. They are all multitudinous. There is no question about it.

But I think as we all know there is very little intercommunication between the various agencies involved even in the same department.

This arises by historic reasons as much as anything else.

So, I would think that any program should have coordination as an essential element. Even if we could coordinate the absence of any new planning input, I think that in itself would be a great step forward.

Senator JORDAN. Thank you. You are a good witness. I shall not take any more of your time. We have a number of questions. We have other witnesses.

The CHAIRMAN. Senator Hansen?

Senator HANSEN. Thank you, Mr. Chairman.

My welcome to you, Mr. Train. We are delighted indeed to have you appearing yet in another role despite our reluctance to see you leave the former position you held with the Department of Interior.

Let me ask you a rather broad question. Would it be your feeling that a properly developed and hopefully successful program of planned land use should go without consideration of water or should the two go hand in hand?

Mr. TRAIN. I think, speaking generally as I understand the question was framed, that the two must go hand in hand. There is no question about that.

Senator HANSEN. I don't know how much relevance you may feel there is between the Water Resources Planning Act and the bill that we have before us. Would it be your feeling that there would be considerable relevance and overlapping of interests between the proposed legislation and that which is reflected in Public Law 89–80, the Water Resources Planning Act?

Mr. TRAIN. I probably am not as familiar with the Water Resources Planning Act as I would have to be to really answer that question.

I will go back and say you can't have a land-use policy that is not closely integrated with water resource management. The two are really part of the same thing.

Senator HANSEN. Is it your thought that we should approach the problem of land planning on a national basis or should it be approached State by State, region by region, and area by area?

Mr. TRAIN. A little of both, or maybe a great deal of both. I certainly would shy away from any thought that the Federal Government operating out of Washington should become sort of a super planning agent for land use all over the country. I don't think that is practical. I don't think that people would support such a move.

Basically, I don't think it would produce the right answers. There are so many differences and variations of a regional. State and local nature that these variations I think can best be accommodated by decisions made at the regional, State, and local level rather than in Washington.

So that when we speak of national of the need for a national land-use policy, I would not want to be misunderstood as saying that we ought to have a national land plan run out of Washington. What we need is more effective land use planning and control all over the Nation.

And to the extent that the Federal Government can encourage that I think it is very important that it should. But the decision should be made much closer to the people than here in Washington.

There are some things such as interstate highways where obviously the decision can only be made on a very broad basis, possibly as part of a national plan.

But here again, State and regional concerns are of very great importance. In the case of the powerplant siting problem that we have discussed earlier, I think there could very well be broad national guidelines as to the development of these plants, the amount of time in advance, for example, that planning would have to be done, the extent of public participation in the development of the plans, things of that sort; perhaps certain specific pollution standards.

Other kinds of activities or decisions such as where a particular industrial plant might be located come much closer to being a matter for local decision.

So, I go back to what I said earlier, I think that you need some of both. You need some national guidelines within the framework of which regional, State and local decisions can be made.

Senator HANSEN. Generally speaking, do you think the local term "broad public interest" will best be served if we approach the contribution, our land resources and our water resources as well may make if we do that in the context of national interest, or should we restrict our concerns to river basins and areas without looking beyond the rather narrow, immediate goals that could be achieved and trying to contemplate the contribution that water can make in the different parts of the country?

What is your feeling on that?

Mr. TRAIN. Aside from certain key or critical kinds of facilities such as highways, regional jetports, power facilities, perhaps large refinery facilities, I would assume that the Federal Government's role by and large should be to encourage effective mechanisms and processes which are on a sufficiently wide geographical base such as a river basin so they can be effective, but leave the specific decisions as to whether a given plant goes here or there to be worked out within that process at the regional level.

Now, I don't know whether I really answered your question. But I think that is about the best I can do.

Senator HANSEN. May I make a specific statement or question?

Do you think the best long-range interests of the people will be served if we were to examine, say, the area of the Southwestern United States, Arizona, and California, an area deficient in water now, should we think in terms of trying to make our plans and our projections for further developments down there or restrictions of development on the basis of water supplies we presently find there, or would it better be served by looking at the whole water availability of the country and trying to come up with long-range solutions based on the possibility of water shortages?

Mr. TRAIN. I certainly think we need long range solutions. I think this is the kind of thing that the Water Resources Commission is expected to be looking at.

I do think it is important in any area of the country, whether it be southern Florida or southern California or any other part, that we not simply plan on the basis of meeting assumed projections of growth, because I think it is important for the country as part of a comprehensive national growth policy such as the President has spoken of, to look to the future and to plan in terms of what kind of population distribution and development is best suited to certain areas rather than sort of willy-nilly pursuing the growth projections.

Senator HANSEN. Is this an urgent problem? Do you think we ought to be thinking about it now?

Mr. TRAIN. I think we definitely should be thinking about it now.

A very specific case, it is not exactly what you had in mind, but one with which this committee has been concerned; that is, the water requirements of southern Florida as compared to the water requirements of the Everglades National Park in particular and whether the

national park should be asked to stand aside in the event that future growth of population, industry, and agriculture in southern Florida should put new demands on available water to the detriment of the park.

That kind of question, I think, is increasingly before us all over the country.

Senator HANSEN. In your statement, you made several comments concerning the power of the Federal Government over State and planning agencies. I refer to page 6. Do you believe the powers of the Federal Government should extend to the withholding of funds from other Federal programs as is indicated on page 19, lines 1–15 of the proposed bill?

I appreciate you may not have that before you. I think this is one of the carrots that is being held out or perhaps the stick, whichever way you look at it.

Mr. TRAIN. I am not sure it is a carrot or stick.

The CHAIRMAN. In some places you will find a provision for a club.

Mr. TRAIN. I do think that legislation of this sort which would be effective in terms of really moving the States forward in this area is going to have to have a combination of carrot and stick. Whether this is exactly the right stick or carrot, I am not prepared to say at this time.

Senator HANSEN. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Hansen.

Senator Burdick?

Senator BURDICK. Thank you, Mr. Chairman.

I have heard your statement, Mr. Train. We had some competing congressional business so I didn't get here right away.

I have one or two questions. Suppose after the States engage in this planning they come up with a comprehensive plan for State X, let's say. Will that plan then be welded into the laws through zoning laws and things of that nature?

Mr. TRAIN. In the States?

Senator BURDICK. Yes.

Mr. TRAIN. I think just before you came in I was expressing my concern that State plans might not turn out to be really effective if the ultimate decision insofar as zoning and other land use controls remains in all cases at the local level.

I raise this as a question with the committee simply for its consideration.

This particular legislation I don't believe requires for qualification of a State plan that there be that kind of ultimate authority in the State over local control.

Senator BURDICK. I understand that. But wouldn't that be the natural course of events to follow, that this be placed in legal cement, let's say, to put it into the zoning ordinance of the city or State law?

Mr. TRAIN. My own view to the extent that it would be practical to do this is that there should be some requirement that local zoning and land use decisions not be out of conformity with the comprehensive State plan. Just how you arrive at that, I am not sure.

Senator BURDICK. You and I are thinking about the same things. You arrive at a plan that isn't adhered to and is violated, then you have not accomplished very much.

Mr. TRAIN. By the same token, I think we recognize there are very many local units that are doing either a good or a reasonably good job of planning; perhaps far better than the rest of the State of the State government is doing.

Any legislation should be carefully drawn so as not to destroy the good that is being done at the local level. But I do think that as the administration's coastal zone management legislation now before Congress provides that if there is a State plan, that in order for it to qualify under the legislation, the State must have the authority to set a regulation which is consistent with that plan.

Otherwise it can become meaningless.

Senator BURDICK. That is, some type of legislation, call it zoning or call it what you will, to give some force or effect to preserving the character of the area that has been agreed to by planning.

Mr. TRAIN. Some States have started moving in this direction. I think there is a desire in quite a few places to move in this direction. But the political reality makes it difficult to move very rapidly.

The State of Wisconsin has a statewide shoreline and flood plain zoning law, as I understand it, where the initial responsibility is left with the local unit, which I believe is the county, but in the event that the county doesn't come up with an appropriate plan within a given period of time, the State can move in and do the plan itself. This is an evolving field.

Senator BURDICK. I think that somebody following the plans, I don't know what form it will take, will have to have some degree of enforcement. Do you agree with that?

Mr. TRAIN. Certainly a State plan which has no teeth to it is not going to be very useful.

The CHAIRMAN. If my friend will yield briefly, on page 17 of the proposed draft, subsection (c) "To retain eligibility for statewide land use planning grants after the end of 3 fiscal years from the beginning of the first fiscal year after the date of enactment of this title, the State land use planning agency designated by the Governor pursuant to section 403(a)(1) must meet the following Federal guidelines and requirements."

I believe there is provision in here to take care of the very development that Senator Burdick referred to.

We get down to subsection (b), "Authority under State police powers to place restrictions on the type of land use activities which may take place in areas designated for a special use under the statewide land use plan and (c) authority to conduct public hearings, allowing full public participation, and granting the right of appeal to aggrieved parties in connection with the dedication of any area of the State as an area subject to restricted or special uses under the statewide plan," and "(3) the agency must have procedures for modification and change in the State land use plan, including public notice notice and hearing," and so on.

The point is that there is required that the statewide land use plan must make provision for conformity as far as the subagencies that would operate under that plan.

Failure to do so, of course, would invalidate their rights under the law.

Senator BURDICK. I quite agree with you.

The CHAIRMAN. There is a lot of trial and error here. We are trying to come up with some guidelines that are not final by any means.

Senator BURDICK. I quite agree with you, Mr. Chairman, that the bill provides authority to do what it can to enhance the planning. I am asking the specific question: Would this result in statewide, something like zoning laws where the States do it? Simply to meet and have a plan doesn't go quite far enough. I presume it would have to be elastic enough for changing conditions, too.

Thank you.

The CHAIRMAN. Thank you, Chairman Train, for a very fine statement and your cooperation with the committee this morning. We will be in touch with you.

Mr. TRAIN. Thank you, Mr. Chairman.

The CHAIRMAN. Congressman Meeds was unable to attend today's hearing, but he has sent a statement to be placed in the record.

STATEMENT OF HON. LLOYD MEEDS, A U.S. REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. Chairman, I appreciate this opportunity to lend my support to establishing a National Land Use Policy. I am sponsoring a bill in the House, H.R. 16989, similar to S. 3354 under consideration here. The problem seems to center on the competition for increasingly scarce land. A National Land Use Policy would bring some order and predictability to land use—we would know what land is to be preserved in its natural state, what land is suitable for recreation and what land will be set aside for industrial sanctuaries.

A redressing of the ecological balance in this country is of priority in the decade of the 70's. Conservationists have redoubled their efforts to keep nearly every parcel of land in its "pristine" state. In this effort, they run head-long into citizens promoting technological change. Conservation can become uncomfortable when its good intentions collide with the legitimate desires of those seeking progress.

A good example of the need for land use planning occurred in my own district a few years ago. The Northwest Aluminum Co. decided to build a refinery on Guemes Island, about an hour's drive and a 15 minute ferry ride from Seattle. The surrounding area lacks a year-round employment base and suffers a jobless rate of 15% or more during the winter when logging, canning and fishing are out of season. The aluminum plant would have provided 2,000 jobs during construction and 1,000 jobs when operating.

No sooner had a welcome been trumpeted by community leaders than a reaction sprouted and grew like crab grass. "Keep industry out and keep nature in," demanded the *Seattle Times*, the conservationists and a great many people who had never seen Guemes Island. From the neighboring town of Anacortes, meanwhile, I received a lengthy petition of support for the aluminum refinery.

A lawsuit against the plant was filed by John D. Erlichman, a Seattle attorney who now advises the President on domestic policy. Confronted with legal barriers and lengthy delays, Northwest Aluminum chose to locate in Oregon.

Area unemployment this last winter reached 20%.

Comprehensive studies may have shown that Guemes Island was not suited for industry. It is a lovely piece of land. But on the other hand, the company had agreed to install the "best commercially available" air and water pollution control equipment. The pros and cons aside, the important point is that the environment factors were never tested, never evaluated, never balanced with the economic aspects.

The same kind of thing that happened to Northwest Aluminum is happening to electric power producers. Electric power needs of Washington State will triple by 1990, but at the same time we are running out of hydro-electric sites. The utilities will have to rely on nuclear reactors to supply the power needs.

As you might expect, proposals for construction of reactors have drawn vehement protests from conservationists and some local citizens.

A thoughtful columnist in one of our local newspapers recently assessed these objections. Look, he said, you conservationists won't tolerate any more hydro-electric dams because they foul up the river ecology. You're dead set against

oil and steam generating plants because they pollute the air. Now you're strongly opposed to nuclear plants which happen to be the safest and cleanest way to furnish electricity. "What will you do when the lights go out?

Our dilemma is that we must conserve our environment, but at the same time, we need the industry and technology to provide the jobs and money so necessary to enjoying that environment. Presently, industry has no way of knowing where it can locate. At every turn environmentalists have put up the "do not disturb" sign.

Environment and technology are on a collision course. A fight erupts every time time a new plant is announced. But all is not black. The collision may be averted if we plan ahead.

S. 3354 provides for statewide land use plans. Highest need and use to society would determine the ultimate use of land. We would remove much of the present uncertainty. Industry could tell by glancing at the plan where to build its plants. Business would not suffer the interminable harrassment of conservation groups and years of delaying litigation. On the other hand, scenic and esthetic areas would be out of bounds to industry.

The energy and money which today is spent quarreling, could be turned toward improvement of our environment and society. The National Land Use Policy as envisioned in S. 3354, may prove to be the balance which makes for peaceful co-existence between progress and preservation.

The CHAIRMAN. Our next witness is Mr. John Carver, member, Federal Power Commission, formerly Assistant Secretary for Public Land Management, and also formerly Under Secretary, Department of the Interior.

We are delighted to welcome you to the committee once again this morning. You have a prepared statement, Mr. Carver. You may proceed in your own way.

STATEMENT OF HON. JOHN CARVER, JR., MEMBER, FEDERAL POWER COMMISSION

Mr. CARVER. Thank you, Mr. Chairman.

I remember the happy days when I was in the executive branch and I could be the first witness. I will try to hit the high points of this statement which I hope the committee members have before them, because in my own approach to this bill I have undertaken to sort of reorganize the way in which it was presented. I find the subject completely fascinating and I didn't want to be left out, so to speak, of what I consider one of the most significant developments in legislation involving land-use planning.

Let me emphasize I am speaking here personally. The Chairman of the FTC will speak for the Commission as an institution separately.

The bill looks toward a system of public action for a better quality of land-use decisions in this country. A central feature of the bill is the dominant role assigned to the States. Provision is made for interstate agencies to participate in the benefits of the program of technical and financial assistance, but in the bill as presently drafted the most detailed attention is given to the statewide land use plan which is to be prepared by a "single State agency."

I merely want to emphasize what I consider are some of the more salient or unusual provisions of the bill.

On page 2 of my statement, I have concluded that the plan or a statewide land use plan contemplated by the bill is required to classify land areas, in the sense of reflecting qualitative judgments of several kinds: For example, areas where ecological and environmental and geological and physical conditions dictate that certain types of land-

use activities are undesirable or to be identified as the areas where the highest and best use is recreation-oriented use, or agricultural, mineral, and industrial.

I found it very interesting that a number of the explicit requirements of the contents of a plan are framed in such a was as to preclude the State from taking too narrow or too parochial a view of the contributions the land resources and its own State governmental actions can make for the good of the nation as a whole.

A plan must include appropriate provisions designed to insure that regional requirements for material goods, natural resources, energy, recreation and environmental amenities have been given consideration. It must include provisions designed to insure consistency with both regional and Federal standards.

And, explicitly, it must include provisions to insure that transportation and utility does not do damage to Federal lands dedicated to the maximization of declared public values.

Then it is an aspect of a plan looking toward the national interests that it looks to the ultimate benefit of the Federal Government as landlord by being required to contain provisions for helping to preserve the integrity of national parks, wilderness areas, and so on, by buffer zones, scenic easements, and other devices.

On page 3 of my statement, I have summarized some additional substantive requirements. For example, the single State agency required to be designated by the Governor must be given authority necessary to implement the plan which authority must include—I think this is very important—at least authority to acquire interest in real property necessary to effectuate the purposes of the plan. It must have delegated police authority to place restrictions on the type of land-use activities which may take place in areas designated for a special use under the plan.

Furthermore, one of the requirements of the bill is that the agency must have authority to conduct public hearings with full public participation and a system of judicial review.

Turning over several pages to page 5, the so-called carrot and stick provisions as you have alluded to them, Mr. Chairman, the main inducement of the measure is the program for these planning grants which are addative; that is, they are to be added to any other kind of grant program which is pending or which is authorized by other legislation.

This is a brandnew concept and I think a very significant one. Once a planning grant has been made, the inducement to stay with the program is more in the stick category. I have emphasized two of them here. One is that a State's entitlement to statewide land-use planning funds if it has been terminated or if an acceptable plan is not submitted when it is due, the State becomes liable to have its entitlement to funds otherwise available under other Federal assistance programs reduced at the rate of one-fifth a year as in the discretionary authority of the President.

Even more harshly, the State is likewise—I think, Mr. Chairman, this one goes a little too far—to be denied the issuance of any right-of-way permit or other permits available under the public land-use laws and other Federal laws to use or to cross the public domain or other Federal lands within that State until the State gets in compliance.

That may mean not much in some States, but in some places in Idaho, some of the county officials wouldn't be able to get out of the county if this were literally applied. That is in section 407.

I found on section 402 of the bill and in section 3 of the bill as it is drafted, middle of page 6 of my statement, a very significant purpose, that is, to develop and refine a coherent national land-use policy with respect to the planning and the management of all federally owned lands.

It is true indeed that the basic force of the bill goes toward the planning of non-Federal lands, but this important section of the bill, of course, is an integral part of it.

Turning to page 8 of my statement, I have called attention to the provision of the bill which calls for the Federal Government—the term is just used Federal Government, I don't know if this means the council or not—to undertake the development of a national land-use policy.

The findings and the policy declaring sections of the bill constitute a statement of policy, at least as I read them, so the national land-use policy apparently refers to some document or statement which builds upon the congressional directives; that is, here we get this fairly common semantic problem with the word "policy."

I have emphasized at least for this summary a point which you raised, Mr. Chairman, early this morning in your opening statement, and that is the provision that one of the requirements of the policy is that it should foster continued economic growth of all States and regions but at the same time influence population distribution in a manner to make scenic, environmental and cultural amenities available. I think one of the principal problems we are facing in this whole subject matter is that a major segment of the debaters, so to speak, take the view that their answer to most problems is a zero economic growth, and therefore I find it very significant that the bill doesn't go that route and explicitly denies it.

On page 9, I have called attention to the fact that this policy is to serve as a guide in making specific decisions at the national level which affect the pattern for environmental, recreational and industrial growth and development on the public lands. This also goes to some of the matters discussed already, that is, a recognition that what you have here is an experiment in federalism in which you are trying to relate within traditional concepts the idea that the States have the police power but they do have to have such an impact on national matters that the Federal Government should use the authority as it properly can to get a higher quality or a better kind of decisionmaking.

One of the most important things is that once they have settled upon a kind of policy is that the Federal Government itself conform with it.

When the bill was introduced the author, Senator Jackson, said that the National Land Use Policy is the next logical step to follow the National Environmental Policy Act and it was recognized that it was a starting point for review and analysis, a working draft for comment and so on.

I would certainly hope—I think it would be a great shame if it didn't—that there will be a constructive response. I would like to think that this response could be on its own intellectual merits rather than a problem of coordination or a bureaucratic infighting for program ascendency.

I think the problems we face in this country are much too big to permit a lot of time to be spent in debating among the various bureaus of who is going to have the dominant role and so on. Rather, we should get down to the basic points.

I think most problems are illustrated by an article which many of you may have read in the Washington Post last Sunday, "Resources for Future," which pointed out that 90 percent of the growth in power generation in the last 30 years has been caused by higher per capita consumption of power.

In other words, if we thought that the right amount of electricity was that which we generated in 1940, at the present rate of consumption only 20 million people could have electricity.

The years since 1940 don't seem too awfully long to many of us. It is when you extrapolate into the next 30 years that you get some really frightening statistics about what you are going to need in terms of capacity and land use and water use. That, of course, is what this bill is all about.

I had occasion the other day—this is not a part of my statement—to point out that just over two decades, if we just assume the experienced historic growth or the economic growth which the bill calls for us to continue to have, we will have to construct about 40 new hydroelectric stations of 100 megawatts or more, about 50 pump storm hydroelectric projects of 300 megawatts or over and about 90 fossil fuel and 165 nuclear steam plants ranging in size from 1,000 to 4,000 megawatts.

That is the kind of land consumption problems which we face, that of course is why it is very important that we begin to see that.

The point that I have emphasized for my own, what I hope is a contribution here, is that the American people are going to make the compromises that are necessary only as they understand the problem.

There is a vast evidence, as far as I am concerned, that they don't now understand it. They have a generalized feeling that they can eat their cake and have it too. In the context of the bill, planning in a free society requires planners who are responsive to the citizens of that society.

Planners don't achieve political immunity simply by being vested with the mantle of planner. The process of planning as the bill recognizes must take place within the political system and be responsive to the President coming to understand what our problems are, as a common effort, is the only thing that will make a plan worth very much.

So, the thing involved is not just the plan, but how you get it. If you don't get it with a common understanding of what your needs are, you will get nobody to accept the decisions as to what will be required in the plan.

I have in the final three pages made some moderately bureaucratic comments about how the bill will or won't work. I have, for example, expressed some doubt that a Council, an augmented Water Resources Council, is the right instrumentality to supervise this kind of a proposition. I have called attention, at least to the committee and its staff, to, I think, a considerable contribution on this subject that this bill presents in the book, "Making Federalism Work," which gives a lot of insights based upon some studies of different kinds of programs that we have had.

I have pointed out in the last page and a half some things where I think it could be strengthened or changed or where I think that the bill perhaps makes some wrong assumptions.

But those statements speak for themselves, Mr. Chairman. I won't burden the committee with reading them here.

The CHAIRMAN. Thank you, Mr. Carver, for your constructive comments on and analysis of the bill.

I take it that you share the urgency that the members of this committee have expressed as to the need to do something in this area.

Mr. CARVER. Mr. Chairman, you can't sit where we sit at the Federal Power Commission and see a growing narrowing of the gap between what we can produce in electricity and what the people demand by way of services from that plant without being genuinely concerned that we have a real crisis at hand. Many of those crisis problems are related to the subject of this bill, the use of land.

The CHAIRMAN. In other words, operating within your constitutional sphere is one thing, but you have to relate it, of course, to what the States can do in trying to plan properly to meet their own requirements, and do it in a timely fashion.

Mr. CARVER. The decisions that we make in the electric utility industry, as you well know, Mr. Chairman, we have got just a minimum timelag of 5 years. The next 5 years are all locked in now, we are dealing with 1975, 1976, 1977 right today. We have a lot of experience, probably more than most, in seeing the relationship or the necessity of coordination and cooperation between the agencies at the State level and those at the Federal level given the very pluralized, plural system we have of electric power generation in this country.

So far this system has served us admirably well. I think that it would be a great mistake to think that the system has been a failure. It has been a success. But we have some forces at work in our society which are questioning some of the things at such a basic level that absent the kind of attention you are giving it here, we will not be able to get power when we need it where we need it in the amounts which are necessary.

Electric power is regarded as a polluter. But electric power, central station generation, is the principal unpolluter of our society. Without electric energy, that independent kind of clean energy, if everybody was still stoking their furnace for example and building a teepee fire to read by, you would have a lot more pollution than you have now.

The CHAIRMAN. I want to thank you for a very fine statement and I recognize that you have expressed your personal views, but we welcome those personal views because you have had a lot of experience in this area. They were extremely helpful as far as the chairman is concerned. We will be in touch with you regarding the various comments and recommendations that you have made. The Federal Power Commission has a very important area of responsibility in connection with the pending legislation. We will want to have the benefit of the individual views of the members of the Commission as well as the Commission itself as an institution.

Thank you very much.

Senator Jordan?

Senator JORDAN. Thank you, Mr. Chairman.

Commissioner Carver, you are well qualified to address yourself to this subject as anyone I know in the Government. I am always pleased to get your views, either personal or reflecting the view of the Commission. I think your statement today has been very constructive. I am intrigued by the statement you just made that about 90 percent of the increase in the demand for electricity was due to the increased use of electricity.

Did I understand you correctly?

Mr. CARVER. Yes, sir; that is correct. We have come up from about a per capita consumption in the order of 600 kilowatt hours up to around 6 or 7,000 today. We look forward to 22,000 kilowatt hours in the next 20 years if the growth rates continue.

This is just purely and simply a measure of the improvement of our quality or our standard of living and a considerable part of that is related to uses which are directed toward giving you an unpolluted, relatively speaking, environment.

Senator JORDAN. I think that is significant. I was astounded the other day when a witness for a conservation group said that we have several times as much light in this room as we need, that we have got to work toward the consumption of less electricity rather than more electricity. I have always assumed that as we moved toward the consumption of more electricity we were following a very sound ecological and conservative pattern.

Wouldn't you agree that it would be much better in a given community that had, let's say, 100,000 home furnaces all delivering into the atmosphere various parts of unburned fuel and fumes, that those homes be heated 100-percent electrically so that the fumes would all go out a single stack wherever possible and arrest the pollution and clean up what came out of that stack?

Could that be economically justified?

Mr. CARVER. That was what I meant, Senator Jordan, in connection with central station generation. It is the relative efficiency which is involved in getting the maximum energy output of the fuel input. It takes some very sophisticated machinery to get that; the levels which have been achieved.

Of course, that sophisticated machinery is not available to the individual householder, generally speaking. So, one example of course was that several years ago at least we were looking toward electric automobiles to relieve air pollution from the automobile.

The fact is that it was generally not understood that the power to charge the battery had to be generated with a generator which would require a plant and would require fuel and so on.

So, you have got a system of tradeoffs here.

Senator JORDAN. I should think the conservationists or ecologists that profess to an interest in protecting the environment and doing away with the degradation of the environment would hail with great enthusiasm the increased use of electricity rather than the lower use of electricity.

Mr. CARVER. As I point out, I think that is true. There are, of course, improvements to be made within the pattern by which electricity is generated. For example, the replacement of a high sulfur fuel with the low sulfur fuel or the replacement of nuclear for fossil fuels. All of these involve trading one kind of a problem for another.

But if you project economic growth, you simply are going to have problems. What you have got to do is have a system which ameliorates those to the highest extent that your technology makes possible.

Senator JORDAN. Turning to your statement on page 3, you enumerate some of the powers, some of the criteria that would be necessary to implement a proper State authority to carry out the provisions of an accepted plan.

You recite, and I quote from your statement, the fact that "such an authority must include the authority to acquire interests in real property. Assume the right of condemnation, if necessary. They must also have the police authority to place restrictions on the type of land use that would be abusive to the plan. They must also be able to hold public hearings with full public participation to explore any breaches of the plan. They must have a system of judicial review for aggrieved parties.

"Furthermore, the plan must be capable of being modified to meet changed conditions and requirements."

That is a pretty big order for a State authority, especially if they are going to be denied some funds from another area if they fail, if they stub their toes in compliance with this master plan.

Would you address yourself to that?

Mr. CARVER. I can only address myself to it in the same terms you have, Senator Jordan, and in the part of my statement which I cut out, I said I thought some of those sanctions were a little bit onerous, that if the State really understood what the risks were, as compared to the benefits they were going to get, they would be hesitant to get into it.

But I fall back on what the author of the bill said, that this is a starting point. I think the concept is sound. I simply think that a careful analysis of the bill would disclose that some of it has been a little bit unusually harsh.

Senator JORDAN. Would you agree with me that voluntarism is the key to this thing? If we have to put the kinds of teeth in it that is going to wrack up some State because they don't come out with the proper State plan or they are going to be denied access to perhaps their own State holdings across public lands that this is carrying the thing altogether too far?

Mr. CARVER. Yes.

Senator JORDAN. Is that so?

Mr. CARVER. I don't criticize this draft of the bill simply because it started somewhere. I think this is better than most. It identifies just exactly what some of the real serious problems are.

Senator JORDAN. You are in agreement generally with the concept of what this bill purports to do?

Mr. CARVER. I strongly endorse the idea of starting back and saying, "We are going to work through our existing political system" and trying to make that machine go rather than start over and make a new one.

Senator JORDAN. Or to superimpose another layer on the presently existing authority?

Mr. CARVER. That is correct. I don't think the bill has quite thought that through in every case. But I don't think it purports to at this moment.

Senator JORDAN. Thank you.

The CHAIRMAN. Senator Hansen?

Senator HANSEN. I have no questions, Mr. Chairman. I appreciate your statement, Mr. Commissioner.

The CHAIRMAN. Senator Burdick?

Senator BURDICK. Thank you, Mr. Chairman. I have no questions. Thank you for appearing. It is always good to see you.

The CHAIRMAN. Thank you very much, Mr. Carver, for your helpful comments and suggestions and a very fine statement.

Mr. CARVER. Thank you.

(Mr. Carver's complete statement follows:)

STATEMENT OF COMMISSIONER JOHN A. CARVER, JR., MEMBER, POWER COMMISSION

This statement is submitted on the basis of my experience as Assistant Secretary for Public Land Management and as Under Secretary of the Department of the Interior, and as a member of the Advisory Council of the Public Land Law Review Commission. The Chairman of the Federal Power Commission will testify with reference to the institutional interests of the Commission on which I now serve.

401(a)* 401(d) 402(a) 403(a)(2) 406 403(a)(1)

S. 3354 looks toward a system of public action for a better quality of land-use decisions in this country. A central feature of the bill is the dominant role assigned to the States. Provision is made for interstate agencies to participate in the benefits of the program of technical and financial assistance, but in the bill as presently drafted, detailed attention is given to a Statewide Land Use Plan to be prepared by a "single State agency."

The system of public action starts, of course, with a Congressional authorization of a program and a means of carrying it out. I approached the contents of the bill in a different order than the one used in the bill. Since I consider the key to an understanding of the bill to be the Statewide Land Use Plan (Plan), an appropriate starting point is to glean from the bill a summary of the attributes of the "Plan."

403(b)(2) 406(b)(2)(A) 406(b)(2)(B) 405(a) 406(b)(1)

-- It apparently is to cover all of the land area of a State, with the discretionary exception of lands within the boundaries of incorporated municipalities which have exercised land use planning and authority. The only other authorized exceptions are those provided in its rules and regulations by the entity authorized by the bill to administer its provisions, the Federal Land and Water Resources Planning Council. These rules apparently could be of specific rather than of general application. The Plan must identify the boundaries of the State subject to the Plan, but it would seem that this is not a grant of authority to the State to make additional exclusions.

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*/ The numbering of section references is to the new Title IV, proposed to be added to the Water Resources Planning Act. In S. 3354, Title IV is added by Section 1.

406(b)(3)(A) -- A Plan is required to classify land areas, in the sense of reflecting qualitative judgments of several kinds: Areas where ecological, environmental, geological, and physical conditions dictate that certain types of land use activities are undesirable are to be identified as are areas where the highest and best use is recreation oriented use and those best suited for agriculture, mineral, industrial and commercial development.

406(b)(3)(B)
406(b)(3)(C)

406(b)(3)(D) -- A classification function may be involved in the bill's requirement that the Plan identify present and future transportation and utility corridor locations. The bill seems to recognize that roads, electric transmission lines, and gas lines are going to have to be located somewhere. The Plan also requires identification of areas which furnish amenities and basic essentials to the development of new towns and the revitalization of existing communites.

406(b)(3)(E)

406(b)(8) -- Flood plain identification and management must be provided for in the Plan.

406(b)(4) -- A number of the explicit requirements for the contents of the Plan are framed in such a way as to preclude the State from taking a narrow or parochial view of the contribution its land resources and its own State governmental action can make for the good of the Nation. For example, a Plan must include "appropriate" provisions, designed to "insure" that regional requirements for material goods, natural resources, energy, recreation and environmental amenities have been given "consideration." It must include provisions designed to insure consistency with both regional and federal standards (as well as local and State) relating to environmental quality and resource conservation. Explicitly, it must include provisions to "insure" that transportation and utility corridors do not damage federal lands dedicated to the maximization of declared public values. To the ultimate benefit of the federal government as landlord, the Plan must contain provisions for helping to preserve the integrity of parks, wilderness areas, and wildlife refuges, by such measures as buffer zones, scenic easements, and prohibition against nonconforming uses.

406(b)(5)

406(b)(6)

406(b)(7)

Additional substantive requirements for State action related to the implementation of the Plan are included in sections of the bill fixing the eligibility standards to be met by a State, in order to receive either initial or subsequent planning grants, and in the section specifying the sanctions which would be applied for failing to follow through. For example,

406(a)(1) the single State agency required to be designated by
406(c)(1) a Governor, must be given authority necessary to imple-
406(c)(2)(A) ment the Plan, which authority must include at least authority to acquire interests in real property necessary to effectuate the purposes of the Plan; and it

406(c)(2)(B) must have delegated police power authority to place restrictions on the type of land use activities which may take place in areas designated for a special use

406(c)(2)(C) under the Plan. Furthermore, the agency must have authority to conduct public hearings with full public participation, and a system of judicial review for aggrieved parties, in connection with dedication of any area of the State as an area subject to restricted

406(c)(3) or special use under the Plan. Finally, the Plan must be capable of being modified to meet changed conditions and requirements.

The bill specifies what must be in a Statewide Plan; it also treats of how a State shall qualify for a "planning grant." It isn't clear, however, that planning grant money is to be applied directly to the devising of a plan, because provision is made for gathering information with the help of the planning grant money.

406(a)(1) To qualify for a planning grant, the single State
406(a)(2) agency must show its competence to develop a Plan, in other words that it has, or can have access to, "a competent and adequate interdisciplinary professional and technical staff." It must also show that it will

406(a)(3) use available and pertinent State and Federal plans,
406(a)(4) data, etc., to avoid duplication, and that it will keep records and make reports.

The Council apparently can be selective among the

403(b) specified list of information-gathering activities, and limit the States accordingly. The authorized purposes for the preliminary phases include:

403(b)(1) -- An inventory of land and related resources.

403(b)(2)(A-F) -- Compilation and analysis of data and information on population, economic, and urban and rural growth; public works, capital improvement, land acquisition and economic development programs; ecological, environmental, geological and physical data relevant to industrial, commercial, transportation, utility, and new town land uses; projected requirements for agriculture, recreation, urban growth, and commerce, transportation and energy uses, for at least the next fifty years.

403(b)(2)(G) -- Marshalling of governmental and financial resources available for land use planning and management within the State and its subdivisions.

403(b)(3)
403(b)(4)
403(b)(5) -- Furnishing of technical information and training, development of data bases, and information exchange programs.

The Statewide Land Use Plan which emerges from the provisions of this bill is clearly required to conform to federal guidelines, and to carry out its terms the States must secure the cooperation of their people and their legislatures for far-reaching changes in their own system of land use decisionmaking. The States complying with the prescription of this bill would be assuming responsibilities broader than those traditionally defined as related to their own interests, in favor of regional and national interests.

Naturally, the States are likely to take the contemplated action only if inducements outweigh the obvious detriments to their parochial interests.

The main inducement of the measure is the program for federal planning grants. The qualifications for
404(a) participation are spelled out. The State must ask for one, by making a proposal. The State can expect to get a grant covering two-thirds of the <u>estimated</u> full
404(b) cost for three full fiscal years. After that, new planning costs are split fifty-fifty, and federal money is authorized to be granted for a quarter of the operating costs. A key feature is that this planning grant

404(d) money is additive. It is to increase, not replace, State funds presently available for State land use planning; and it may be added to and use jointly with grants or other funds for land use planning or investigation under other federally assisted programs.

Once a planning grant has been made, the inducements to stay with the program are found in the harshness of the penalties prescribed for failure. First, the money can be cut off, after notice, if the State agency has failed to adhere to the requirements of
406(d) the law in the development of the Plan, or if the State has not enacted appropriate legislation to allow the State to acquire land, and restrict its use, and
406(c) for an appellate procedure, as referred to above.

More importantly, once a State's entitlement to statewide land use planning funds has been terminated, or if an acceptable Plan is not submitted by the fourth year, the State becomes liable to have its entitlement to funds otherwise available under other
407 Federal assistance programs, reduced at the rate of 20% per year, as selected by the President.

Even more harshly, the State is likewise "to be denied the issuance of any right-of-way permit or other
407(2) permits available under the public land laws and other Federal laws to use or to cross the public domain or other Federal lands within that State, until the State gets in compliance."

The Federal instrumentality for effectuating
Sec. 3 of S.3354 this program is an augmented Water Resources Council, now to be known as the Land and Water Resources Planning Council. Seven cabinet secretaries (of whom one is the Army service secretary), and the Chairman of the Federal Power Commission, make up the Council. The Council's chairman is presidentially designated. Its administrative functions, under unchanged provisions of the Water Resources Planning Act, are delegable by the Council to one of its members, or to employees.
Sec. 5(a) of S.3354 $3,000,000 is authorized to be appropriated annually for administration.

Comparatively little is said in S. 3354 as to how the Council carries on its business, beyond the

fact that it may make rules and regulations. It is
402(b) a stated purpose of the bill that the grant-in-aid program assist State government "to hire and train personnel, and establish procedures to develop, implement and administer the Plan." It is also a
402(c) purpose to establish reasonable and flexible Federal requirements to give States guidance in developing their Plans.

The Council also is charged with maintaining a continuing study of the adequacy of administrative and statutory means for the coordination of federal pro-
Sec. 3(c) of S.3354 grams related to land use, and the compatibility of such programs with state and local land-use planning and management. It is given the duty of appraising the adequacy of existing and proposed federal policies affecting land use, and to make recommendations to the President with respect to such policies and programs.

402(d) & Sec. 3(c) of S. 3354 Finally, after the requirement for the making of a biennial report to Congress, it is a stated purpose of the bill

402(e) "to develop, and refine a coherent national land use policy with respect to the planning, and the management of all federally owned lands."

408(a) Statewide Land Use Plans, when completed, are required to be submitted to the Council, which in turn is required to submit the Plan for a ninety-day period of review and comments to appropriate federal agencies. The Council then must review the Plan and the comments received, and is required to approve the plan if it conforms with policy, guidelines and requirements and is compatible with the plans proposed or submitted by other States, so that regional and national land use considerations are accommodated.

408(b) Explicitly, federal agencies with public works responsibilities or activities in areas under an approved Plan shall make their activities consistent with the approved plan, "unless there are overriding considerations of national policy which require departures from the plan." Furthermore, federal agencies "shall not

approve proposed projects that are inconsistent with the Plan."

I have organized my discussion around the action features of the bill. The bill itself begins with a legislative recital of the ills it is designed to correct, and a definition of congressional purpose and intent.

401(a) A congressional finding of a national interest "in a more efficient and comprehensive system of national and statewide land use planning and decision-making," and a congressional declaration "that intelligent land-use planning and management provides the* single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality life," are key provisions of the measure.

Under the bill, Congress would make a number of findings about things needing improving:

401(a) -- For a variety of stated reasons, land-use management decisions at all governmental levels are being made "on the basis of expediency, tradition, [and] short term economic considerations."

401(b) -- Public and private enterprise has been required "to delay, litigate, and cancel" various developments and to make decisions on industrial and commercial activity siting in areas of least public and political resistance, without regard to relevant ecological and environmental land use considerations.

401(c) -- There is a lack of consistent policy and conflict among the many federal agencies involved in land use planning and management activities.

401(d) -- Failure to plan or bad planning often results in irreparable damage to "commonly owned assets" such as estuaries, ocen beaches, and other areas in public ownership."

-- Inferentially, federal land use decisions have not included sufficient participation by State

*/ Emphasis in quoted sections of the bill is added throughout.

and local governments, and therefore have not accorded "with the highest and best standard of land-
401(e) use management and the desires and aspirations of State and local government."

The bill also calls for the federal government (whether this is a responsibility of the Council isn't
401(f) clear) to undertake the development of a national land-use policy. The findings and policy-declaring sections of the bill themselves constitute a statement of policy, so the "national land-use policy" clearly is to be some document or statement which builds upon the congressional directives.

-- It must be developed consistently with the
401(f) responsibility of State and local governments. There
401(d) is a specific finding that the primary responsibility and constitutional authority for land use planning and management of non-federal lands rests with State and local government.

-- It is required to incorporate ecological,
401(f) environmental, esthetic, economic, social and other appropriate factors.

-- It should encourage the wise and balanced use
401(g)(1) of land and water resources.

-- It should foster continued economic growth of
401(g)(2) all States and regions, but at the same time influence
401(g)(3) population distribution in a manner to make scenic, environmental and cultural amenities available.

-- It should contribute to revitalization of
401(g)(4) rural communities, and encourage new communities.

-- It should prompt States to take a larger view by assuming land use planning responsibility for
401(g)(5) activities of regional, interstate and national concern within their boundaries.

-- It should facilitate coordination of federal
401(g)(6) programs for more desirable patterns of environmental, agricultural, recreational and industrial land-use planning.

401(g)(7) -- It should "systematize methods" for land use and environmental information exchange.

401(f) -- Importantly, such a policy is to serve as a guide in making specific decisions at the national level which affect the pattern for environmental, recreational and industrial growth and development on the federal lands.

401(f) -- The Policy should provide a framework for development of interstate, State and local land-use policy.

When this bill was introduced, its author said that a national land use policy is the next logical step to follow the National Environmental Policy Act of 1969. He recognized that it was a starting point for review and analysis, a working draft for comment by State, local, and federal officials and planners, and representatives of industrial and public interest groups.

It would be a great shame if it did not get the constructive response which has been asked for, one consistent with the importance of the subject matter, and the thought and imagination which obviously has gone into its drafting. Every land managing agency of the federal government, from the Bureau of Land Management and all its sister bureaus of the Interior Department to the Forest Service and the Corps of Engineers and the Federal Power Commission, the military services, and the General Services Administration, ought to present comments in terms of their particular program interests. So should the States and their land or resource departments, and the interstate agencies. I would go so far as to suggest that the Committee try to expose the differences of opinion among the experienced professionals, so that the debate can be marked more by its intellectual content, than by bureaucratic jealousies.

I emphasize the importance of the kind of consideration this proposal should get, because I think public understanding will be enhanced by the process. The importance of public understanding transcends any statewide plan, or national land-use policy. To take an example from the utility industry to illustrate my meaning, last Sunday's Washington Post had an article by Hans Landsberg who pointed

out that ninety per cent of the growth in power generation in the last 30 years has been caused by higher per capita consumption. In other words, if we thought that the right amount of electricity was that which we generated in 1940, only 20 million people could be served at today's consumption rates.

The years since 1940 seem short to some of us. It is when we extrapolate the growth of the last 30 years for the next thirty that we get frightened about the sufficiency of our land and water resources--and that is what this bill is about.

The American people are going to make the compromises necessary for survival only as they understand the problem--and there is vast evidence that they don't now understand it.

Planning in a free society requires planners who are responsive to the citizens of that society. Planners do not achieve political immunity simply by being vested with the mantle of planner. And the process of planning, as the bill recognizes, must take place within the political system and be responsive to it. Coming to understand what our problems are, as a common effort, is the only thing that will make a Plan worth very much.

I confess misgivings about many features of the bill. For example, I do not believe that the experience of the Water Resources Council has been positive enough to prove that an augmented Council can provide the kind of leadership a program of this magnitude requires. Much will depend upon the Council's professional staff, and an organization of designees of members undoubtedly will try to make it work. But in matters as fundamental as land-use planning, the instutional interests of the various departments are likely to preclude the possibility of the Council, as such, resolving policy conflicts.

In this connection, it may be proper to note that the Federal Power Commission was, for its first ten years a cabinet-level Commission, made up by the Secretaries of War, Interior, and Agriculture. As these matters go, the cabinet-level FPC was moderately successful, but its successes were traceable more to the personality of an

old Forest Service man who took over as the first Chief Engineer of the Commission than to the hoped-for coordination arising from putting the warring department heads on the same Commission. That form of organization was abandoned in 1930.

Speaking to the overall concept of the bill, I commend to the Committee's attention a very recent book by an old colleague of mine, and friend or acquaintance of most of the members of this Committee, James L. Sundquist. Jim was once administrative assistant to Senator Clark, and served the Kennedy and Johnson Administrations in the Agriculture Department as Deputy Under Secretary. Now at Brookings, he has written a fine book called Making Federalism Work, a Study of Program Coordination at the Community Level. (The Brookings Institution, 1969).

In a section headed "A Government Policy for Federalism: A Policy of Deference" Mr. Sundquist points out some of the pitfalls which have been encountered in other efforts at intergovernmental coordination, and particularly in situations where, as here, a considerable reliance is placed on actions at the State level. In another section he puts his finger on what may be a key problem here. Speaking of the response of the federal government to the need for coordination, he points out that the structures created for it have tended to rely upon systems of mutual adjustment rather than of central direction--upon what could be attained through negotiation among equals rather than through the exercise of hierarchical authority. The Council mechanism is subject to this criticism.

It is fully understandable that there are inconsistencies and gaps within the bill itself, and I hope that my identification of some of them will be regarded as constructive. At a pretty basic level, the bill goes far to negate its own fundamental reliance on the constitutional prerogatives of States in the section which finds that the manner in which State responsibility for land use planning and management impinges upon federal managerial responsibilities for the public domain, and the national parks and recreation areas.

Other criticisms are less basic:

-- Greater participation by State governments in land use decisions of the federal government does not necessarily insure that decisions will accord with the highest and best standards of land use management. Sometimes the opposite is true.

-- The bill might well point out who in the federal government ought to undertake the development of a national land use policy. The Congress is a part of the federal government, but given the elaborate prescription in this bill of what the policy should contain, it is apparent that what is contemplated is something which meets the specified guidelines at the executive level.

-- Multiple-use statutes are the prototype for at least some of the principles enunciated in the bill. From personal experience, I can testify that the existence of such statutes seldom helps in the resolution of particular land use controversies.

-- Also as noted earlier, the bill does not clearly delineate the areas where interstate agencies may supplant States in the devising of plans, or in their implementation.

I believe that the system of sanctions specified in the bill, and particularly the cutting back of other grants on a selective basis is unduly harsh, and unless modified would effectively bar most States participating.

The provisions that the State agency which manages the plan should have the authority to acquire interests in real property does not specify what authority, if any, that agency must also secure to pay for any interests acquired. Federal constitutional requirements require compensation, and absence of monies to carry out such a program might leave it utterly ineffectual.

The State judicial review procedures ought not be a subject of the federal legislation.

It would be possible for me to devote considerable time to the question of how regulatory agencies, at both

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the federal and the State level, are affected by the bill as drafted, and how I think this particular governmental mechanism ought to be meshed. Suffice it to say at this point that the very independence of these agencies, coupled with their vital involvement in land use planning decisions with wide impact, makes a careful review of this whole question of vital importance. Licensing of hydroelectric and pumped storage projects, siting of plants, regulation of nuclear generating stations, and location of electric and gas utility lines are activities not easily folded into the system contemplated by this measure.

A valuable public service has been performed in the opening of public debate on these vital questions. As the bill points out, most of our problems are directly or indirectly traceable to the dynamics of growth--and continued economic growth is specifically endorsed in the bill. I look forward to assisting, in any way I can, in the refinement of a congressional statement of policy in this area.

The CHAIRMAN. Our next witness is Dr. Kenneth P. Davis, president, Society of American Foresters.

Dr. Davis also is a professor of forest land use, Yale School of Forestry, and in addition, very importantly, he is a westerner at Yale. That is quite a combination.

STATEMENT OF KENNETH P. DAVIS, PRESIDENT, SOCIETY OF AMERICAN FORESTERS

Dr. DAVIS. I have come a long way one way or another.

The CHAIRMAN. We are delighted to welcome you to the committee.

Dr. DAVIS. You have my statement, I believe, before you. I would like to paraphrase from it.

The CHAIRMAN. The entire statement will be in the record. You may proceed in your own way.

Dr. DAVIS. Thank you.

As indicated in my official capacity, I am representing as its president the Society of American Foresters, which is a national organization of over 17,500 members, most of whom are professionally educated foresters. It dates back quite a way. It was founded in 1900 and includes foresters of all employment: public and private, in administration, research, and education.

The society has published a document, Forest Policies of the Society of American Foresters, and a copy is attached to my statement. Parts of the statement are marked.

The CHAIRMAN. That will be included also along with the statement.

Dr. DAVIS. I would emphasize that there was a resolution adopted by overwhelming total referendum vote of the entire membership, and it is my authority speaking for the society today. My personal identification is in the statement. So, I won't bother with that.

The Society of American Foresters certainly does recognize the tremendous scope and implications of this bill and also that it cannot be grasped at once. It is something like the three blind men and the elephant. It all depends on where you hit the animal first what reaction you get.

So, we are also limited somewhat that way.

Our purpose today here is to state our deep interest and concern in society, our approval of the general intent of the act, our desire to be constructively helpful and to raise a few questions. I hope that following more study it may be possible for us to present some further statement at a later date.

We have a new and continuing committee on national land use just established in the society. I want to put it to work. This is an excellent place to start.

Collectively, foresters have a long experience in land-use planning. It is part of their heritage. They are used to planning for the present and for long periods in the future and the constant need to revise plans and use better data and to meet changing conditions of forces and related land management is a very commonplace affair with foresters.

Forested land is important, and I think most of you gentlemen know, because there is so much of it, about a third of the United States. On this land foresters face the continuing problems in making and imple-

menting plans and administering the lands to produce whatever mix of the goods and services such land can yield in accordance with the desires of ownership and the concern of people generally.

I would like to raise three rather general questions. I recognize to some extent they have come up already.

The first one is that it is recognized that a first and prime need under this act is to assemble and document data which are a necessary base and to establish a national framework and procedure for planning.

For constitutional and other reasons it seems entirely appropriate to focus on the State as a primary planning unit, but also as brought out, this also offers some problems and difficulties.

In the act, a great deal of emphasis is placed on planning to prepare the State land use plan. This phrasing is recurrent and I understand the reasons I think why it showed up in the act as it did. However, by the nature of people and things, such planning can become static and bureaucratic rather than dynamic as it must be.

It is obviously much more than a forecasting and statistical problem.

Let me explain a bit. It seems to me certainly at any rate there are four essential parts to effective and accepted planning; that is, planning that works:

(*a*) You can consider planning as a function, an operation, carried on with the staff and facilities and profesional people. The word means to make plans, plural.

(*b*) A plan or plans, the result from planning which is in itself a proposal. Certainly in my experience, most public plans are basically proposals as prepared and the distinction is often overlooked as a proposal and something that is an actuality.

The third, (*c*), is the interaction between planners and planees which has come up here this morning; that is, those who are concerned and affected by the planning processes.

This is certainly vital to the acceptance of any plan and should permeate the entire planning process. How and when it is done is extremely important. To be most effective, most of this work prospers best when it is done before the plan is presented as a document.

Fourth, of course crucial, ability to implement and execute plans over time. This is what counts.

Unless these four parts are brought together in some effective working balance, the results from the plan, the objective of all of this pain and strain, are not obtained. So, in some respects it is not so much the plan as the process of planning that counts.

In our feeling somewhat minimal attention I think necessary is given in the bill to the continuing processes of planned revision and implementation. The wording is there, but we believe more emphasis should be given in this direction perhaps resulting from long and painful experiences in forestry with plans that don't work.

We have had lots of them in the past.

The second point, definition and subject content of State plans. I realize this point has already been brought up. In section 402A, and in the title 403 of the bill, the language "statewide environmental, agricultural, recreational, industrial land use plans" seems to define the subject content of the statewide land-use plans which are the hub of this act and for which grant-in-aid programs are proposed.

If this language is so intended and it seems a bit curious to me in the choice of words, it seems unclear and inadequate to cover the wide

range of lands concerned in a comprehensive statewide or regional planning.

The language actually used in section 403 and elsewhere is broader.

A third general point which relates to section 406B2 and B3 is this matter of exclusion and inclusion of lands to be studied.

We certainly recognize the difficulty of definition here and that the language is necessarily rather open, although it does seem to be dominated in a number of respects by federal authority when you come right down to it.

In B2, "Such other lands as the Council may specify," may be excluded. This is not a state option. This might be significant and could be wider or narrower in application. There is no guideline for that.

Under inclusions, 3A, it rather seems that a presumption in a way of undesirable land-use activities is made on a very broad designation. The same sort of thing is done under 3B, where the "highest and best use is recreational oriented use." This is very broad, to go to the extreme of some views, that the national forests could all be thrown in here. It depends on how you look at it.

In 3B there again seems to be some presumption rather than determination of what is "best suited for agricultural, mineral, industrial and commercial development." We would also question why these three particular uses are singled out.

There is a wider range of land uses involved.

These questions are of particular concern to the Society of American Foresters which supports the management of forested land, including, as I said, about a third of the United States, under the general multiple-use concept.

Forested lands produce many goods and services, several often simultaneously on the same area and should be managed to produce them in that combination which will contribute the most benefits to the economy and to society.

We are consequently firmly opposed to any widespread categorization or partitions of forested lands for particular uses other than the kinds that have been established. For example, national parks and recreation areas, wilderness and related natural areas, and so forth.

This concludes the prepared part of my statement. I have a couple of other points, if time permits. Otherwise, we can terminate here and take questions.

Senator BURDICK (presiding). Senator Jordan?

Senator JORDAN. Thank you, Mr. Davis. I have no questions.

Senator HANSEN. I have no questions, Mr. Chairman.

Senator BURDICK. I have one, really. On pages 3 and 4 of your statement, you say the following: "This is very broad, to go to one extreme of some views, that the national forests could be all thrown in here."

On top of page 4 you say, "We are firmly opposed to any widespread categorization or partitioning of forested lands for particular uses by areas other than the kinds already established."

I don't know whether it was the intent of the bill or not, do you find specific language giving the State planning agencies to plan the national forests?

Mr. DAVIS. No. In fact, it is a little hard for me to understand from the bill exactly how national forest relationships would enter into the act.

Senator BURDICK. It is my understanding that this doesn't permit that.

Mr. DAVIS. It does not?

Senator BURDICK. Yes. If there is something in here that shouldn't be here, I would like to see it and know about it.

Mr. DAVIS. I myself would raise a question that I think it must be recognized that national forest lands are extremely important. So are other Federal lands in some states. Under the Multiple Use Act of the Department of Agriculture, the framework in the act is entirely wild land, if you will recall. It includes no interplay between lands that in the future should get into some real allocation of lands use for recreation. Some of it might go in state use or private work. There is no framework for that.

There is a question as to how narrow this net can be cast in dealing with statewide land-use plans. This is partly the reason I brought up the inclusions and exclusions in the somewhat to me rather restrictive wording involved in it.

I am unclear myself.

Senator BURDICK. I didn't think the act gave authority to permit States to plan.

Mr. DAVIS. I think it says that by agreement they would not be. I am not certain on that. I don't think it is the intent.

Senator BURDICK. Thank you very much.

(The complete statement of Mr. Davis follows:)

STATEMENT BY KENNETH P. DAVIS, PRESIDENT, SOCIETY OF AMERICAN FORESTERS

I am Kenneth P. Davis of New Haven, Connecticut. In my official capacity I am representing, as its President, the Society of American Foresters, a national organization of over 17,500 members, most of whom are professionally educated foresters. It was founded in 1900, and includes foresters of all employment—public and private, and in administration, research, and education. The Society has published the attached statement *Forest Policies of the Society of American Foresters*. Parts of the statement are marked to indicate the Society's position with regard to forested land use. This statement was adopted by overwhelming referendum vote of the entire membership of our Society.

By way of personal identification, I am presently the David T. Mason Professor of Forest Land Use at the Yale School of Forestry. A native Montanan, I have over 40 years of experience in forest land administration, research, and education in forest management. This experience includes 18 years with the Forest Service . . . from District Ranger, to a Washington Office Division Chief, and consulting work with state, federal, and private forest industry organizations. It also includes 25 years in three universities across the country as professor of forest land management, also serving as forestry department chairman and dean. I have published much, including two widely used textbooks in forest management and fire control, respectively.

The Society of American Foresters recognizes the tremendous scope and implications of S. 3354, the National Land Use Policy, and that it cannot be grasped all at once. There undoubtedly will be further hearings and amendments. Our purpose here today is to state the deep interest and concern of the Society, our approval of the general intent of the act, our desire to be constructively helpful, and to raise a few questions. I am hopeful that, following more study, it may be possible for us to present a further statement at a later date.

Collectively, foresters have long, intensive experience with land use planning; it is a characteristic of the profession to plan for the present and for long periods into the future because of the inherent nature of forest growth. And constantly to revise plans and use better data. To meet changing conditions and purposes of forest and related land management is commonplace with foresters. Forested land is important because there is so much of it, about ⅓ of the United States. On this land foresters face the continuing problems of making and implementing plans, and administering the lands to produce whatever "mix" of the goods

and services such land can yield in accordance with the changing desires of ownership and of concern to people generally. Consequently, foresters have substantial credentials in land use planning and implementation. Much of this knowledge and experiece is translatable ad trasferrable to other forest situations.

I should like to raise three rather general questions:

1. Implementation and Revision of Statewide Plans

It is recognized that a first and prime need under this act is to assemble and document data which are a necessary base, and to establish a national framework and procedure for planning. For Constitutional and other reasons it seems proper to focus on the state as the primary planning unit although this offers problems and difficulties. Emphasis is placed on planning to prepare *the* State Land Use Plan. By the nature of people and things, such planning can become static and bureaucratic rather than dynamic as it must be.

Let me explain a bit. There are four essential parts to effective and accepted planning:

(*a*) Planning as a function can operate as a function, an operation, carried on with staff and facilities. The word means to make plans, plural.

(*b*) A plan, resulting from planning, which of itself is a proposal. Most public plans are basically proposals as prepared.

(*c*) Interaction between planners and plannee—those who are concerned and affected. This is vital to acceptance of any plan and should permeate the planning process. How and when it is done is extremely important.

(*d*) Ability to implement and execute plans over time.

Unless these four parts are brought together in working balance, effective results from the planning process—the objective of all this—are not obtained. Minimal attention in the bill is given to the continuing processes of planned revision and implementation. We believe more emphasis should be given in this direction.

2. Definition of Subject Content of State Plans

In Section 402(a) and in the title Section 403 of the bill the language "Statewide Environmental, Agricultural, Recreational, Industrial Land Use Plans" seems to define subject content of the Statewide Land Use Plans for which a grant-in-aid program is proposed. If this language is so intended, it is unclear and inadequate to cover the wide range of lands and concern in comprehensive statewide or regional planning. The language used in Sectio 403 and elsewhere is much broader.

3. Section 406(b)(2) and (b)(3). Exclusion and Inclusion of Lands To Be Studied

This is a difficult matter to define and the language is open and seems dominated by federal authority. In (b)(2) "such other lands as the Council may specify" may be excluded. This is not a state option and could be wide or narrow in application.

Under Inclusions (3)(A) a presumption of undesirable land use activities is made under very broad designations. The same sort of thing is done under (3)(B) where "the highest and best use . . . is recreational oriented use." This is very broad; to go to extremes of some views, the national forests could be included here. In (3)(B) there again seem to be some presumptions rather than determination of what is "best suited for agricultural, mineral, industrial and commercial development." We also question why these three particular uses are singled out; there is a wider range of land uses.

These questions are of particular concern to the Society of American Foresters' policy statement which supports the management of forested lands, comprising about ⅓ of the United States' land area, under the multiple use concept. Forested lands produce many goods and services, several often simultaneously on the same area, and should be managed to produce them in that combination, quoting our policy statement, which will "contribute the most benefits to the economy and to society." We are consequently firmly opposed to any widespread categorization or partitioning of forested lands for particular uses by areas other than of the kind that have been established; e.g. national parks and recreational areas, wilderness and related, and natural areas.

On behalf of the Society of American Foresters I thank you for the opportunity of appearing today, and hope that we may be of further assistance to the Committee.

Senator BURDICK. Our next witness is Mr. William E. Towell, executive vice president, American Forestry Association.

STATEMENT OF WILLIAM E. TOWELL, EXECUTIVE VICE PRESIDENT, AMERICAN FORESTRY ASSOCIATION

Mr. TOWELL. Thank you, Mr. Chairman. I appreciate the courtesy of the committee of hearing me today. I was to appear with a panel of conservationists tomorrow. My statement is quite brief. I think I will read it and save time.

I appear in support of the basic principles of S. 3354. The need for comprehensive land and water resource planning on a coordinated basis is great and some means to accomplish it is long overdue.

We no longer can afford piecemeal development of land and natural resources, looking only at the immediate needs and ignoring future requirements.

Although responsibility for land-use decisions on other than Federal lands, and waters rests largely with State and local governments, the time for strong Federal leadership has come. Air and water pollution abatement are two good examples of the need for coordinated planning and for strong Federal guidelines to State and local governments in dealing with environmental problems that do not conform to State lines or other jurisdictional boundaries.

Similar problems are involved in other water resource developments, highways, urban sprawl, industrial growth, river navigation, coastal protection and allforms of park and recreational land use. Future needs should be determined wherever possible before we forever close out desirable options.

Planning grants to a single responsible State agency are highly commendable. The job cannot be done on the basis of one resource or immediate needs along. Some States may be ready to designate such unified authority, but most are not.

Whether 3 years time to inventory all lands and resources and another year to develop a comprehensive plan are sufficient time is open to debate, but the goal is desirable. States righters will argue violently against such strong punitive measures as withholding Federal grants of funds for single use purposes, but this may well be the only force or incentive available to accomplish needed improvements.

I particularly support the combining of land and water resource planning under a single Council. These resources are inseparable and should be considered together.

Another aspect of this legislation that has strong appeal to me is that it combines land and water amenities with industrial resource needs for planning purposes. There has been great public interest in park- and wilderness-type developments, and much needed Federal legislation to implement these needs.

Often we tend to overlook the equally essential need of resource use to provide the material products for our existence. Just as it is important to set aside some lands for preservation of natural values, it may become just as important to provide a place for industry or for mining, grazing, or lumbering. But these uses, which so often are in conflict, should be planned together for greatest efficiency.

Mr. Chairman, I strongly support the principles and objectives of S. 3354. I am sure many problems will have to be worked out on the Federal-State aspects of this legislation, but it is a step in the right direction.

I would make one further comment. I did not include it in my prepared statement because I wasn't quite sure at the time of the relationship between the Council of Environmental Quality and the Land and Water Resources Planning Board.

But I certainly strongly favor the provision in section 409B which would require all Federal agencies to consult with the Land and Water Resources Planning Board to avoid conflicts.

I think that there is just as much likelihood or has been just as many conflicts in the past between Federal agencies planning land use on Federal lands as there has been between state and local agencies.

I certainly like the idea of a stronger Federal coordination.

Thank you.

Senator BURDICK. Senator Jordan?

Senator JORDAN. Thank you. I haven't any questions. You have a good statement. I especially want to commend you on this. I agree with you wholeheartedly, the land and water resources are inseparable and must be considered together. You can't very well divide them and go separate ways with them or you get into trouble.

Senator BURDICK. Senator Hansen?

Senator HANSEN. Thank you, Mr. Chairman.

Mr. Towell, I compliment you on your statement. I would like to pursue just an additional thought that has already been suggested by Senator Jordan.

You have stated, as he brought out, that you support the combining of land and water resources planning under a single Council.

Do you regard this planning activity of both land and water resources as something urgent?

Mr. TOWELL. Very urgent, sir, and I think we have been lagging in advanced planning not so much by individual agencies, but on a coordinated basis. This is why I would put land and water together. The two are inseparable. Just like I would say that all the Federal agencies planning the uses of land should be coordinated and these in turn coordinated with the State and local agencies.

We have had planning but we have not had coordinated planning and it hasn't applied to all resources and all the uses of land that are sometimes in agreement, but sometimes are in conflict.

Senator HANSEN. As you know, some agencies of Government, particularly the Bureau of Reclamation, has been concerned with the water needs of some sections of our country not so blessed as are other sections with adequate supplies of water. If we are to take the steps necessary now in order to assure that we don't find ourselves caught short in the years ahead, would it be your feeling that we have got to plan our activities so as to make the best use of our water and our land resources on a national basis or can we continue to do it State by State?

Mr. TOWELL. Very definitely I think it has to be done on a national basis. I don't believe we could confine our planning activities to artificial boundaries. State boundaries are political things and frequently have no relationship to watersheds and air movements. We need to have authority within-State politically, but I think there needs to be some kind of overall national coordination to make sure that the best use is planned for these resources on a total national basis.

Senator HANSEN. In order that I don't misunderstand you, may I be more specific and ask this: Looking at the Southwestern part of the United States, particularly the areas of California, Nevada, and Arizona, would it be your feeling that we should contemplate their projected additional needs for water and take steps to see what can be done within the context of overall planning to satisfy those needs or would you not recommend it?

Mr. TOWELL. Certainly I think steps should be made to consider the needs. The decision is another matter. I would not be personally well enough acquainted with the problems there to suggest what the decision might be. But the planning should involve the future needs of that area.

Senator HANSEN. And as you understand the word "planning," would this be a consideration of the inventories we have with which we can deal and the potential of land and water resources?

Mr. TOWELL. By all means. If we have surpluses that could be used, fine. If we don't have, if the projected needs elsewhere are greater, then these should be considered. Certainly this should be brought into the planning.

Senator HANSEN. Thank you very much, Mr. Towell.

Thank you, Mr. Chairman.

Senator BURDICK. Mr. Towell, I notice that your organization, American Forestry Association, has existed since 1875. Your membership is 74,000.

Mr. TOWELL. Yes, sir.

Senator BURDICK. So, you are really not new to this conservation work.

Mr. TOWELL. No, sir. I think we are one of the oldest, if not the oldest, national conservation organization. I am very sorry to say, however, we are not the biggest. But we are among the largest.

Senator BURDICK. Has your organization recently considered this and passed any resolutions or anything?

Mr. TOWELL. The directors of the American Forestry Association have not considered this particular legislation. However, we have an overall policy guide adopted by the vote of the membership of the association about 5 years ago which is clear enough to indicate our direction in this particular legislation.

Senator BURDICK. Thank you very much.

The committee will be in recess until 10 o'clock tomorrow.

(Whereupon, at 12:20 p.m., the committee was recessed to reconvene at 10 a.m., Wednesday, April 29, 1970.)

NATIONAL LAND USE POLICY

WEDNESDAY, APRIL 29, 1970

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The committee met at 10 a.m., pursuant to notice, in room 3110, New Senate Office Building, Senator Henry M. Jackson (chairman of the committee) presiding.

Present: Senators Jackson, Stevens, Allott, Gravel, and Metcalf.

Also present: Jerry T. Verkler, staff director, and Stewart French, chief counsel.

The CHAIRMAN. The committee will come to order.

We are pleased to resume the hearings which were recessed yesterday on the pending bill, S. 3354, a bill to establish a national land use policy.

We have a distinguished list of witnesses today, representing State and Federal Government, conservation groups, the legal and planning professions, and the electric power industry. We look forward to hearing their testimony.

I shall ask the ranking Republican member on the committee, my good colleague, Senator Gordon Allott, to present our first witness this morning.

Senator ALLOTT. Thank you, Mr. Chairman.

I am very happy to present to the committee this morning our distinguished Governor of Colorado, John A. Love, who I urged personally to come here, so that he could present his testimony in person rather than by a mere formal statement.

I know the great interest of the chairman and all of us have in the land use policy bill, and it occurred to me that in breaking into this new legislative area, we will have a lot of questions to ask, and proposed to us and raised at these hearings.

In this session of the Colorado Legislature the Governor offered an act concerning the establishment of a Colorado Land Use Commission and provided the power and duties thereof in making an appropriation thereof.

It was the Senate bill of the 47th General Assembly, and the Governor was able to get an act through the legislature, but not one of the scope and breadth which he had envisioned at the beginning of it, and it occurred to me that since there is going to be so much attention paid to this area that the comments of the Governor this morning on the general features of his original bill and the act of the Colorado Legislature did pass would be very helpful and particularly if he could pinpoint some of the problems and questions that were raised when

the bill was offered, so I am very happy to introduce the Governor of Colorado.

Senator HANSEN. Mr. Chairman, could I be permitted just one word.

The CHAIRMAN. You may.

Senator HANSEN. I would like to join with my distinguished colleagues in welcoming a very distinguished Governor to the hearings this morning.

It was my great pleasure and privilege to serve as Governor Love's counterpart in a colony to the north known as Wyoming, where he first began his service to the State and the Nation as Governor of Colorado.

Since that time it has been my great pleasure to see his influence expand and widen, his impact on this country and upon national legislation increased, and I note with considerable pleasure he presently serves as chairman of the national Governors' conference.

It attests to the abilities and the knowledge that are so well known by those acquainted with the Governor of Colorado, and I can say from a personal experience that Wyoming has benefited from its proximity of the good State of Colorado.

I am pleased indeed that the Governor has taken this time to be here to testify on a piece of legislation which has great importance to us.

Maybe we will not agree on all of the facets of this bill, but I can say that his testimony will be read and studied by all who are interested in this problem, Mr. Chairman, and I am certain that based on his observations, none of us can do other than to benefit from them, so I join with you in saying how pleased I am that the Governor can be here.

The CHAIRMAN. Governor, you come to the committee with a very fine reputation as an able Governor, and certainly your experience in this area will be of great interest to all the members of the committee.

I am delighted to welcome you to the committee. You may proceed in your own way.

Governor LOVE. Thank you very much, Mr. Chairman, Senator Hansen, Senator Allott, and thanks to all of you for those very kind words.

I am pleased to have this opportunity to testify before this committee on this subject.

It is one that I am confident is of great, great importance to the State of Colorado, and I am confident of its overriding importance to the Nation as a whole that we deal with it as wisely as we know how.

Indeed, it is true in my mind if we determine land useage wisely, it would have an effect on many if not most problems that we feel across the Nation today.

I have some very brief prepared remarks which I will simply ask be included in the record, rather than to read them at this time, and also I believe that probably it would be useful to the committee if we included the proposed act which was introduced in the legislature of Colorado, Senate bill No. 11, together with the act as it finally was passed by the legislature, and if the staff does not have these documents, we will see that they get them.

The CHAIRMAN. They will be included in the record.

(The documents referred to follows:)

STATE OF COLORADO, FORTY-SEVENTH GENERAL ASSEMBLY, SECOND REGULAR SESSION

(Senate Bill No. 11—State Affairs)

A BILL for an act concerning the establishment of a Colorado land use commission, providing for the powers and duties thereof, and making an appropriation therefor

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Chapter 106, Colorado Revised Statutes 1963, is amended by the addition of a new article to read:

ARTICLE 4.—COLORADO LAND USE ACT

106-4-1. *Legislative declaration—short title.* (1) The general assembly finds and declares that the rapid growth and development of the state and the resulting demands on its land resources make new and innovative measures necessary to encourage planned and orderly land use development; to provide for the needs of agriculture, forestry, industry, business, residential communities, and recreation in future growth; to encourage uses of land and other natural resources which are in accordance with their character and adaptability; to conserve soil, water, and forest resources; to protect the beauty of the landscape; and to promote the efficient and economical use of public resources. The general assembly further finds and declares that there is an increasing mutuality of interest and responsibility between the various levels of government in the state which calls for coordinate and unified policies in planning for growth and development in the interests of order and economy, and that the most effective means of attaining the objects set forth in this article is the adoption of the statewide system of land use.

(2) This act may be cited as the "Colorado Land Use Act".

106-4-2. *Establishment of commission.* (1) (a) There is hereby established within the office of the governor the Colorado land use commission, hereinafter called the "commission". The commission shall consist of seven members who shall be appointed in the manner and shall serve for terms as set forth in this section. The commission shall assume its duties July 1, 1970, and all terms of commission members shall commence on that date.

(b) Five members shall be appointed by the governor, including one from each of the congressional districts and one at large, but no more than three members shall be from any one major political party.

(c) The executive director of the department of natural resources and the coordinator of state planning shall serve as ex officio voting members.

(d) The terms of office of the appointed members of the commission shall be five years, except that of the members appointed to take office on July 1, 1970, one shall be appointed for a one-year term, one shall be appointed for a two-year term, one shall be appointed for a three-year term, one shall be appointed for a four-year term, and one shall be appointed for a five-year term. Any vacancies shall be filled by appointment of the governor for the unexpired term.

(2) The commission shall elect a chairman from among its appointed members. The members shall receive no compensation for their service on the commission but shall be reimbursed for their actual expenses incurred in the performance of their duties.

(3) The commission may engage any employees necessary to perform its duties, including administrative personnel, and it may establish one or more field offices. The state planning office and other departments and agencies of state government shall make available to the commission such data, facilities, and personnel as are necessary for it to perform its duties. The commission may receive and utilize gifts and any funds from federal or other governmental agencies. It shall adopt rules for its conduct and maintain a record of its activities, accomplishments, and recommendations to the governor and to the general assembly.

106-4-3. *Land use classes.* (1) The commission shall develop a Colorado land use plan, which will classify all lands in the state in one of the four land use classes established in this article: Urban, rural, agricultural, and conservation.

(2) An *urban district* is an area characterized by high density use and shall include areas that ane now in urban use. An urban district may also include a sufficient reserve area for foreseeable urban growth.

(3) A *rural district* is an area characterized by small farms mixed with very low density residential lots of a maximum density of one house per one-half acre and a minimum lot size of one-half acre. It is an area where city-like

concentrations of people, structures, streets, industries, and an urban level of services is absent. A rural district may include contiguous areas which are not suited to low density residential lots or small farms by reason of topography, soils, or related characteristics.

(4) An *agricultural district* is an area characterized by the cultivation of crops, orchards, forage, and forestry; farming activities or uses related to animal husbandry, and game and fish propagation; and services and uses accessory to the above activities including but not limited to living quarters or dwellings, mills, storage facilities, processing facilities, and roadside stands for the sale of products grown on the premises. An agricultural district may include contiguous areas which are not used for, or which are not suited, to agricultural and related activities by reason of topography, soils, or other related characteristics.

(5) A *conservation district* is an area characterized by scenic areas, park lands, and wilderness reserves, and it shall include areas used for protecting watersheds and water sources; conserving plants, fish, and wildlife; preventing floods and soil erosion; forestry; or other uses consistent with a multiple use conservation concept. A conservation district may include a stream and the adjacent shore lands to a specified distance from the center of the channel.

106-4-4. *Proposed district classifications.* (1) The commission shall promulgate regulations pursuant to the provisions of section 106-4-9 not later than January 1, 1972. Such regulations shall govern the classification of all land in the state into districts; but such regulations shall permit activities and uses in urban districts which are now permitted by the zoning ordinances or regulations of the local zoning jurisdiction in which the urban district is situated.

(2) Each county or muncipal zoning authority which has enacted zoning ordinances or regulations as of July 1, 1970, shall prepare a proposed district classification of lands within its jurisdiction on the basis of the regulations promulgated pursuant to subsection (1) of this section. In preparing the proposed classification, such zoning authority shall give consideration to existing zoning ordinances or regulations and to the master plan, if any, for the region, county, or municipality in which the zoning authority is situated. Such proposed district classification shall be submitted to the land use commission not later than July 1, 1972.

(3) The commssion shall review the proposed district classifications and shall determine whether they comply with statutory criteria and with the regulations promulgated pursuant to subsection (1) of this section. The commission shall make any changes in the proposed district classifications which it deems necessary to comply with this article or with the regulations. If a county or municipal zoning authority does not submit a proposed district classification for the land within its jurisdiction by July 1, 1972, the commission itself shall prepare such proposed classification. The commission shall also prepare proposed district classifications for land within the jurisdiction of a zoning authority which has not enacted zoning ordinances or regulations, giving consideration to the master plan, if any, for the region, county, or municipality in which such lands are located.

(4) The commission shall prepare a proposed district classification map showing the boundaries of urban, rural, agricultural, and conservation districts for each county in the state not later than January 1, 1973.

106-4-5. *Hearings—adoption of district boundaries—Colorado land use plan.* (1) The commission shall hold public hearings on the proposed district classifications for all land within the state. A hearing may concern an entire county or any portion thereof, or it may concern more than one county or portions of more than one county, but no hearing may concern counties or portions of counties which are not in the same geographical area and which do not have similar land use problems.

(2) Notice of the time and place of the hearing shall be published in the same manner as notices required for public hearings by the planning commission of the appropriate county or counties. If there is no planning commission, the notice shall be published at least twenty days prior to the hearing in at least one newspaper of general circulation in each county which the hearing will concern. Maps showing the proposed district boundaries shall be available for public inspection prior to the hearing in at least one place in each county which the hearing will concern, and the notice shall indicate the time and place that such maps may be inspected.

(3) At the hearing interested owners, lessees, officials, agencies, including any state, regional, county, or municipal planning or zoning agency, and individuals, may appear and be heard. Such persons shall also be allowed at least fifteen days following the final public hearing to file with the commission any written comments or recommendations. The commission shall review each proposed district classification in light of the information and opinions presented at the public hearings and in the written comments thereon, and it shall adopt final boundaries for the county or counties within a period of not more than ninety nor less than forty-five days after the date of the final public hearing concerning such county or counties; but final district boundaries for all counties in the state shall be adopted not later than July 1, 1973.

(4) When adopted, such district boundaries shall constitute the Colorado land use plan. Such final district boundaries shall constitute regulations of the commission having the full force and effect of law and shall be subject to judicial review in accordance with the provisions of article 16 of chapter 3, C.R.S. 1963. After the adoption of final district boundaries, no state, regional, county, or municipal zoning or planning authority may authorize activities or uses incompatible with this article or with the regulations promulgated thereunder establishing such districts.

106-4-6. *Amendments to district boundaries.* (1) After six months have expired from the date on which final district boundaries are adopted, any department or agency of the state or of any county or municipality within the state, any property owner or lessee, or any other interested individual or group may petition the land use commission for a change in the boundary of any district. Within five days of receipt, the land use commission shall forward a copy of the petition to the planning commission, if any, or the region, county, or municipality wherein the land is located. Within forty-five days after receipt of the petition, the regional, county, or municipal planning commission shall transmit the petition, together with its comments and recommendations, to the land use commission. Upon written request by the regional, county, or municipal planning commission, the land use commission may grant an extension of not more than fifteen days for the receipt of any comments and recommendations. The land use commission may also initiate changes in a district boundary which shall be submitted to the appropriate regional, county, or municipal planning commission for comments and recommendations in the same manner as any other request for a boundary change.

(2) (a) After sixty days but within one hundred and twenty days of the original receipt of a petition, the land use commission shall advertise a public hearing to be held in accordance with the requirements of section 106-4-5. The commission shall notify the persons and agencies that may have an interest in the subject matter of the time and place of the hearing. Within a period of not more than ninety days and not less than forty-five days after the hearing, the commission shall act upon the petition for change. The commission may approve the change with six affirmative votes. No change shall be approved unless the petitioner has submitted proof that all of the following conditions have been satisfied:

(b) Other land in the same general area is not classified and available for the desired use;

(c) The public interest requires that land be available for the desired use; and

(d) The land is usable and adaptable for the use for which it is proposed to be classified.

106-4-7. *Special permits.* (1) A municipal or county zoning agency, or the land use commission in the case where the land affected is not subject to any existing zoning ordinances or regulations, may permit certain unusual and reasonable uses other than those otherwise permitted within agricultural and rural districts, as provided in this section. Any person who desires to use his land within an agricultural or rural district other than for an agricultural or rural use, may petition the zoning agency which regulates the use of his land, or the commission in the case where the land is not subject to any existing zoning ordinances or regulations, for permission to use his land in the manner desired.

(2) The municipal or county zoning agency or the commission, as the case may be, shall conduct a hearing within a period of not less than thirty nor more than one hundred twenty days from the receipt of the petition. Any persons or agencies that may have an interest in the subject matter shall be notified of the time and place of such hearing. If the hearing is to be conducted by a municipal or county zoning agency, such agency shall also notify the land use commission.

(3) The municipal or county zoning agency or the commission, as the case may be, may, under such protective restrictions as may be deemed necessary, permit the desired use, but only when the use would promote the effectiveness and objectives of this article. Such agency, or the commission, shall act on the petition not earlier than fifteen days after the public hearing. A decision in favor of the applicant shall require a majority vote of the total membership of the zoning agency or the commission, as the case may be. When the matter has been determined by a municipal or county zoning agency, a copy of the decision together with the findings shall be transmitted to the commission for review within ten days after the decision is rendered. Within forty-five days after receipt of the zoning agency's decision, the commission shall act to affirm, to modify, or to deny the decision of such municipal or county zoning agency. A denial by the commission of the desired use shall be appealable to the district court of the district in which the land is situated.

(4) Special permits cannot be granted to authorize uses which have the effect of making boundary changes or creating a new district.

106–4–8. *Nonconforming uses.* The lawful use of land or buildings existing on the date of final adoption of boundaries for any agricultural district or rural district may be continued although the use, including lot size, does not conform to this article; but no nonconforming building shall be replaced, reconstructed, or enlarged or changed to another nonconforming use, and no nonconforming use of land shall be expanded or changed to another nonconforming use. In addition, if any nonconforming use of land or building is discontinued or held in abeyance for a period of one year, the further continuation of such use shall be prohibited.

106–4–9. *Adoption and amendment of regulations.* The land use commission is hereby authorized to promulgate reasonable rules and regulations concerning matters within its jurisdiction. Any regulations promulgated under this article shall be subject to the rule-making provisions of article 16 of chapter 3, C.R.S. 1963. Any amendments to such regulations shall be subject to the same procedures for adoption as govern original regulations. If the amendment is to a regulation which defines the uses and activities permitted in the land use districts, as provided in section 106–4–4(1) any change must be based on proof that conditions exist which were not present when the regulation was adopted or that the regulation does not serve the purposes of this article.

106–4–10. *Periodic review of districts.* Irrespective of changes and adjustments that it may have made, the land use commission shall make a comprehensive review of the classification and districting of all lands and of the regulations at the end of each five years following the adoption thereof. The assistance of appropriate regional, state, county, and municipal agencies shall be secured in making this review, and public hearings shall be held in accordance with the requirements set forth for the adoption in final form of district boundaries and regulations under this article.

106–4–11. *Violations.* Any person who uses or threatens to use land in a manner which is not permitted in a district established pursuant to the provisions of this article shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not to exceed one thousand dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.

106–4–12. *Enforcement.* (1) Each officer or agency charged with the duty of enforcing county or municipal zoning laws shall be responsible for reporting all uses of land within its jurisdiction which violate this article to the commission. The commission itself shall be responsible for overseeing the uses of land in areas which are not subject to any existing zoning ordinances or regulations. The commission shall investigate reports of violations, whether made by a zoning authority or any other agency, group, or individual, or it may conduct an investigation on its own initiative.

(2) Whenever the commission shall have cause to believe that any person is engaging or threatening to engage in any use of land contrary to the provisions of this article, the commission shall by conference, conciliation, or persuasion, endeavor to eliminate the offending use. In case of failure by conference, conciliation, or persuasion to eliminate such offending use within a reasonable time, the commission shall cause to be issued and served upon the person allegedly violating or threatening to violate this article a written notice which shall specify the land affected, the offending use, and the provision or provisions of this article or the regulations promulgated hereunder which are alleged to be

violated, and the commission may order the person committing or threatening to commit the violation to cease and desist from such offending use. Each such order shall provide for a reasonable time for compliance, taking into consideration economic hardship and such other matters as the commission deems proper.

(3) Any such order issued under the provisions of subsection (2) of this section shall become final unless, no later than twenty days after the date such order is received by the person allegedly committing or threatening to commit the violation, such person requests, in writing, a hearing before the commission. Upon the filing of such request with the commission, the order shall be stayed pending the commission's final determination thereon.

(4) If any person requests a hearing under the provisions of this section, public notice shall be issued and the hearing shall be held in conformity with the provisions of article 16 of chapter 3, C.R.S. 1963. After consideration of the proof presented at the hearing, the commission shall affirm, modify, or rescind the original order.

(5) Whenever in the opinion of the commission any person is engaging, or threatening to engage, in any use of land which constitutes a violation of any cease and desist order of the commission which has become final according to the terms of subsections (3) and (4) of this section, the commission shall make application, through the attorney general, to the district court for the district in which the violation occurs or is threatened for an order enjoining such violation. After notice to the parties in interest as prescribed by the Colorado rules of civil procedure for such actions, the district court shall proceed to hear the matter, and if it finds that the cease and desist order of the commission was lawful and reasonable, it may issue an injunction or a restraining order in accordance with the Colorado rules of civil procedure. In any action for an injunction or restraining order brought pursuant to this section, any finding of the commission shall be prima facie evidence of the fact or facts found therein. An appeal or a writ of error may be taken from any such order of the court in the same manner as is provided in civil cases.

(6) No proceeding under this section, and no order issued therein or as a result thereof, shall bar the imposition of any other penalty imposed for violation of this article.

106–4–13. *Notification of county assessors.* Upon the adoption of district boundaries, certified copies of the classification maps showing the district boundaries shall be filed with each county assessor.

106–4–14. *Authority of local bodies.* Except as specifically provided by this article and the regulations promulgated pursuant thereto, the authority of regional, county, and municipal zoning and planning bodies shall not be affected.

SECTION 2. 106–3–5. Colorado Revised Statutes 1963 (1967 Supp.), is amended by the addition of a new subsection to read:

106–3–5. *State planning office.* (3) The state land use commission, as established under article 4 of this chapter, shall perform its functions and duties as a part of the state planning office.

SECTION 3. *Appropriation.* There is hereby appropriated out of any moneys in the state treasury not otherwise appropriated, for the fiscal year beginning July 1, 1970, to the Colorado land use commission, the sum of one hundred thousand dollars ($100,000), or so much thereof as may be necessary, for the administration and implementation of this act.

SECTION 4. *Effective date.* This act shall take effect July 1, 1970.

SECTION 5. *Safety clause.* The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

Senate Bill No. 11. By Senators Schieffelin, Anderson, Armstrong, Bermingham, Chance, Enstrom, L. Fowler, Jackson, MacManus, Minister, Saunders, Shoemaker, Stockton, Strickland, Taylor, Williams, and H. Fowler; also Representatives Arnold, Bryant, Byerly, Cooper, Dameron, Edmonds, Fentress, Fuhr, Gustafson, Johnson, Koster, Lamm, Moore, Carroll, Sack, Strahle, and Bain.

AN ACT concerning the establishment of a Colorado land use commission, providing for the powers and duties thereof, and making an appropriation therefor.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. Chapter 106, Colorado Revised Statutes 1963, is amended by the addition of a new article to read:

ARTICLE 4.—COLORADO LAND USE ACT

106-4-1. Legislative declaration—short title.—(1) The general assembly finds and declares that the rapid growth and development of the state and the resulting demands on its land resources make new and innovative measures necessary to encourage planned and orderly land use development; to provide for the needs of agriculture, forestry, industry, business, residential communities, and recreation in future growth; to encourage uses of land and other natural resources which are in accordance with their character and adaptability; to conserve soil, water, and forest resources; to protect the beauty of the landscape; and to promote the efficient and economical use of public resources. The general assembly further finds and declares that there is an increasing mutuality of interest and responsibility between the various levels of government in the state which calls for coordinate and unified policies in planning for growth and development in the interests of order and economy, and that the most effective means of attaining the objects set forth in this article is the adoption of the statewide system of land use.

(2) In order to provide the leadership necessary to meet the objectives of this article, it is the intention of the general assembly to provide the adoption of a Colorado land use map which will classify all lands in the state into various classifications and will designate those uses which may be made of lands within each classification.

(3) This article may be cited as the "Colorado Land Use Act".

106-4-2. Establishment of commission.—(1) (a) There is hereby established, within the office of the governor, the Colorado land use commission, hereinafter called the "commission". The commission shall consist of seven members who shall be appointed in the manner and shall serve for terms as set forth in this section. The commission shall assume its duties June 1, 1970, and all terms of commission members shall commence on that date.

(b) Five members shall be appointed by the governor, including one from each of the congressional districts and one at large, at least one of whom must reside west of the continental divide, but no more than three members shall be from any one major political party. The terms of office of the members appointed under this paragraph (b) shall be five years, except that of the members appointed to take office on June 1, 1970, one shall be appointed for a one-year term, one shall be appointed for a two-year term, one shall be appointed for a three-year term, one shall be appointed for a four-year term, and one shall be appointed for a five-year term. Any vacancies shall be filled by appointment of the governor for the unexpired term.

(c) The governor shall also appoint two members who shall serve at his pleasure.

(2) The commission shall elect a chairman from among its members. The members shall receive no compensation for their service on the commission but shall be reimbursed for their actual and necessary expenses incurred in the performance of their duties.

(3) The commission shall utilize the staff of the state planning office to assist in the performance of its duties. The departments and agencies of state government shall make available to the commission such data, facilities, and personnel as are necessary for its to perform its duties. The commission may receive and utilize gifts and any funds from federal or other governmental agencies. It shall adopt rules for its conduct and maintain a record of its activities, accomplishments, and recommendations to the governor and to the general assembly.

(4) Four members of the general assembly shall be appointed as an advisory committee to the commission to serve from June 1, 1970, to December 1, 1970. Two members shall be appointed by the speaker of the house of representatives, one member from each of the two major political parties; and two members shall be appointed by the president of the senate, one member from each of the two major political parties.

106-4-3. Duties of the commission.—(1) (a) The commission shall develop and submit to the governor and the general assembly, recommendations for adopting a land use map based upon land use classifications. Such recommendations shall be submitted no later than December 1, 1970.

(b) The commission shall hold such public hearings in various locations throughout the state as it deems necessary to formulate its recommendations.

(c) The recommendations may include, but shall not be limited to, the division of the state into geographical planning districts, together with the regulations for their implementation, to guide the growth and settlement of the state and to assure the best and wisest use of the state's land now and in the future.

(2) The commission shall consider, among other things, trends of urbanization; the protection of the natural environment; the meeting of recreation and leisure-time needs; the provision of supportive public facilities and services; the development of housing; the preservation of green belts, open space areas, and flood plains; the creation of new towns and new growth areas; and the conservation and use of natural resources and agricultural land.

(3) (a) The commission shall initiate and conduct on a continuing basis a surveillance of the ecological systems of the state, including:

(b) The conduct of studies, conferences, seminars, investigations, surveys, research, and analyses;

(c) The establishment of a system of collecting and receiving information on all necessary factors of the natural ecological systems of the state;

(d) The evaluation of the interrelationship and mutual dependencies of the natural ecological systems and the urban-industrial-recreational man-made systems;

(e) The conduct of examinations and analyses of alternative land uses in the state with the purpose of identifying and increasing the understanding of the major economic, social, aesthetic, and ecological effects of such alternative uses and of improving the state of the art of such studies and analyses, and thereby enhancing and improving the ability to make decisions with regard to the management and the use of lands of the state;

(f) The encouragement of the use of natural ecologic criteria for the design of present and proposed uses of the air, water, land, and space of the state; and

(g) Engaging in such other studies and investigations as may be required to carry out the purposes of this article.

106-4-4. State land use plan.—(1) In conjunction with the state planning office, the commission shall prepare a state land use plan which shall be utilized in adopting the land use map and which shall promote the wisest use and development of the state's natural and land resources in the present and in the future, and which shall assure the most effective expenditure of public and private resources in its implementation. In the development of the plan, the commission shall consider all relevant information on the past, present, and anticipated settlement and development of the state. The commission's concerns should include, but shall not be limited to, the location and timing of residential development; industrial and commercial development; transportation facilities; recreation facilities; educational and cultural facilities; water and sewer lines and treatment stations; and other public services and facilities required for the maintenance and support of human settlements. The plan shall also be concerned with the conservation and management of the state's natural resources, and the preservation of its ecologic systems.

(2) In the preparation of the plan, the commission shall solicit the views and advice of local government officials, regional and local planners, businessmen, and other interested persons, and shall take into account those regional and local plans presently in existence.

Section 2. Appropriation.—In addition to any other appropriation, there is hereby appropriated out of any moneys in the state treasury not otherwise appropriated, for the fiscal year beginning July 1, 1970, to the office of the coordinator of state planning, the sum of sixty-two thousand dollars ($62,000), or so much thereof as may be necessary, for the administration and implementation of this act.

Section 3. Safety clause.—The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

MARK A. HOGAN,
President of the Senate.
JOHN D. VANDERHOOF,
Speaker of the House of Representatives.
COMFORT W. SHAW,
Secretary of the Senate.
LORRAINE F. LOMBARDI,
Chief Clerk of the House of Representatives.
JOHN A. LOVE,
Governor of the State of Colorado.

Governor LOVE. In recounting the experience we had in Colorado in this area, that of land use planning, I think it is important that something be said about Colorado, its geography, and its growth.

I am sure that Senator Allott, Senator Hansen are both very familiar with this State, but as far as the record is concerned, Colorado is not a typical State, but it does have many aspects which will be relevant in other States across the Nation.

To begin with, Colorado is divided into eastern and western sections by the Continental Divide.

The recent growth and development has been primarily concentrated on the eastern slope, the western slope containing perhaps 10 or 15 percent of our entire population, has gone to primarily the recreation area of skiing.

Along the east face of the rockies, as a result of a decision by many fine companies to locate their activities and plants there, there has been growth at a much higher percentage rate than the rest of the Nation.

As a consequence, it creates several problems in the area of land use.

It seems apparent to me that given sufficient time and accepting the forecast of the demographers that look to an additional 100 million people in the United States in the next 30 years, for example, and I noted the chairman used that forecast in implying the percentage growth of Colorado, it seemed very obvious to me that one of the problems was that left to its own devices, we ran the dangers of building a strip of urban sprawl along the east face of the Rockies, depending on the period of time, from Pueblo to Fort Collins, or from Trinidad to Wyoming State, and beyond, and it seemed also apparent to me that this was a state of affairs, an event that we should not allow to be happening if we could possibly forestall it.

You only have to look across the Nation to find too many examples of the problems created by this kind of spreading, sprawling and concentrated kind of development.

Other problems, of course, in our great mountain country—the ski areas and other recreational areas—there have been growing up certain subdivisions, certain mountain homesites, similar things, but all too often creating destruction rather than enhancement of the natural advantages that are there; or in some of the areas—I think about the Roaring Fork Valley—the Roaring Fork is one of the forks of the Colorado River, and there has been growing concern lately that the rate of expansion growth there has been such that soon the number of spaces in effect on the ski hills and in a relatively narrow valley again has the risk of destroying many of the values that we seek to retain.

It seems true to me too that the present procedures to control that kind of growth and development are based on cities and counties.

We have 63 counties in Colorado, and all but three or four of them have zoning ordinances.

The cities in turn of course have zoning ordinances without exception, but to look at the city, for example, Colorado Springs, I talked in terms of my speech to the legislature this last January, and they cannot have a statewide perspective.

The zoning authorities on the city level must be looking toward a bigger and better community, bigger being equated to better, and there is no way in which they voluntarily are going to limit the size of that particular city.

Now, if you are to have an overall kind of plan, whether they are cluster cities, stressing open space, and an appropriate and proper use

of land, it seems to me it is going to be necessary that we bring to it a statewide approach, and this I will go into a little more detail in a moment, is a most difficult thing because it runs counter to many of the traditions, many of the concepts, many of the philosophies and philosophical beliefs we have held from the beginning, the old English common law concept of course that man is entitled to do what he wants with his property so long as he does not unreasonably interfere with the rights of others, and the transfer to the present zoning was difficult enough, but this will be far more difficult it seems to me.

There are only two States that have made beginnings in this regard, and at the time I had looked at it, since then there are others that have made some moves, but Wisconsin and Hawaii have both passed bills in part to attack this problem, so in Colorado we first started in 1967, with a State planning authority.

Now, the direction of the authority is State planning, was broader, but did include the direction——

The CHAIRMAN. Governor, Senator Allott must leave.

As you know, there is a death in the family, and he must leave by plane for Colorado.

Senator ALLOTT. Governor, I did want to express my appreciation to you, and one thing I would like to suggest, I did not like to have interrupted you, but I think that both of the bills, the first one which represents the Governor's ideas and the second one which became enacted, should be probably included in the record.

The CHAIRMAN. Yes. I did include those at the outset of the hearing.

Senator ALLOTT. Thank you very much.

The CHAIRMAN. Thank you, Senator Allott.

Governor LOVE. As I said, with a State planning authority that was broader, I was attempting to establish State goals, and the means of implementing them, but also included the direction to provide a State land-use plan.

Now, we moved toward that and we found, and I think this is also true in a precept to be kept in mind, that planning without power, planning without means to implement, planning in a vacuum, so to speak, turns out to be extra expense, redtape and bureaucracy, unless it is tied in with the power to act.

Planning in itself does not do much good, so this year the legislature, I have proposed that we do establish a State land-use commission with the power to enforce its decisions, as we brought it to the legislature, and held hearings, and we ran into several points of problem, perhaps not too surprisingly.

One, the western slope, for example, was suspicious of it.

They would feel, and I think this is a parallel here in the United States, they would feel the eastern slope in planning would like to simply keep all of the development on the eastern slope, and to make a park out of the western slope.

I heard that fear expressed on a nationwide basis from time to time.

Secondly, of course, is the interest of the local officials who are jealous of traditionally the power that they presently have to accomplish the zoning within their county, or their community or city.

There has been some move by the way to regionalize to a minor extent some of the local planning functions, and, of course, there were those who are involved as a matter of their occupation in the development and sale of land, that there is another problem for them.

Finally, of course, is the kind of feeling that any individuals that—I wish Senator Hansen were here to hear this—the ranchers on the State legislature, who would in effect say just as a matter of philosophy, "If I decide to sell a 5-acre piece of land off my ranch to somebody for a mountain cabin, whose business is it? It is my business," and so on.

There was open opposition expressed, but it did not build and grow, for it did not need to, because as a matter of fact, the concept itself has not been so sufficiently to have the kind of support in the legislature that the opposition needed to work against it.

As a consequence, the legislature with some urging passed a much watered down bill which is provided for, but has no means of implementation.

It simply did provide for land use commission to direct them to revise such a plan for the State of Colorado, and to bring it back to the legislature to the next session next year, presumably with the thought that if it is all right, we would then take some steps to provide the tools, and implement such a land-use plan.

It is a fight that is far from over, and in Colorado it is one of the more difficult things to do equitably and effectively, and the main argument that I think would be brought to it facing the difficulties is the fact that alternatively the future is so unacceptable, that if we do not have these things, we will be faced with expansion of some of the activities, some of the developments that we all decry.

As far as I may comment on the purpose of the bill, I was interested to note, Mr. Chairman, it indicated that this was not represented to be a full and final approach to the problem.

I am sure that we are all exploring, even groping to some extent, but I think this is not only a welcome, but I think a necessary part that the Congress, Federal Government can and must play in this overall approach.

The States will need help technically, staff help, planning help, they will need perhaps some guidelines, and, of course, as in all of these programs, it seems to me that the time would come when it would be necessary to consider the need for money.

Assume, for example, that we would decide a plan in Colorado, that involved cluster cities, we would have to stop the growth of one city and provide open space for an undetermined amount of distance.

If you do that, by zoning, with a variance procedure, although the same thing is true entirely in the kind of zoning you have now, but I think you are closer to taking of property and property rights without just compensation, and you also have the problem of the flexibility of variance procedures whether indeed such a line could ever be held, and it may well be that the only way that this can be made effective is for purchase of this kind of land at the State level.

When the bill was introduced, it sought to have classification of land into four parts:

1. Urban;
2. Rural;
3. Agricultural; and
4. Conservation.

The kind of conservation land, the land that was to be used as the dividing lines, are the open spaces. That is an integral and essential

part of any plan. We may end up finally to purchase to equitably accomplish what we lead to accomplish, but in addition to the kind of staff help, guidelines, money, I think that you can consider here too the advisability of this committee and this Congress, through this vehicle, this bill, expressing the need for, in addition to the kind of State planning, some sort of national planning in this area.

I found it interesting, and I think really relevant, to review one of the policy positions adopted by the National Governors' Conference at our last meeting in Colorado Springs in September 1969, without reading all of it, I will submit it for the record.

(The material referred to follows:)

POLICY POSITIONS ADOPTED BY THE NATIONAL GOVERNORS' CONFERENCE, COLORADO SPRINGS, COLO., AUGUST 31-SEPTEMBER 3, 1969

POPULATION DISTRIBUTION

Since it is accurately projected that the population of the United States will rise from its present level of 200 million people to 300 million people by the year 2000, it is essential that a national policy or goal be established regarding the distribution of opportunity and hence the voluntary distribution of our growing population in years to come. We must recognize that the forces causing population maldistribution are man made and, in some instances, the result of inadvertent and uncoordinated Federal Government programs.

It is the position of the Governors that maintaining and enhancing the quality of life now and in the future in the United States is so important that our Nation should adopt a national policy or goal regarding voluntary distribution of population within the Nation's boundaries.

Furthermore, it is recognized by this body that the national agricultural programs will play a paramount role in the achievement of voluntary population distribution and the reversal of out-migration from rural States to the urban areas.

Because of the importance of the new Federal farm proposals to be presented later this year on this question and the economy of rural America, it is recommended that the Nixon administration have policy discussions with the Governors and State agricultural departments prior to the introduction of any new agricultural programs on the Federal level.

It is further recommended that all Federal agricultural programs give special recognition to developing parity of opportunity for the Nation's farmers and ranchers, along with the preservation of the concept of family farms and the necessity for a viable agricultural economy in order to achieve economic stability in this Nation.

NATIONAL PLANNING

Environmental management and natural resource management are very complex problems which must be tied in with all areas of national interest and endeavor through comprehensive planning. Many States and many municipalities are now practicing far more sophisticated and coordinated planning than is the Federal Government. Most Federal agencies are now conducting some planning activities with varying degrees of expertise and with almost a total absence of direction or coordination of the executive branch of Government through a high-level agency whose sole purpose is national planning.

The Nation has never developed identifiable and articulated goals toward which planning efforts of Federal agencies and State and local government can be directed. There is little or no coordination between the sporadic and uncoordinated Federal agency planning and that being carried out by the States and local government.

It is, therefore, the position of the Governors that:

1. Some very basic national goals need to be identified and articulated by Congress and the President.

2. Federal agencies must be directed and coordinated in their planning activity by a high level Federal planning agency which is cognizant of our national goals.

3. State and local government planning efforts will be far more effective if they can be meshed voluntarily with a Federal planning effort on the national level.

4. Congress, as well as the executive branch of Government, must make use of the new and constantly improving electronic equipment, techniques, and expertise in planning as they enact legislation to cope with national problems.

5. The total lack of coordinated and expert Federal planning is a basic deficiency in this country's continuing failure to adequately cope with environmental management and natural resource management, as well as all other social and economic problems.

Governor LOVE. And so it seems to me as you grapple with the problems of what is a good and what is an acceptable plan, you will have to consider what is a national goal, and there are two areas I will use as an example.

One, it seems to me there needs to be a national policy on population dispersal.

The forecasts that indicate that 90 percent of our people will be living on 8 or 10 percent of whatever number you want to pick, of the land——

The CHAIRMAN. Seventy percent of them now live on only 1 percent of the land.

Governor LOVE. To simply say this will occur, seems to me to be giving up, because take a look at the ultimate in New York City and the concentration of people.

I think it can be argued that that no longer represents a viable or effective or workable social and governmental organization.

If that is too extreme, I do not think you can quarrel with the fact that certainly that great a concentration of people in that society represents a part of the problem rather than a part of the solution, and a national policy that would seek to further disperse, separate, particularly in view of forecast growth, seems to be wise and necessary, and it would not be a new policy, and when I think back, I think the Homestead Acts was such a policy.

Secondly, and just one other example, and a kind of national policy that I think this kind of approach is inevitable, that I have to deal with, there will be witnesses I note later in the day, you will be talking with greater authenticity about the rate of growth and demand for public power, but the most recent figure I say indicated the demand will I think double in the next nine years.

Whether this be right or wrong, it is at least an indication of the kind of ascending growth, and the demand for public power.

Now, whether this power be by atomic reactor or burning of fossil fuels, there are certain inherent potential problems to the environment.

We can add technological improvements, and whether there will be no particular air pollution or not, whatever there may be, a national policy approach to power is almost inevitably a part of the national policy on land use.

In conclusion, let me say that I am firmly convinced that appropriate legislation in this area is not only advisable, but necessary for the States for planning at the State level, planning within the overall context of national goals and policies be set.

The CHAIRMAN. Governor, I want to compliment you on your statement this morning and on what you have been endeavoring to do in Colorado.

I gather that the plan you presented to the legislature contemplated a statewide land use policy; that is, once a policy was made, the political subdivisions of the State could continue to zone, but the zoning would have had to be in conformance with the statewide plan.

I must say to you that this is the only thing that makes sense, because it is inevitable that the dispersal of authority in zoning is such, not only in Colorado, but in every State in the Union, that without a statewide plan, the local political entities are not in position to make a decision locally, unless they understand the impact of those decisions on the wider area of the State, and beyond the State.

I take it that this is your thesis?

Governor LOVE. That is right.

The CHAIRMAN. I am glad you mentioned the example, too, of the problem of thermal plants. As you indicated, we will double our output by the end of this decade, 1980, and I have yet to find, in my State—maybe you have been successful in your State—where the power companies, whether publicly or privately owned, are able to find a forum in which they can get a decision as to where they can locate their thermal plants.

Do you find that statement to be correct?

Governor LOVE. Yes. I find it to be correct.

Actually, when you start to look at the fragmented authority there are, the number of places it could conceivably go, if they are going to put in a nuclear reactor, you know the procedure they have to go through.

The CHAIRMAN. After they have complied with the Federal procedure—that is, the conditions laid down by the Atomic Energy Act—with proper arrangement for adequate safeguards, the State and subdivisions then come in and completely undo what the Atomic Energy Commission has already decided, because the Commission cannot pass on the question of where it should be located: Nor do I think they should, as I think this is a matter to be resolved in view of local conditions. Only the local authorities can say whether it is safe, and this has to be coordinated with State authorities.

Governor LOVE. If I may interject, perhaps not directly on the point, but in that area there is growing uncertainty on the possible conflict between congressional policy and the State police power.

The CHAIRMAN. Yes. There is no doubt about that, and, of course, we recognize in this bill, which is a working draft, that the States have the police power as far as zoning is concerned.

What we are trying to do, of course, is to give some help to the Governors so that they can get their legislatures to provide for statewide zoning. Every Governor I have talked to has said without this kind of carrot and stick, it is not possible for a Governor to get a program that will be useful through the legislature. Is that a fair statement?

Governor LOVE. I think it may be at the present time. I still have hope that it is a new enough concept and program that the initial reaction is negative.

I still have hope that with additional speeches across the State and so forth, that the level of support I am sure has not come up since first introduced, but nevertheless, at the very least, it will be a most difficult thing.

The CHAIRMAN. We discovered in our research there are about 60,000 political subdivisions of the various States that have a hand in zoning directly or indirectly. In my State of Washington, there are 2,000 political subdivisions that have a hand in zoning directly or indirectly.

Obviously, there is no objection to local participation. In fact, it should be mandatory at the local level in zoning. The problem is to get those local representatives to think in terms of the larger problem.

Under existing law and in virtually all of the States, this is not possible, and this is what we are trying to deal with.

In short, the bill, I must say, is simply an effort to provide incentive to the States to exercise their States rights. I want to commend you for your fine comments, and I am pleased that we will have the two bills before us which will be very useful, to the committee and to our staff. If you should have an opportunity to go through the bill and make any comments or suggestions for change, they would be very welcome.

Governor LOVE. I would like to have the opportunity, not another appearance, but to comment and perhaps on some of the specifics throughout our National Governors' Conference, to bring them to your attention.

The CHAIRMAN. Very good. We would welcome that, and if you would arrange to send that to us as soon as possible, we would be grateful.

Senator STEVENS. Governor, Senator Allott left a question with me concerning a statement made yesterday by Chairman Train on environmental quality. He stated here yesterday there was a need for further education and information regarding implementation and the effect of a national land-use policy, and Senator Allott's question to you would be that, knowing your recent activity in Colorado in this area, what is your opinion of the reaction and feeling of the citizens of Colorado during those discussions concerning the Colorado land use bill?

In other words, could you assess for the committee your impressions as to how far the people of Colorado are willing to go now in centralized land use planning, and how far are they willing to go in terms of centralized land use control, based upon your recent experience?

Governor LOVE. I would have to report perhaps somewhat repetitively, but judging by the action of the State legislature in the first part of this year, they are not prepared at this moment to go to statewide implementation of any land-use plan.

However, as I have said, it is a new concept to most of them. I find that the people that live in the more populated portions of the State are more adjusted to and accustomed to zoning, to the fact that their land is zoned, than are the people in the less populous portions of the State, but I also find that there is simply the fact that it was introduced and debated, that it has raised very perceptibly the level of concern and acceptance.

Whether a poll would show it is now the majority, I do not know, but it certainly would move in that direction.

Colorado, of course, in common with all of the States, perhaps even to a greater extent as a result of our physical situation, was most con-

cerned about the environment, and the land-use bill is a portion of that growing concern.

I do not think it can be separated from the fact that what we are going to do as far as the environment is concerned, that it will be greatly controlled by its land use.

In commenting on Mr. Train's comment, in effect, if I understand, a further delay and a further study, I think we need to have a vehicle to get at it.

It will take a little time anyway, and the sooner we have a vehicle that would be helpful from the Federal level, the better I think it would be.

Senator STEVENS. Do you think those from the West have a greater burden as far as this type of program is concerned in selling it to our people?

Governor LOVE. I guess this sounds a little regional, but I have said many, many times, that all we in the West need to do is to look across the Nation and see some of the mistakes we should not make if we are well advised at all, and we in the West almost without exception still have the time to do this thing on a better basis than has been done in many parts of the East and Midwest, and if we do not take action and simply build additional New York cities, or contaminate our lake areas, I think we should be called to the task, and blamed severely for not seeing what is obvious to all of us.

Senator STEVENS. I get the impression from what you read of the Governors' conference, that the Governors would sort of like us to bite the bullet and establish this policy with the carrot and stick approach as the chairman had mentioned, and do you think the Governors think this would make your task easier; is that a good impression of the statement?

Governor LOVE. From this fact we did introduce the bill in Colorado, we are willing to go ahead, but I think it is a fair statement to say that help from this level would be of help in accomplishing the things that need to be accomplished, and I think the chairman was out of the room while I mentioned it, but ultimately in most of these Federal-State relationships, you also get to the point of talking about money too, and I think this is going to take some money.

The CHAIRMAN. And we provide for grants to assist in the planning work.

Senator STEVENS. When I was in the Interior Department several years back, we had a proposal for a Federal classification concept, and it was proposed, I think, this is the alternative approach of giving the States the opportunity to take the lead in this with Federal assistance, and I am getting more and more of your opinion if the States do not do it, eventually the Federal Government will do it for us, and I commend you on your approach in Colorado.

I certainly hope you are successful next time in getting a strong bill that has got some teeth in it.

Governor LOVE. I had one other thing, I am sure this is fully apparent to both of you, but the Federal interest as far as the West, the large public land estates, of course, it is apparent too that not only is this the area that still has the opportunity to be so planned that it can avoid many of the problems, but also it seems to me the Federal Government has a greater obligation, such as in Colorado where it has 36 to

38 percent of our land which is federally owned, and you know the West as well as I, and we think Alaska is 102 percent at the last count.

The CHAIRMAN. Governor, we want to thank you again, and I must say you are to be commended for your leadership in this area, and I believe in legislation along the lines that is now before us, and it will certainly be of help to you in trying to establish a little bit of order, shall we say, in what is in many States a state of anarchy as far as land-use planning is concerned, and your leadership, and your comments are very helpful, and, as chairman of the Governors' conference, I know you can help a lot.

Senator STEVENS. May I ask one last question?

Governor, how far do we have to go to make Federal land subject to the State plan in order to make a successful—in order to make your planning successful in Colorado?

Governor LOVE. Of course, with the caveat that very soon we should be having a report from the Land Commission, which has been dealing with some of the problems involved, it seems to me there is little doubt that there has to be a very close coordination.

Let me use just one example. The ski industry, which is a big industry now, and a growing industry in Colorado, depends on almost every instance on a permit from the National Forest.

If the policy that grants those permits is different from the policy of the development of the surrounding privately owned land, will simply not be creating a plan, but certainly more chaos, and that is just one example, and there are others, and it gets involved of course, but the whole problem of resource development, which is one of the more difficult ones.

Senator STEVENS. In other words, the Federal Government along with the private owners, is going to have to accede to some modification in order to accommodate the State plans as well as vice versa?

Governor LOVE. It is not a fully caught-on idea as yet, the kind of concept which this bill contemplates, that there will be a State land-use plan which will be subjecting all to the approval or disapproval from the State, but if it does go through, and we do get a statewide land-use plan, it seems to me the Federal Government should be bound by that plan just as fully as everybody else.

Senator STEVENS. We appreciate your appearance here very much, Governor, and I am sure what you have told us will be of much use to us here on the committee. I for one will consider your testimony.

The CHAIRMAN. Thank you very much, Governor Love, for coming here to give your testimony to the committee.

Governor LOVE. Thank you very much.

The CHAIRMAN. Our next speaker of the morning will be the Honorable Rogers C. B. Morton, Member of the House of Representatives from the First District of Maryland.

We are delighted to have you, and I would like to commend you for introducing a companion bill in the House.

Congressman MORTON. Thank you, Mr. Chairman. I am very pleased with the bill.

Mr. Chairman, I have a prepared statement, and I have found through experience in the interest of time, it is usually better to read the statement than it is to try to summarize.

STATEMENT OF HON. ROGERS C. B. MORTON, A U.S. REPRESENTATIVE IN CONGRESS FROM THE STATE OF MARYLAND

Congressman MORTON. Mr. Chairman, it is a great honor for me to appear today before the Interior and Insular Affairs Committee of the Senate to offer my testimony in support of the need to establish a viable system of land-use planning in this great Nation of ours.

I am no stranger to the fine work of this committee and, because of my 6 years on the House Committee on Interior and Insular Affairs, I am well acquainted with the goals and objectives the members of the committee seek to achieve here today.

I testify here in a dual capacity: first, as a Federal Representative whose district can be served by the concept of a national land-use plan, but, secondly, I appear here today as an individual firmly convinced that, unless we prod man in the direction this bill seeks to go, he will smother in his own garbage if we just give him a few more years.

It is certainly in our national interest to bring about a more efficient and comprehensive system of land-use planning in order that our children and grandchildren will have an opportunity to enjoy the esthetic beauty which has made the city and the countryside of America so great.

And, secondly, it must be done in order that the services of Government at all levels and the services supplied by private transportation, utilities, and communications systems can be more efficiently brought to the people of America.

Within recent months a new-found love of environment has been professed by many; it is the "in" thing.

To those of us who have been working in the field of antipollution for many years, it is a relief to welcome new converts to the philosophy that says that man and nature can be compatible.

The only caveat is that man finally realize that he is not compatible with nature unless he purposefully plans his uses of the elements found in the crust of this earth in such a way that the earth will continue to be able to sustain useful and productive life.

Our population crossed the hundred million mark many years ago, and it will be approaching the 300 million mark before we know it, yet what have we done about the newcomers?

In 1900 each American had the equivalent resources of 25 acres of land; by 1966, it was down to 9.7 acres, and I don't think any of us care to think about its level by the year 2000.

The bill before us today offers a constructive approach toward establishing an orderliness much needed in this Nation.

There will be many who attack the idea of the Federal Government involving itself in land-use planning at the national level because it is an encroachment on fundamental States rights.

There is merit in this position just by the very nature of the Federal Government's superior resources to offer in bringing about the undeniably sound objectives this legislation is pointed toward.

However, I believe that if the Federal power in this process is left in an advisory status and is directed as an incentive for State motivation toward high standards of land-use planning, then, despite the

power of Federal grants, we can avoid any misuses of constitutionally reserved States rights.

The problem of land-use planning like many others in our history is one in which the States will not in and by themselves cooperate to the extent that meaningful standards can arise across the Nation.

It is further very clear that the involvement of the Federal Government in land use is not something new. There are at present several Federal agencies deeply involved in regional and State management and planning activities.

This legislation would coordinate the many agencies of the Federal Government along with the individual States in their efforts to alleviate the many problems that a lack of land-use planning has left us with and that will be compounded in the years to come.

I am so much a believer in the need for a national land-use policy that I have introduced a bill identical to S. 3354 in the House.

It is my considered opinion that the legislation before this committee is a logical step to providing a basis upon which sound and meaningful land-use policies can be enacted.

The President said on the second of January of this year in his speech on the state of the Union:

> The answer is not to abandon growth, but to redirect it. For example, we should turn toward ending congestion and eliminating smog the same reservoir of inventive genius that created them in the first place.

Then he further said:

> Between now and the year 2000, over one-hundred-million children will be born in the United States. Where they grow up, and how, will, more than any one thing, measure the quality of American life in these years ahead.

This should be a warning to us.

For the past 30 years our population has also been growing and shifting.

The result is exemplified in the vast areas of rural America emptying out of people and of promise, a third of our counties lost population in the 1960's.

The violent and decayed central cities of our great metropolitan complexes are the most conspicuous area of failure in American life.

I propose that before these problems become insoluble, the Nation develop a national growth policy.

Our purpose will be to find those means by which Federal, State and local government can influence the course of urban setlement and growth so as positively to affect the quality of American life.

In the future, decisions as to where to build highways, locate airports, acquire land or sell land should be made with a clear objective of aiding a balanced growth.

In particular, the Federal Government must be in a position to assist in the building of new cities and the rebuilding of old ones.

If we in the Congress are pragmatically to address ourselves to this challenge we must upgrade our concept of land use planning in terms of goals and standards we want to achieve and in terms of disciplines which must be established at all levels, local, State, and National.

If we do not, we can well wind up with a hodgepodge pattern that will be inefficient, unattractive, and virtually impossible to serve by government.

All that one has to do is to look about to see the failures of the past, failure to provide open spaces and recreational areas in the high-density population centers; failure to provide transportation facilities compatible with housing patterns; failure to engineer and construct waste processing facilities in time to serve the needs of an area; and failure to use our architectural talents to enhance the beauty and esthetic qualities of where we live and where we work.

Hopefully, in our time, we will reach for a higher quality of life through the motivation of our leaders and by the desire to bring this civilization onto a higher plane.

This bill is a step in that direction.

Mr. Chairman, I would like to add that I know that the temptation is to think in terms of the vast areas of the West, because here is an opportunity, a virgin opportunity to put the land-use plans into effect that will control the growth, and perhaps eliminate some of the errors that have been made in the older areas of the country, but I believe the real need for land-use planning is in the immediate, the immediate need is in the East, and that is also in the coastal areas of the west coast where population centers now have grown to vast proportions.

The concern I have is that great areas like Los Angeles on the west coast and the megalopolises of the east coast are reaching such proportions of sprawl that they are becoming virtually impossible to serve by government.

The disposal of solid waste has become fantastic because of the statistics involved just to get the waste out of the area where the people live.

The same goes for the disposal of liquids, because liquid likewise has to be pumped for great distances to be removed, and I think that if we can set density standards for areas, and can in our land use control the development of housing patterns so that we actually begin to control through planning the relationship between where people live, where people work, and where people play, and where people must be served by government, that we can overcome the problems, the environmental problems that we have now in the great cities of the East, of the central country, and of the coastal areas, so I just hope the bill goes through.

I have studied this whole proposition for many years, and I have tried to motivate my own counties and State to get into the act, to begin to overhaul our whole zoning and planning system so they are really meaningful and creative, and not just restrictive.

I would be glad to answer any questions or shed any more light on my opinions.

The CHAIRMAN. Thank you, Congressman Morton.

I think your statement is excellent. I think the points you have made go to the heart of the issue.

Would you say there is a real problem in the density of population as it pertains to air pollution, water pollution, land pollution?

Congressman MORTON. Oh, absolutely, Mr. Chairman.

The CHAIRMAN. Is it true it really compounds the problem?

Congressman MORTON. It certainly does. Take New York, the complex of New York; the boroughs of New York are still to a very large extent using the Atlantic Ocean as their disposal, and where you have density of that magnitude, covering that big an area, the alternatives

to doing that represent just a fantastic investment; when you have to lay a few land-use concepts that involve systems within that of transportation, of disposal, or processing, or a combination of both, a system of communications that has to be overlaid to update the communications system that is there, the density of population in these areas is the thing to overcome, and we may have to go to the new-town concept, we may have to do a lot of things; but the point is, unless we set the standard, and this is what this bill directs itself to, if we do not set the standards for doing this, we will never do it.

I am convinced we will never do it. I think we can give lipservice to this until the cow gives beer, and I do not think we will do it unless we really motivate the States to come up with a set of standards for all kinds of areas, the high-density areas, the undeveloped areas, the areas that are set aside purely for conservation.

The CHAIRMAN. Would not you say that the orderly zoning of land is at the heart of our environmental challenge today?

Congressman MORTON. It certainly is. There is no question about it.

The CHAIRMAN. Senator Stevens.

Senator STEVENS. Congressman Morton, I do not really follow your statement about the East as to errors of what I call people pollution, how the land planning concept will really be of assistance here in the East, more so than in the West.

Will you tell me how you got to that conclusion?

Congressman MORTON. Well, I think land use is of benefit to people, and this is where the people are, and land-use planning is a benefit to us.

Sure, we can lay out perfect blueprints for our great State of Alaska, for the vast domains that the Federal Government is already involved in, and I think Governor Love testified that his State was 32 percent in the Federal domain, but that is not going to affect the quality of life of the people in Baltimore, and Philadelphia, and Newark, and Washington, and I think that we cannot just say that we are frozen into the environmental system that we have in these areas, and that we are not going to make the same mistakes in Alaska, or in the Great State of Washington, or Utah, or any of those mistakes that we have made in New Jersey, and that we have made in Maryland.

I think we have got to reconstruct our dense areas so that Government can serve them.

The proposition, for example, in the suburban sprawl areas are bringing Government services to each individual home becomes stupendous when you have high-density areas spread over large acreage, and I think that where we have got to spend our money is where the people are, and this is where the people are.

It will not cost too much to undertake a land-use concept for a place that is not developed.

That is a matter of architecture, engineering, discipline, but when you are going to change something that is already there, you are dealing with very heavy investment, and I think in order to really save the environment, this investment has to be made, and the forerunner of such an investment is a commitment on the part of the people to do it, and I think we have no alternative but to put in a concept, a whole new concept of land use in the high-density areas of the East, and of the big city areas of the whole country.

Senator STEVENS. You contemplate then that these land-use plans on a statewide basis in the East would involve massive metropolitan renewal concepts, a new concept of urban renewal?

Congressman MORTON. No. 1, I think we have got to stop the growth of the city from external sources by providing an opportunity in the rural areas for people to develop a viable economy, and we have let the automation of the farm take place without replacing by and large.

There have been some very fine efforts made in a good many areas, and, of course, what I say has some exceptions, but basically the statement that the President made in his state of the Union address is very accurate.

We have gutted the rural areas of the people, and we have stacked them vertically, or packed them into the cities without the capacity in those cities to take care of them.

The difference between a slum and a nonslum area is primarily density of people.

If you have got 20 people living where 10 should be, the chances are you have got a slum.

If you only have 10 where it was planned to have 10, you have a residential area, and that is in my opinion very satisfactory.

The old areas of Washington that years ago supported a very high quality of life, now that they have been tripled and in some cases quadrupled as far as density have become in my opinion intolerable as a part of the American life, and the reason this happened is because we had no land-use plans to direct our energies so that we would make it a viable plan for population distribution to be spread out over a bigger area.

Senator STEVENS. I really think it takes more courage for you from the East to support this concept than us from the West, and I commend you.

Congressman MORTON. We live in the threat of being exterminated by our environmental management. You don't, and that is one of the reasons, and I served on the National Power Subcommittee, as Senator Jackson knows, for a long time and it always concerned me when we waved the magic wand and took maybe a hundred thousand acres out of the public lands and made national land out of it way out in Utah, and nobody could get there from Baltimore, or from Washington.

This is something we can do 50 years from now, because nobody can destroy that land. It belongs to the Federal Government, so why not spend our park money where the people are, in the cities of Seattle, Anchorage, there you are [laughter], Baltimore.

Senator STEVENS. You know how to hurt a guy, Mr. Morton. [Laughter.]

The CHAIRMAN. I am not sure which hat you are wearing now.

Congressman MORTON. I guess I better tell.

The CHAIRMAN. May I just comment, I think there is another matter here that relates to population density. I am convinced that there is a direct relationship between congestion and violence.

You jam people together into a limited area, and you have serious social problems.

I think some of these huge urban areas are no longer governable. We are just finding it out.

Congressman MORTON. I agree a hundred percent.

The CHAIRMAN. It is not just the environmental impact, but also the sociological impact that I think is enormous.

You know, experimentation has been run with animals, and you put a few in an area, and they can survive, but add a few more and they start eating each other.

Well, they are shooting at each other now, and in large metropolitan areas, it is pretty bad. There is a need for better land-use planning, for new towns and for revitalization of small communities. There is certainly a limitation on the proper size of the urban mass, and I think it has reached the point of crisis here.

Congressman MORTON. I could not agree with you more, Senator.

Just take the man in the city of Baltimore who does not have a car, and he has to depend on public transportation to get to a park and spend a few hours out of doors in healthful recreation, the bus system takes 45 to 50 minutes to get him to the nearest park, and then he has to change a couple of times.

There is not any incentive to do it. Here is a kid on concrete, and he is packed in against the dirt, the filth, and what is his escape hatch. It is narcotics, it is crime.

We used to expend it with axe handles in walking behind a mule, but we have automated ourselves out of that, so we have this kid in exactly the situation we are talking about, and I am used to being in the poultry business, and if you put more than a certain number of poultry into a given area, they get sick and die. The only escape we have here is the adventure of crime, the adventure of narcotics, and you are not going to solve these problems by all of the investment you can make out in the boondocks, unless you solve the environmental problems first.

I am just convinced of it. That is the reason I came here to Congress. I believe it, and that is the only way I think we have to go.

The CHAIRMAN. While you are on that point, I hope you get the House to act on the Youth Conservation Corps bill, to take these kids off the streets and give them an opportunity to work during July and August in Federal land areas.

We hope the House Rules Committee will get that bill out. It came out of this committee unanimously on a bipartisan basis, and it passed the Senate unanimously, and we hope we will get the House to back it rapidly.

Congressman MORTON. I will do everything I can to help you.

The CHAIRMAN. Thank you for a very fine presentation. We know of your long interest in conservation. I do personally as a colleague of yours on problems that we have worked on together.

Congressman MORTON. Thank you, Senator.

The CHAIRMAN. Our next witness is the Honorable John N. Nassikas, Chairman, Federal Power Commission.

Mr. NASSIKAS. Thank you, Mr. Chairman.

The CHAIRMAN. You have a rather lengthy statement, and I wonder if you could place it in the record, and then you can hit the high points in view of the time crunch that we have.

Mr. NASSIKAS. I will be happy to.

The CHAIRMAN. Then it will be received, made a part of the record, and inserted at the end of your testimony.

STATEMENT OF JOHN N. NASSIKAS, CHAIRMAN, FEDERAL POWER COMMISSION

Mr. NASSIKAS. May I state at the outset, that my statement has not been cleared by the Bureau of the Budget. The position of the administration was expressed by the Honorable Russell Train of the Council on Environmental Quality. The statement I am presenting today is a statement of the Federal Power Commission.

The CHAIRMAN. This is the view of the Commission without previous clearance or comments specifically by the Bureau.

Mr. NASSIKAS. Yes.

The CHAIRMAN. We understand that.

Mr. NASSIKAS. The Federal Power Commission has broad interest in national land use planning. We share your conviction that land policy must be advanced to the forefront of contemporary concerns.

Failure to recognize the crucial importance of land planning could well have dire national consequences of indeterminable duration and impact.

As society and its institutions have become increasingly aware of the environmental consequences of our highly developed technology, land use planning has emerged as a matter of central importance.

The National Environmental Policy Act contains a strong and far-reaching Federal mandate to evaluate the environmental consequences of all significant Federal activities.

We recognize that this act was the culmination of your considerable efforts, Senator Jackson.

It is logical and necessary that we now focus on land use considerations.

The full gamut of environmental degradation has become a matter of concern.

Air, water, and noise pollution, noxious odors, urban blight and sprawl, and overcrowding, to name the principal offenders, are inextricably bound to the land and its use.

I do not have to repeat the problems that we have had with pollution. I have set that forth in some detail in my statement.

I would like to point out that I testified back in October 1969, before the Joint Committee on Atomic Energy. In the committee print of that testimony, there are detailed forecasts of power needs, power requirements, transmission requirements, as well as plant site requirements, so that I don't have to go into that in detail.

I would like to point out as I set forth on page 3 of my statement, that our statutory responsibilities under the Federal Power Act and the Natural Gas Act do include a wide range of environmental concerns and delegated responsibilities.

Under part II of the Federal Power Act, the Commission must assure, if it can, "an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources."

Under part I of the Federal Power Act we license projects involving a wide range of land use and water resources decisions.

We are guided by a comprehensive plan, standard which we interpret to mean under our present congressional mandate the appro-

priate planning for land-use management and conservation of resources.

The generation, transmission, and distribution of electric power represent one of our Nation's major land utilizations.

The electric utility industry is the largest industry in the United States from the standpoint of capital investment.

It is about a hundred billion dollars now. We anticipate in the present forecast that in the next 20 years probably $350 billion will be invested by that industry to meet projected energy demands.

The CHAIRMAN. I think it will be $83 billion for new plant and equipment for this calendar year, and I think $19 or $20 billion will be from the electric utility industry.

Mr. NASSIKAS. It is an enormous industry and it plays an extremely important part in our total economy. This is significant in the event, as we get into it a little later on, there is a reassessment or a reappraisal of the value of increased plant growth.

We have to be mindful of the effect such thinking may have on our national economy.

For example, in terms of plants, over the next two decades we will require about 40 new hydroelectric installations of 100 megawatts or more, approximately 50 new pumped storage hydroelectric installations of 300 megawatts or more and about 90 fossil and 156 nuclear steam-electric plants on new sites.

Many present sites are not adapted or adaptable to the installation of additional larger facilities.

There is either inadequate land or inadequate cooling waters available for nuclear technology. This means we must think primarily in terms of new sites.

There are approximately 250 major new plant sites throughout the United States.

I am speaking of the lower 48 States. I do not mean to exclude the State of Alaska, but my projections are based on the lower 48.

Senator STEVENS. Mr. Chairman, just to comment, I think the Federal Power Commission has failed to recognize the great way in which the power industry could assist development of my State, and at the same time they would help out with the pollution problems and the problems we have with the protection of the environment, because I think they have ignored the development of power in Alaska being transmitted by high voltage wires to what we call the south 48, and instead of having all of this pollution problem such as you get from these plants, and if there had been some advanced planning concerned with this developing region, power centers could be built in Alaska, and you could tie up to the powerplants in Alaska, and you could supply the whole demands of the whole country coming down on wires that do not pollute everything and really are capable of being buried with no thermal problem involved, and yet we are constantly involved with the activities related to the pipe line, and to these dangers and everything else, and yet in every survey, I find, Alaska is in fact left out of the total demand and supply function, yet half of your gas will be coming from Alaska, and probably a third of your oil and yet you are going to bring it down to the south 48 to generate electricity.

Why don't we generate it up there?

Mr. NASSIKAS. To answer your question fully would take an intensive study. If I cited facts on the five or six different parts of your question each would require a separate study.

May I start out by saying that first the Federal Power Commission has no jurisdiction over the matter which you just directed your remarks to.

Congress has not delegated to us that responsibility or the authority to insist upon the transmission of electric energy from Alaska to the contiguous 48 States.

This is not the theory of the act. Perhaps the Congress wishes to review this and perhaps delegate this kind of authority to us. Then we would carry it out.

Secondly, with reference to a power survey for Alaska, we have completed an Alaska power survey in 1969.

This is being incorporated incidentally in the 1970 power survey which will update the 1964 survey, which was the first national electric power survey.

With reference to a third aspect of your observation, the feasibility of transmitting electric energy by direct current, through extremely high voltages, either over the ground or under the ground, I agree that it has considerable scientific attraction. Some of the finest engineering and scientific minds in the world, I understand, are addressing themselves to this very point.

There are developments that are worldwide in this respect. Not only in the United States, but in Russia, for example, there is considerable technology which has been developed with reference to having transmission run over long distances by direct current with conversion at the other end of the line. Whether technology can accomplish this type of objective efficiently and economically so as to serve the purpose of transmitting power over several thousand miles is not known at this point. Therefore, I am not qualified to answer that question at this time.

Let me focus on this problem. While we have about 4 million acres now used by existing transmission rights-of-way, this is only about one five-hundredth of the land area of the lower forty eight United States. These States contain about 1.5 billion acres of land.

If we were to include Alaska and Hawaii, we would have about 2.3 to 2.4 billion acres of land in the land mass of the continental United States and Hawaii.

Our projections of the growth of transmission lines indicate that we will have 7,100,000 acres of land used for this purpose in 1990, or roughtly one three-hundredths of the total land area of this country.

Now, I recognize, and I hasten to add that while this may not seem significant in terms of the total, it is significant in terms of where that land is utilized, because much of this mileage is, of course, located rather close to the densely populated regions where the load centers are.

The technology of transmitting power on alternating current is expanding rapidly.

I direct your attention to the table at page 5 of my statement showing the projected growth of extra-high-voltage transmission lines between 1970 and 1990.

The 765-kilovolt lines will have an enormous increase from 560 miles in 1970 up to 10,170 in 1990.

When we consider the amount of energy that can be transmitted by 765 kv. compared with 230, it is obvious that we are dealing with a much larger amount of energy. This will conserve considerable land areas because of the characteristics of extra-high-voltage transmission.

With respect to interstate pipelines, which were also part of your observation Senator Stevens, there is a vast network of these throughout the country. There are somewhere over 240,000 miles of interstate natural gas pipelines alone. This is greater than the total mileage of railroads in the country.

These pipelines, as you know, Mr. Chairman, are subject to the jurisdiction of the Department of Transportation under the Natural Gas Pipeline Safety Act, and, of course, we certify the lines ourselves, depending on their function and location.

With reference to the environment, we have a docket number, which I outlined on page 8, docket No. R–360 issued in 1969, in which we gave notice of an intent to issue guidelines and a policy statement amending regulations under the Natural Gas Act relating to the practices which should be followed by natural gas pipeline companies in the planning, locating, cleaning and maintenance of rights-of-way and the construction of above-ground facilities.

We have received many comments on that, and we hope in a short time to be in a position to rule on this matter and issue an order.

On page 9, by way of summary, we have docket No. R–365, which relates to guidelines for the transmission of electric energy.

I will skip over to pages 10 and 11, except to note in passing that docket No. R–379 proposes to revise our uniform system of accounts with a view toward recognizing the fact that land and sites for power stations and for transmission lines will have to be acquired many, many years in advance of actual need.

If we are to plan properly, we must recognize the land-management concepts that are contained in this bill, as well as other matters that are contained in other bills, some of which have passed, some of which are pending. We must recognize that some sites will have to be acquired, perhaps 15 to 20 years in advance of the time they are needed in order to be sure to minimize environmental deterioration and encroachment.

To accomplish this, it is important from an economic standpoint that State commissions include these lands in the earnings rate base, the investment base upon which a utility is entitled to earn a reasonable return. In order to encourage this type of planning the utilities should be entitled to earn a return on their investment.

In the context of S. 3354—I am at page 12, the last paragraph—the objectives of industry-governmental coordination through cooperation might well be advanced by amending the bill to provide that statewide land-use planning agencies and the Land and Water Resources Planning Council undertake two steps to coordinate their efforts with those in the private sector of the economy.

One, the State planners should discuss with major industrial groups having large land holdings and rights-of-way (such as railroads, utilities, and natural resource companies) the desirability of pursuing policies that would aid the maximum joint use of existing properties and other desirable points of optimum environmental management.

For example, the railroad industry owns in the vicinity of 200,000

miles of rights-of-way which leads into the densely populated part of the United States, railroads being our first mode of transportation into these large centers.

Coordinating the use of these lands is the type of cooperation that State land planners should promote in order to preserve valuable land resources without sacrificing needed utility services.

Two, the State planners should be encouraged to consult with the principal elements of the electric and gas pipeline industries in their respective areas with regard to the interrelationship of utilities needs and State and regional plans for future siting and rights-of-way, together with related environmental factors.

The Water Resources Council, of which I am a member, has concerned itself with these problems.

Not only has the Council been concerned about land use, but the various river basin commission's established pursuant to title II of the Water Resources Planning Act have also been actively considering land use problems in their respective areas.

The New England River Basin Commission, for example, this past February published an excellent report entitled "Power and the Environment, Report No. 1, Laws and Procedures of Power Plant Siting in New England." It is an excellent report.

I would like to interpolate here the philosophical concept underlying my comments. You have in your bill an excellent principle that permits the establishment by interstate compact of legal mechanisms for regional planning organizations for problems that transcend State boundaries. In such situations States could delegate their responsibilities in order to protect the interests of a region.

This is particularly useful in the East where States are smaller, where population is larger on a square foot or mile basis, and where pollution problems with the air, water, and ecology cross boundaries into other States. It seems to me that by leaving this compact or regional mechanism open to the States you would make an extremely important contribution.

Power planning, for example, for generating plants and transmission is largely done on a power-pool basis. We have various regions in the United States. For example we have a New England-New York area that extends up into Canada with a contemplated connection with Quebec and includes a big loop which will eventually integrate it into another system.

Now, it seems to me we can logically proceed to a regional concept for power planning if the States cannot do it themselves. If the standards that are set up would indicate that it is better to plan on a regional basis, we could expand the concept of State planning contained in the bill to cover regional needs. The needs of power pools and power system planning would be preserved while at the same time recognizing environmental standards which may be set up.

I think the structure of using the Water Resources Council and expanding its functions to include land use planning management is a good one.

I endorse this idea in your bill.

We have no conceptual difficulty in adapting our licensing jurisdiction to national land use policies. In fact, our statutory responsibility under the Federal Power and Natural Gas Acts requires comprehensive analysis of proposed projects.

Because of this responsibility we are concerned about the restrictions in section 408(b) that prohibit the licensing of projects that are inconsistent with any State land use plan.

An earlier provision of section 408(b) requires "Federal agencies conducting or supporting public works activities" to make such activities consistent with approval State and-use plans "unless there are overriding considerations of national policy which require departures from the plan."

This discretionary authority to depart from a State's land-use plan is essential where overall national considerations are paramount.

We feel such departures are no less justifiable or necessary when Federal licensing agencies are exercising their responsibilities.

The projects themselves, after all, have the same kinds of effects on the environment whether they are constructed by the Federal Government or by a FPC licensee.

Th licensing of essential electric and interstate natural gas facilities may at times require departures from various State plans in order to meet regional and national needs.

Section 408(b) should be amended to allow Federal licensing agencies such as the Federal Power Commission to exercise such discretion in the overall public interest.

Under the provision of sections 406 and 407, States would have at most until the beginning of the fourth fiscal year after the enactment of the bill to develop acceptable statewide plans.

Presumably until a plan had been approved the limitations on Federal licensing authority specified in section 408 would not be operative.

Also, the status of projects that have received Federal authorization prior to the approval of an applicable statewide plan, but have not been completed at the ime the plan goes into effect should be clarified.

Sound considerations of regulatory administration would indicate that these projects should not be subject to the limitations on Federal authority found in section 408.

As I indicated earlier in my remarks, this statement is not intended to encompass a full-scale evaluation of land-use policy considerations or a line-by-line analysis of the merits of section 3354.

We view this bill as a significant and imaginative first step in the resolution of a nationwide problem.

We concur in your statement when introducing this bill, Mr. Chairman, that it provides "a starting point for review and for analysis" of a most serious national problem.

We are pleased and honored to discuss with this committee possible solutions to this problem.

In concluding I would like to observe that section 401(h) of the bill expresses the Federal Power Commission's evaluation of the seriousness and importance of the task this committee has undertaken.

That section states that: Intelligent land use planning and management provides the single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality life and providing the material means necessary to improve the national standard of living.

We fully support this policy pronouncement and the objectives it represents.

I will be happy to answer any questions which the members of the committee would like to present.

Senator STEVENS. Thank you for your comments. I think it is a very significant contribution you have made to these hearings.

I have only one question. You raised the question of the multiple use of rights-of-way, such as rights-of-way of the railroads.

I wonder, have you given any consideration to allowing the electrical utilities not only to utilize the railroad rights-of-way, but also to coordinate with the railroads so that our high-speed ground transportation could be electrically powered in the very populous Eastern areas?

Mr. NASSIKAS. Yes. There are studies being made by the Department of Transportation, by utilities, and by the staff of the Federal Power Commission relative to the ultimate establishment of a coordinated plan to the extent this may be economically feasible or practical.

It is not the kind of thing that can be simply adopted without a complete analysis.

We are proceeding on this type of analysis. In addition, I might say, there is a natural gas fuel vehicle which is in the experimental stages which also will relate to this overall pollution problem, although it may not particularly affect the land use conservation problem.

Senator STEVENS. One other question just came to my mind, and that is, what is today the maximum feasible distance for a.c. transmission of high voltage usage?

Mr. NASSIKAS. I am informed by my staff that this runs some place around 500 to a thousand miles. Closer to 500 for a.c. transmission.

When you start getting in excess of 200 miles at certain voltage levels you start getting some rather rapid losses of efficiency. Studies have been made regarding this point.

I am certain that in the course of time, how long I cannot speculate, there will be development of methods of transmitting energy in vast quantities over distances that today would be considered as impossible for reasons of engineering.

Senator STEVENS. Thank you very much.

The CHAIRMAN. Might I just make an observation here. It seems to me that it is very important as far as the electric utility industry is concerned to push research on high-voltage lines to the maximum. The reason is of course, as the witness knows, that to the extent you can increase the voltage, you will cut down the amount of acreage needed for transmission lines. Here is another instance in which science and technology can play a constructive role in the environment.

In other words, if you have a 250-kilovolt line now in a given area, instead of just taking more land for another one, you can start pushing that voltage up, so you can have a 500-kilovolt or 750-kilovolt line.

As for a direct current line, the witness knows well that they are engineering the line from the Columbia River to southern California sometime this summer, I believe, and this is a direct current line representing the latest and best technology. This comes as a result of cooperation with the Swedish companies who are probably along with the Swiss the best informed in this area in the Western World. One of the longest lines that will be operating in the entire world will be the line from the Columbia River to Los Angeles, which is more than a thousand miles, and we will be able to get a lot of data from that operation.

Senator GRAVEL. You made reference in your testimony to the Atomic Energy Commission.

I wonder if you might describe your role with the nuclear pollution problem?

Mr. MASSIKAS. With respect to thermal effects, jurisdiction is currently centered in the States.

The Atomic Energy Commission's jurisdiction regarding thermal effects has been altered by the Water Quality Improvement Act. The AEC must now require compliance with approved State thermal standards.

As part of a study under the auspices of the Office of Science and Technology which has been going on since I arrived at the FPC on August 1, 1969, we are examining this problem, and hope to be able to recommend legislation within the next month or two specifying guidelines for the States and suggesting procedures to handle the thermal effect problem.

As you know, the Federal Water Quality Administration has established standards regarding all types of pollution, including thermal effects on the ecology.

It has worked these out in conjunction with the States. The procedures that have been adopted are still not definite, although with reference to federally licensed plants, as you know, H.R. 4148, has established a procedure where now there must be certification that standards for thermal effects are met before any Federal agency can go ahead and license a project, most thermal plants currently require no licensing by a Federal agency, and very few States, about 17, in greater or lesser degree, currently require the licensing of thermal plants.

I recommended to Senator Hart's subcommittee of the Committee on Commerce on January 30, that legislation be adopted to cure this problem, this particular gap in procedure. In the future no plant in the United States of any size should be established unless there is environmental clearance and a certificate or license indicating compliance issued by a duly authorized agency of a State or at most two agencies, such as have been set up, for example, in your State of Washington, Senator Jackson.

The New England River Basin Commission would appear to prefer review by two State agencies. I have mixed views on this. I think it is a matter for the States to decide. They should set up certification procedures with no more than two agencies involved.

In the event the States do not set up this type of certification procedure, I would propose that there be a Federal certification procedure established to fill in the gap, after allowing the States a reasonable time to establish their procedures.

Senator GRAVEL. But all of the nuclear powerplants in this country are federally licensed, are they not, and you are the organization that issued the license?

Mr. NASSIKAS. The Atomic Energy Commission issues the license. It does not come under the jurisdiction of the Federal Power Commission.

Senator GRAVEL. So for a nuclear powerplant, you have nothing to do with it?

Mr. NASSIKAS. Nothing, except in the event the discharge from that nuclear plant goes into waters of a licensed project.

Senator GRAVEL. Do you have any radiological concern?

Mr. NASSIKAS. We are concerned, yes, but from the standpoint of jurisdiction or responsibility, the Power Commission has no jurisdiction over radiological effects insofar as health and safety are concerned. They are under the AEC.

We do not have that assigned responsibiilty.

Senator GRAVEL. You made mention of some projections in the area of hydro, fossil fuels, and nuclear energy.

I am acquainted with the rapid acceleration of construction in the nuclear and powerplants.

In the event (and since you admittedly stated this is not your area of concern) that pollution through radiation were more extensive than is presently realized, or the thermal pollution becomes a larger problem, what other alternatives do we have to satisfy these voracious energy demands which face this Nation?

Is there any planning involved?

Mr. NASSIKAS. Are you suggesting in your question that in the event the promise of atomic energy fails because of radiological effects upon the environment beyond current predictions, what other kinds of plans do we have for plants to meet this demand, is that the question?

Senator GRAVEL. Yes.

Mr. NASSIKAS. In the event of such failure, the only alternatives that we presently have, that are technologically feasible, are fossil fuel plants, which are a classic kind of plant and hydroelectric plants. But, it should be noted that we have a resources problem in this country.

For example, we currently have a gas supply problem which has developed over the course of the past 5 to 10 years in this country. This will take, as I have testified before, at least 5 to 10 years before it is resolved, if it is resolved in that length of time.

While we have vast resources of coal in the United States, we are finding that there is a critical shortage developing, short term at least, of the necessary coal supplies to build up inventories of fuel. Also, we cannot speculate at this time whether as a form of energy coal will be the answer, particularly in view of the low sulphur requirements of various areas of the country.

We also have a problem with oil in the United States, but our reserves appear to be adequate for the time being.

Many people have professed that these should be increased and improved. We have made a complete study of this through the Report of the Cabinet Task Force on Oil Import Control in which I participated. Residual fuel is largely the form of fuel which is used to generate electricity in district 1, basically the east coast.

This oil is from foreign sources, from Venezuela and from North Africa primarily.

This type of fuel requires desulphurization facilities in order to meet air pollution standards. Also, we cannot speculate on a long-term basis as to the reliability of this source.

What I am saying is that I think we need to answer your question by conducting a total energy study in this country, and I have recommended it. All of our energy resources will have to be analyzed so that we will have a national environmental energy policy which will give us contingency plans in the event the atom does not yield the promise which experts have indicated that it has.

Senator GRAVEL. Would you expand that to a continental energy policy, I would hope, since we are talking by and large of sources from the entire North American Continent. What is the disposition of yourself to a national environmental energy policy?

Mr. NASSIKAS. I suggested such an energy policy study to the Senate Subcommittee on Energy, Natural Resources, and the Environment on January 30, but we have not proposed a bill. There is considerable interest in many circles regarding this kind of proposal.

Of course, there are energy studies being made. The Office of Science and Technology is conducting a study of all energy resources, but this is not by any means a definitive study.

What I am suggesting is a far-reaching, long-range study that will enable us to determine the necessary governmental policies to which industry must respond to assure that we have adequate resources to meet the energy demands of an industrialized society, yet comply with environmental standards.

Senator GRAVEL. Very good. I could only urge you to use your influence to push for legislation in that regard.

Just one last question. Would you feel that the activities of the AEC, that part of the activities that relate to you, should be shouldered by your organization in the licensing procedure?

Mr. NASSIKAS. I do not think that it is necessary to transfer their responsibilities to us. I think we have to coordinate.

Senator GRAVEL. Do you coordinate with them at this time?

Mr. NASSIKAS. Yes, we do.

We coordinate through staff. We have also had Commission meetings with the Atomic Energy Commission.

If State plans, that is State certificating plans, were adopted in coordination with standards provided by the Federal Government and in harmony with land-use policy such as proposed in this bill, then it seems to me the States would have accomplished a great deal.

Senator GRAVEL. What about a situation, such as where Minnesota is taken to court? Several States have developed higher standards than the AEC.

Mr. NASSIKAS. I am acquainted with that case. It is my private opinion as a lawyer that the Federal Government has preempted that field, through the AEC, and that the States cannot set independent standards under the current status of the law. Nevertheless, regardless of my private view, this particular matter will be resolved by the courts where it now is.

The CHAIRMAN. Thank you, Mr. Nassikas, for your very fine statement and helpful comments and suggestions. We are most grateful.

Mr. NASSISKAS. Thank you, Mr. Chairman.

(Mr. Nassikas' statements and appendixes follow:)

STATEMENT OF JOHN N. NASSIKAS, CHAIRMAN, FEDERAL POWER COMMISSION

Mr. Chairman:

I appreciate this opportunity to discuss with you the Federal Power Commission's interest in national land use policy and planning. We share your conviction that land policy must be advanced to the forefront of contemporary concerns. Failure to recognize the crucial importance of land planning could well have dire national consequences of indeterminable duration and impact.

As society and its institutions have become increasingly aware of the environmental consequences of our highly developed technology, land use planning has emerged as a matter of central importance. The National Environmental Policy Act contains a strong and far-reaching Federal mandate to evaluate the environmental consequences of all significant Federal activities.* Therefore, it is logical and necessary that we now focus

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* Executive Order No. 11514, issued by President Nixon on March 5, 1970 directed all Federal agencies to revise their procedures and practices to comply with the Congressional mandate of the National Environmental Policy Act. We at the Federal Power Commission are working with the Council on Environmental Quality in order to comply with Executive Order No. 11514.

on land use considerations. The full gamut of environmental degradation has become a matter of concern. Air, water and noise pollution, noxious odors, urban blight and sprawl, and overcrowding, to name the principal offenders, are inextricably bound to the land and its use. Comprehensive State-Federal planning and coordination of land policies offer a logical approach and long-term solution to these problems.

It is, of course, paramount to the preservation of our national economy and position of world leadership that our land policies be developed and implemented in a manner designed not only to assure environmental preservation, but to maintain our productive capacity as well. Sound environmental planning involves a careful evaluation and balancing of all national needs in order to maintain and enhance economic progress while preserving the ecology of our land, air and water resources.

On October 28, 1969, I testified before the Joint Committee on Atomic Energy on the environmental effects of producing electric power.* I stressed at the outset of

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* Hearings Before the Joint Committee on Atomic Energy on the Environmental Effects of Producing Electric Power, 91st Cong., 1st Sess., Pt. 1, pp. 32-82 (1969). On January 30, 1970, I testified before the Senate Commerce Committee's Subcommittee on Energy, Natural Resources and the Environment. The environmental aspects of electric and gas utility operations were a prominent part of that testimony. I have attached a copy of my statement before the Subcommittee as Appendix A.

my remarks before that Committee that I view environmental decisionmaking as a delicate but workable balancing procedure. Every major industrial and economic decision that results in a change in our land, water and air resources cannot be condemned out of hand without sacrificing decades of important advances in our standard of living. Sound planning procedures in the area of land utilization, such as those outlined in this proposed legislation, are the key to economic and industrial stability without unduly degrading the environment. I continue to subscribe to these beliefs today.

The Federal Power Commission's statutory responsibilities under the Federal Power Act and the Natural Gas Act include a wide variety of concerns for proper utilization, development and preservation of the Nation's land resources. The licensing of non-Federal hydroelectric projects under Part I of the Federal Power Act involves a wide range of land use and water resource decisions. Also, within our jurisdictional limits, we have a statutory mandate in Part II of the Federal Power Act (16 U.S.C. 824a) to assure "an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources * * *." Commission activities and

decisions implementing this mandate also necessarily involve important questions of land use.

The generation, transmission and distribution of electric power represent one of our Nation's major land utilizations. The electric utility industry is the largest industry in the United States from the standpoint of capital investment. As of the end of 1969, the gross capital investment of the electric utility industry was almost $100 billion. This industry - public, cooperative and private - provides the United States with the highest production and utilization of electric energy of any nation in the world.

The present projected growth of the electric utility industry during the next two decades may require the construction of about 40 new hydroelectric installations of 100 megawatts or more, approximately 50 new pumped storage hydroelectric installations of 300 megawatts or more and about 90 fossil and 156 nuclear steam-electric plants on new sites.

To meet these needs, the electric utility industry will need to install nearly 1,000,000 megawatts of new capacity between 1970 and 1990. Not only is needed capacity on the increase, the size of generating plants

has grown considerably as well. In the late 1950's a 300-mw generating unit was considered extremely large, today units well in excess of 1,000 mw are feasible. Tentative projections of our staff indicate that about 40 percent of all power installed in 1990 will be nuclear fueled, about 45 percent will be from steam generating plants fired with fossil fuel, 7 percent will come from conventional hydroelectric installations and about 5 percent from pumped storage hydroelectric projects. The remaining 3 percent is expected to be internal combustion and gas turbine capacity.

Regardless of the source of this needed additional generation, vast new areas of land will necessarily be committed to generating, transmitting, and distributing the power produced. To cite an example, the December 27, 1968 report of the Working Committee on Utilities* estimated that the new transmission construction between now and 1990 will utilize more than 7,100,000 acres of land for

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* Report to the Vice President and to the President's Council on Recreation and Natural Beauty. FPC Commissioner Carl E. Bagge served as Chairman of the Committee that prepared the Report.

TABLE I

EHV TRANSMISSION LINES-PROJECTED GROWTH
1970-1990

	230 KV			287 KV			345 KV			500 KV			765 KV			750 KV (DC)		
REGION	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
Northeast	5,360	6,140	6,900	--	--	--	1,210	3,110	3,960	880	1,600	2,200	--	--	1,320	--	--	--
East Central	160	230	230	--	--	--	5,950	10,900	12,420	830	1,500	1,810	560	2,750	4,540	--	--	--
West Central	5,650	6,400	6,700	--	--	--	3,380	6,950	12,750	--	1,410	2,740	--	220	2,660	--	--	--
Southeast	6,330	17,620	21,320	--	--	--	--	--	--	830	4,800	9,730	--	--	--	--	--	--
South Central	1,000	2,440	4,000	--	--	--	3,520	7,930	13,600	1,180	2,410	3,480	--	120	670	--	--	--
West	21,950	26,510	27,880	1,020	870	560	2,580	5,590	7,790	3,730	9,570	14,760	--	370	980	850	1,670	1,670
TOTALS	40,450	59,340	67,030	1,020	870	560	16,640	34,480	50,520	7,450	21,290	34,720	560	3,460	10,170	850	1,670	1,670

Total Line Mileage	69-200 KV	EHV	TOTAL
1970	235,000	66,970	301,970
1980	290,000	121,110	411,110
1990	335,000	164,670	499,670

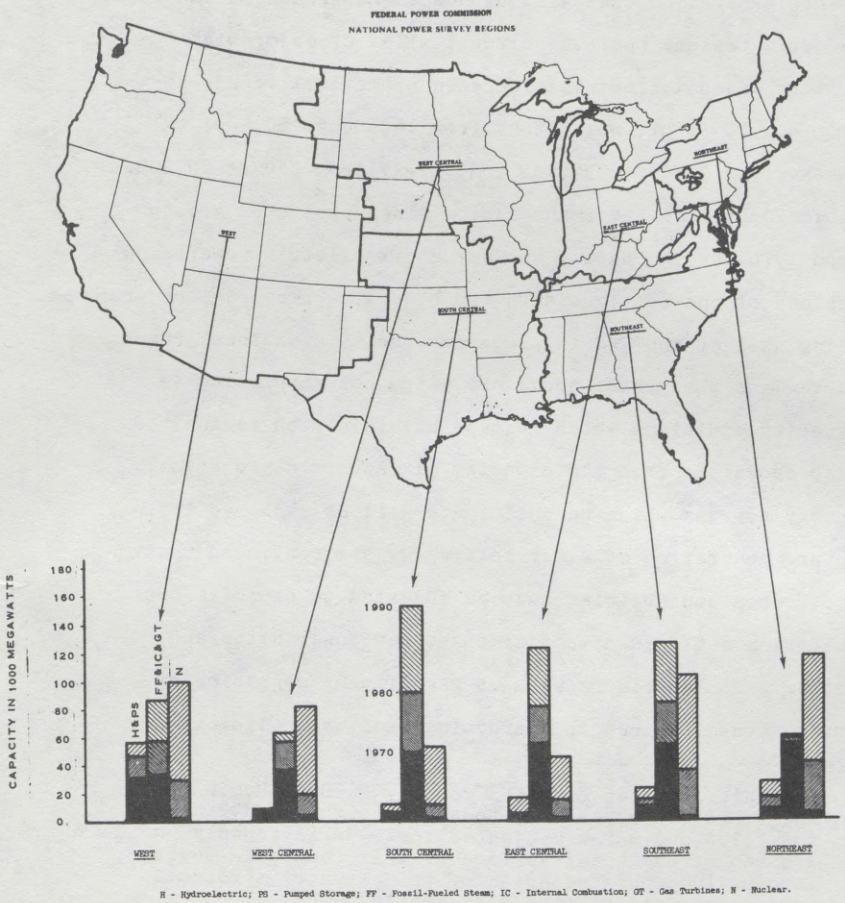
Source: Report to the Vice President and to the President's Council on Recreation and Natural Beauty, Working Committee on Utilities, page 50, December 27, 1968.

rights-of-way, compared with 4,000,000 acres now used by existing transmission.* Concurrent with the vast amount of new generation that will be needed between 1970 and 1990, we estimate that operable circuit miles of major high-voltage transmission will increase dramatically: 230-kv from 40,500 to 67,000; 345-kv from 16,600 to 50,500; 500-kv from 7,500 to 34,700 and 765-kv from 560 to 10,200. Table I outlines EHV transmission lines projected growth from 1970-1990. Chart I shows the six electric power supply regions of the contiguous United States. These regions are being used by the FPC in preparing the 1970 National Power Survey and this chart shows projected net generating capacity additions which must be built in each region. It also shows the changing capacity mix according to primary energy sources which we anticipate will be employed in the future generation of electricity. We are convinced that procedures and policies must be adjusted to expedite the selection and development of these new power sites and transmission corridors without significant degrading of environmental values or disrupting land use policies.

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* The United States contains roughly 1,900,000,000 acres. The 4,000,000 acres used today is roughly 1/500th, and the 7,100,000 acres projected for 1990 is roughly 1/300th of the total surface of this country. However, in densely populated areas of this country acreage is very scarce and difficult to obtain.

CHART I



H - Hydroelectric; PS - Pumped Storage; FF - Fossil-Fueled Steam; IC - Internal Combustion; GT - Gas Turbines; N - Nuclear.

PROJECTED NET ADDITIONS TO GENERATING CAPACITY

The vast network of interstate natural gas pipelines also constitute an important commitment of our land resources. Our jurisdiction over the interstate transprotation and sale for resale of the gas carried in these pipelines occupies a significant portion of the Commission's time and energies. The certification of these services, consistent with the public convenience and necessity, is a national land use decision of major significance. In fiscal year 1969, for example, the Commission approved 254 certificate applications for the construction of natural gas facilities. These applications involved facilities estimated to cost $1.38 billion and involving 5,426 miles of pipeline. The figures represent a major commitment of land and money.

In the area of land use, there are currently pending before the Commission three proposed rulemakings that, if adopted, will have a major influence on the land use practices of the nation's electric and gas utilities.

In Docket No. R-360, 34 F.R. 9348, issued June 6, 1969,* the Commission gave notice of its intent to issue guidelines and a policy statement amending its regulations under the Natural Gas Act relating to the practices which should be followed by natural gas pipeline companies in the planning, locating, clearing and maintenance of rights-of-way and the construction of aboveground facilities. The proposed amendments** to the Commission's rules would require companies to file new exhibits with their pipeline construction applications. One exhibit would set forth the consideration given by the pipeline company to the feasibility of using existing rather than additional rights-of-way and another would deal with the effect of the proposed facilities upon officially designated scenic, historic and recreational values.

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* The proposed rulemaking is attached as Appendix B. Commissioner Carver dissented to the issuance of the notice.

** The proposed amendments were adopted from those set forth in the report of the Working Committee on Utilities, Supra. fn. p. 5.

The notice of proposed rulemaking pointed out that construction of natural gas facilities "can affect scenic, historic and recreational values which are factors to be considered as part of the public interest by the Commission in determining whether facilities proposed to be constructed are required by public convenience and necessity." We indicated that we believe that rights-of-way should be selected to minimize conflict between natural gas pipeline company rights-of-way and other present and foreseeable uses of the land on which they are to be located.

Commission concern for proper consideration of aesthetic, recreation and environment aspects of utility construction and land use was also demonstrated on July 29, 1969, by a notice of rulemaking (Commissioner Carver not participating) in Docket No. R-365, 34 F.R. 12718 (a copy of the notice is reproduced in Appendix C) proposing the amendment of the regulations under the Federal Power Act and the addition of a new section to the Commission's Rules of Practice and Procedure in order to implement procedures for the "preservation of aesthetic and related values in the design, location, construction and operation

of" [hydroelectric] projects.* If adopted, the rule would require future applications for license to include a map showing the location of transmission facilities in relation to public interest areas, such as recreational and scenic areas.** The new exhibit would also be required for inclusion in certain applications for amendment of licenses or for licenses for already-constructed projects.

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* Under Part I of the Federal Power Act the Commission licenses each hydroelectric project, i.e., a "* * * complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, * * * , and all water-rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such units;" Federal Power Act, Section 3(11) (16 U.S.C. 796(11)).

** There has been an ever increasing concern in the preservation and enhancement of the nation's natural, historic and scenic values. The court in Scenic Hudson Preservation Conf. v. F.P.C., 354 F.2d 608 (CA2, 1965), certiorari denied sub nom. Consolidated Edison v. Scenic Hudson Preservation Conference, 384 U.S. 941 (1966), interpreted the Commission's power to condition a license pursuant to section 10(a) of the Federal Power Act [41 Stat. 1068, 16 U.S.C. 803] as encompassing "the conservation of natural resources, the maintenance of natural beauty and the preservation of historic sites." Following the passage of the National Historic Preservation Act of 1966 (80 Stat. 915) the Commission has included articles in permits and licenses designed to effect the policies of that Act. See 18 C.F.R. 4.40(k).

The Commission's most recent notice of rulemaking related to land use problems was issued on January 22, 1970, in Docket No. R-379, 35 F.R. 1169. (A copy of that notice is reproduced in Appendix D.) In Docket No. R-379 we are proposing to revise the Uniform System of Accounts prescribed under the Federal Power Act and the Natural Gas Act to encourage utility management to acquire land deemed necessary for long-range utility use far in advance of immediate needs. Our present regulations permit land costs to be accounted for as utility operating expenses only if the property purchased is part of a "definite plan" for its use. Ratemaking practice is generally consistent with this accounting procedure. Under the

proposed new rules, we would delete the requirement pertaining to a "definite plan" thus permitting the recording of land acquired under long-range planning. Of course, we do not intend by this amendment to suggest that utilities should not make "definite plans" for expansion. Rather, by means of this policy we intend "to provide impetus to utility management for prudent acquisition of land for utility purposes well in advance of specific construction needs." This policy should benefit consumers in the long run by reducing land costs and assuring sites for future expanded utility needs.

Electric utilities and natural gas pipeline companies should acquire land with a view toward preserving environmental quality. To this end, we would encourage all jurisdictional companies to consult with appropriate planning agencies in their service areas concerning orderly land development procedures.

In the context of S. 3354, the objectives of industry-governmental coordination and cooperation might well be advanced by amending the bill to provide that Statewide Land Use Planning Agencies and the Land and Water Resources Planning Council undertake two steps to coordinate their efforts with those in the private sector of the economy. One, the State planners should discuss with major industrial groups having large land holdings and rights-of-way (such as railroads, utilities and natural resource companies) the desirability of pursuing policies that would aid the maximum joint use of existing properties and other desirable points of opti-

mum environmental management. For example, the railroad industry owns in the vicinity of 200,000 miles of rights-of-way. It would be to the economic advantage of the railroad industry and other utilities to share the cost and use of these rights-of-way. This is the type of coordination that State land planners should promote in order to preserve valuable land resources without sacrificing needed utility services. Two, the State planners should be encouraged to consult with the principal elements of the electric and gas pipeline industries in their respective areas with regard to the interrelationship of utilities' needs and State and regional plans for future siting and rights-of-way, together with related environmental factors.

Such coordination and cooperation might well alleviate the enlightened present concern of industry and government over the growing scarcity of land suitable from an environmental and economic standpoint for plant sites, transmission lines, and other utility functions. This land scarcity has resulted from, among other things, the population increase (especially where densely concentrated in certain urban corridors), the growing use of water front property for recreational, residential and industrial sites, and the Nation's expanding economy.

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* Compare with this figures in the 1969 Gas Data Book, published by the American Gas Association, which indicates that in 1968 there were 852,400 miles of all types of natural gas pipelines. Of this total 234,000 miles of pipeline are interstate transmission lines subject to the jurisdiction of the Federal Power Commission.

The Water Resources Council, of which I am a member, has concerned itself with these problems. Not only has the Council been concerned about land use, but the various river basin commission's established pursuant to Title II of the Water Resources Planning Act (42 U.S.C. 1962b, et al.) have also been actively considering land use problems in their respective areas. The New England River Basins Commission, for example, this past February published an excellent report entitled Power and the Environment, Report No. 1, Laws and Procedures of Power Plant Siting in New England, that deals with important land use considerations. The Federal Power Commission is represented on this river basins commission by its New York Regional Engineer. The Commission has a representative serving each of the other three river basin commissions established pursuant to the Water Resources Planning Act. *

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* The other three river basin commissions established by Executive Order are: Pacific Northwest River Basins Commission (E.O. 11331), Great Lakes Basin Commission (E.O. 11345), Souris-Red-Rainy River Basins Commission (E.O. 11359).

As part of its relicensing functions under Sections 14 and 15 of the Federal Power Act the Commission has issued eight reports containing detailed appraisals of the water and related land resources of various river basins. The reports issued to date cover the following river basins: Tallapoosa River Basin (Alabama) (out of print), Cheat River Basin (Pennsylvania and West Virginia), Chippewa River Basin (Wisconsin), Feather River Basin (California), Merrimack River Basin (New Hampshire and Massachusetts), Wisconsin River Basin (Wisconsin), Upper White River Basin (Missouri and Arkansas) and the Santee River Basin (South Carolina and North Carolina). The Santee River Basin appraisal was issued on April 16, 1970; a copy is attached as Appendix E.

Our participation in the work of the Water Resources Council and the various river basin commissions has provided us with an invaluable opportunity to understand and appreciate the complex and varied problems of large-scale, multistate resource planning. The stated policy of the Water Resources Planning Act (42 U.S.C. 1962) is to "encourage the conservation, development, and utilization of water and related land resources of the United States on a comprehensive and coordinating basis * * *." Participation in the implementation of this policy has given me considerable appreciation of the need to attain the objectives of the National Land Use Policy Act now under consideration by this Committee. We must have a workable, comprehensive national policy of land utilization and preservation. Therefore, the goals and objectives of the bill before this Committee today, S. 3354, have the support and endorsement of the Federal Power Commission.

Our exposure to land use problems has convinced us not only of the importance of proper land utilization, but of the difficulty and far-reaching impact of land use decisionmaking as well. We share the evaluation of the task that lies ahead that you, Mr. Chairman, expressed on January 29, 1970, when introducing S. 3354:

> Meeting the challenge of the land promises to be a difficult task. It will not be resolved by one act in one legislative session. It will require experimentation and the refinement of many programs over a long period of time. It will cost money. It will require hard decisions about what is to be conserved and what is to be lost in the tides of social and technological

> change which sweep this country. And most important, it will require a national effort based upon a high level of State and Federal cooperation. *

We believe these goals are attainable. Furthermore, it is our opinion that the objectives and general approach to land management found in S. 3354 represent an important contribution to the attainment of these goals.

However, we are not now prepared to take a final position on the merits of all aspects of the proposed legislation. Land use planning and policy are, as this Committee so well recognizes, matters of far-reaching importance and broad significance. We recognize the need for land use planning and applaud the responsible and imaginative effort to meet that need embodied in this bill. We are, however, still formulating our views on this important subject and must withhold a comprehensive statement of our views at this time. With that reservation a matter of record I would like to make some specific observations about certain provisions of the bill now under consideration.

The initial provision of the bill, S 401, contains an excellent summary of the problems and conflicts that have given rise to our land use dilemma. Fragmentation of land use responsibilities and powers among a plethora of Federal, State, interstate and local governmental entities has precluded coordinated and comprehensive land utilization. Essential utility services, for example, have often been delayed and

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* 116 Cong. Rec. S836 (daily ed., January 29, 1970).

even cancelled because of unresolved land use questions growing out of the maze of necessary governmental authorizations. These processes must be streamlined without sacrificing full public debate and adequate consideration of all facets of the public interest. Proper accommodation of the public interest requires that planning procedures should be designed and implemented to give due consideration to inevitable changes in environmental standards and goals. Sound enviornmental planning is a dynamic process that must meet changing needs if it is to be effective. We believe the adoption of a national land use policy, that takes full account of these needs is essential if these conflicts are to be resolved.

This bill places primary emphasis on State and, where consistent with the needs of a particular region, interstate responsibility for land use planning. Consistent with paramount national considerations, the States should be allowed to reorganize land use planning in the coordinated, systematic manner provided in S. 3354. Heretofore much of the chaos of unorganized land utilization has resulted from inadequate Federal guidance and insufficient planning techniques and procedures at the State level. Requiring the concentration of land use responsibility in a single agency in each State

subject to overall coordination with comprehensive Federal guidelines is a most appropriate approach to rectifying our current problems. At the same time, when it is in accord with overall national interests we believe lands in the Federal domain should be utilized and administered in a manner consistent with the approved land use programs of the individual States.

We generally approve of the timetable for State compliance with land use planning objectives provided in § 406 of the bill. We do believe, however, that the Federal agency responsible for administering the land use grants should be fully authorized to apply flexibile compliance criteria in order to accommodate the diverse problems of the various States. Section 406(d) appears to provide this necessary flexibility.

The bill's most direct impact on the jurisdiction of the Federal Power Commission is found in § 408(b) where it is provided that "Federal agencies shall not approve proposed projects that are inconsistent with [Statewide land use] plans." It is also provided in § 408, however, that a Statewide plan cannot be approved without providing an opportunity for the "review and comments" of Federal agencies with "significant interest in or impact upon land use within the State concerned." We would expect to be given an opportunity to review all State plans with respect to their impact on our jurisdiction. Our jurisdictional activities under both the Federal Power and Natural Gas Acts involve land use decisions throughout the United

States. Overriding national interests require this kind of coordination.

We have no conceptual difficulty in adapting our licensing jurisdiction to national land use policies. In fact, our statutory responsibility under the Federal Power and Natural Gas Acts requires comprehensive analysis of proposed projects. Because of this responsibility we are concerned about the restrictions in § 408(b) that prohibit the licensing of projects that are inconsistent with any State land use plan.

An earlier provision of § 408(b) requires "Federal agencies conducting or supporting public works activities" to make such activities consistent with approved State land use plans "unless there are overriding considerations of national policy which require departures from the plan." This discretionary authority to depart from a State's land use plan is essential where overall national considerations are paramount. We feel such departures are no less justifiable or necessary when Federal licensing agencies are exercising their responsibilities. The projects themselves, after all, have the same kinds of effects on the environment whether they are constructed by the Federal government or by a F.P.C. licensee. The licensing of essential electric and interstate natural gas facilities may at times require departures from various State plans in order to meet regional and national needs. Section 408(b) should be amended to allow Federal licensing agencies such as the Federal Power Commission to exercise such discretion in the overall public interest..

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Under ~~the~~ provisions of §§ 406 and 407, States would have at most until the beginning of the fourth fiscal year after the enactment of the bill to develop acceptable Statewide plans. Presumably until a plan had been approved the limitations on Federal licensing authority specified in § 408 would not be operative. Also, the status of projects that have received Federal authorization prior to the approval of an applicable Statewide plan but have not been completed at the time the plan goes into effect should be clarified. Sound considerations of regulatory administration would indicate that these projects should not be subject to the limitations on Federal authority found in § 408.

As I indicated earlier in my remarks, this statement is not intended to encompass a full-scale evaluation of land use policy considerations or a line-by-line analysis of the merits of S. 3354. We view this bill as a significant and imaginative first step in the resolution of a nationwide problem. We concur in your statement when introducing this bill, Mr. Chairman, that it provides "a starting point for review and for analysis" of a most serious national problem. * We are pleased and honored to discuss with this Committee possible solutions to this problem.

In concluding I would like to observe that § 401(h) of the bill expresses the Federal Power Commission's evaluation of the seriousness and importance of the task this Committee has undertaken. That section states that "intelligent

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* 116 Cong. Rec. S836 (daily ed. January 29, 1970).

land use planning and management provides the single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality life and providing the material means necessary to improve the national standard of living." We fully support this policy pronouncement and the objectives it represents.

Thank you.

List of Appendices to and made a part of the prepared statement of John N. Nassikas, Chairman, Federal Power Commission, presented to the Committee on Interior and Insular Affairs, United States Senate, April 29. 1970.

A. Statement of John N. Nassikas, Chairman, Federal Power Commission, hearings before the Subcommittee on Energy, Natural Resources and The Environment, Committee on Commerce, United States Senate, January 30, 1970.

B. Docket No. R-360 Notice of Proposed Statement of General Policy and Proposed Rulemaking. (Selection, Clearing and Maintenance of Rights-of-Way Routes and Construction and Maintenance of Aboveground Facilities by Natural Gas Companies).

C. Docket No. R-365 Notice of Proposed Rulemaking. (Protection and Enhancement of Natural, Historic, and Scenic Values in the Design, Location, Construction and Operation of Project Works).

D. Docket No. R-379 Notice of Proposed Rulemaking. (Accounting Treatment for Land Held for Future Utility Use and for Profits or Losses Realized through Sales of Those Lands).

E. Water Resources Appraisal for Hydroelectric Licensing, Santee River Basin (South Carolina-North Carolina), Federal Power Commission, Bureau of Power, 1970.

(Appendix E refered to above is too voluminous to reproduce, and was retained in the Committee files.)

APPENDIX A

STATEMENT OF JOHN N. NASSIKAS
CHAIRMAN, FEDERAL POWER COMMISSION

HEARINGS BEFORE THE
SUBCOMMITTEE ON ENERGY, NATURAL
RESOURCES AND THE ENVIRONMENT
COMMITTEE ON COMMERCE
UNITED STATES SENATE
JANUARY 30, 1970

MR. CHAIRMAN:

We appreciate this opportunity to share with this Committee our experience in the electric and gas utility fields as it relates to emerging policy questions having major impact upon recognized public interests. My remarks set forth our assessment of the efficacy of existing legislation in meeting these problems and give our recommendations for additional legislative action. My statement covers consumer protection actions of the Commission; reliability and adequacy of electric and gas service; electric and natural gas supply; 1/ environmental considerations including

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1/ On November 13, 1969 the Chairman and the other Commissioners of the Federal Power Commission testified at hearings before the Subcommittee on Minerals, Materials and Fuels of the Senate Committee on Interior and Insular Affairs on natural gas supply. The testimony, exhibits and supplemental information in response to questions by various members of the Committee are appended hereto as Appendix A. I request that this and the other appendices which accompany my statement be made a part of the record of this Committee.

plant sitings 2/ and utility operations together with the resulting cost incidence of environmental measures; financial requirements of the electric and gas utility industries over the next twenty years; and general administrative matters.

Our basic regulatory authority is set forth in two comprehensive legislative enactments, the Federal Power Act, 16 U.S.C. 791a, et. seq., and the Natural Gas Act, 15 U.S.C. 717(a), et. seq. Both statutes are conservation related and thus, are properly interpreted and applied in pari materia with other environmental and resource development measures.

Attached Appendix B sets forth a Commission staff compilation of projections of power industry growth,

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2/ With reference to environmental effects of electric utility operations, the Chairman of the Federal Power Commission and F. Stewart Brown, Chief of the Bureau of Power, testified on October 28 and 29, 1969 at hearings before the Joint Committee on Atomic Energy (see pages 32-82). On November 7, 1969 Commissioner Carl E. Bagge, Chairman of the Working Committee on Utilities of the President's Council on Recreation and Natural Beauty, also testified before the Joint Committee (see pages 451-481). The Committee Print of this and other testimony presented by a series of witnesses on October 28, 29, 30, 31 and November 4, 5, 6 and 7, 1969, was released on January 13, 1970.

environmental considerations, reliability policy and organizations, state and interstate authorities and activities relating to power plant siting, relicensing of hydroelectric projects, recreation inventory program; prepared by the Bureau of Power, Federal Power Commission, under the direction of F. Stewart Brown, Bureau Chief.

Attached Appendix C sets forth a Commission staff compilation of statutes and Executive Orders relating to our duties and responsibilities in the development and utilization of land, water and fuel resources. Fundamentally, these duties involve electric power and natural gas utility services and regulation of wholesale electric bulk power rates and natural gas rates from the wellhead to local distribution.

In addition, we are concerned with navigation, flood control, irrigation and other water supplies. Recreation, including the preservation and development of fish, wildlife and other forms of recreation, are matters of equal concern. We have specific responsibilities in the area of national defense, in the use of government lands and

in the rates, charges and cost allocations of Federally-owned power developments. Where other Federal agencies or departments are assigned major administrative or operational tasks, ours is a supporting or consultative role.

Evolving Questions - The major problems confronting electric and gas utilities and the public in the 1970's transcend the classical categories of rate, accounting and financial problems historically encountered in regulation of public service systems. To be sure, the perennial economic problems of cost allocation, cost of service, rate design, rate base and rate of return will continue. The objective of the economic regulatory process in relation to rate-making is to attain an ultimate result of just and reasonable rates.

Additional social and economic values to be considered in arriving at regulatory conclusions consistent with the public interest include a balanced energy economy, efficiency in allocation and use of the country's natural resources (air, fuel, land and water), and the social performance of the electric and gas utility

industries in contributing to the nation's overall economic and environmental welfare.

Ours is an economy of growth, energy sensitive and responsive to the continually rising demands of residential, commercial and industrial uses. Demands for electric energy and natural gas are accelerating beyond earlier forecasts. FPC staff estimates indicate that electric energy supplies must be quadrupled within the next two decades if the nation's current rate of growth is to be maintained. Natural gas production to meet demand must be more than doubled. Presently the electric industry, the nation's largest single domestic industry, has invested gross capital in excess of $100 billion. The natural gas industry, the nation's sixth largest, has a capital investment of $37 billion (exclusive of production investment and gas exploration and development costs). To meet these growth projections, electric utilities - investor, publicly and cooperatively owned - must raise $350 billion in new capital by 1990. The natural gas industry's projected additional capital requirements will

be about $60 billion.

Our objective in the regulation of the electric and natural gas energy industries is to establish an equitable balance in the public interest between economic and social concerns. The growing demands of the American consumer for energy in the decades of the 1970's and 1980's and the national policy of improving environmental quality of life can be best served only by a coordinated effort of Federal, state and local economic and environmental regulatory agencies in cooperation with industry, and concerned environmental and consumer groups.

The principal policy questions now facing the Commission are:

1. How can gas and electric utility systems make the most efficient and productive use of the nation's air, fuels, land and water resources in serving the utility needs of the nation's consumers while preserving our environmental quality of life?
2. What operating and utility regulatory procedures

are most likely to insure the timely installation of needed electric and gas utility facilities and the operation of all systems on a progressively more reliable basis with minimum impact upon the environment?

3. What procedures will best insure the continued development of new sources of natural gas adequate to serve growing consumer demands?

4. What kinds of Federal action or joint action between Federal and state regulatory authorities will best assure the continued attraction of capital by utilities at reasonable costs of money while at the same time producing optimum utility service for the ultimate consumer at a fair price?

This report covers these questions, and related matters, including, as requested in your letter of December 29, 1969, our judgment as to the need for new legislation to enable us to carry out our responsibilities more effectively.

Current Actions - We have no easy answers or panaceas. We are seeking to harmonize existing governmental constraints and thus achieve an ordered application of Federal, state and local requirements to successfully resolve the environmental and related social problems of both industries. To be concerned with the orderly growth and development of electric and gas utilities is to recognize the manifold interests of organized society. Utility systems subject to FPC jurisdiction are affected in many ways by the actions of state or local utility commissions; Federal and state bodies having jurisdiction over land use, water and air quality controls; and building, construction, safety and health codes. Our actions are but one part of the nation's public control matrix.

We see this in total perspective when we consider that this nation, throughout its history has enjoyed an almost unlimited abundance of energy resources in the form of water-power, coal, oil, natural gas, and now nuclear fuel. Our ever-increasing supplies and ever-widening availability of low-cost energy to meet increased

demand account in large measure for our being able to achieve a standard of living and level of productivity higher than any other country in the world. 3/

Continuing exploration and technical and scientific progress have steadily unfolded new supplies and new ways of tapping and utilizing these reservoirs of great wealth. The heavy demands of the nation's industrial growth rests upon these energy resources. Our actions are designed to insure that usable sources remain abundant today and through the foreseeable future.

3/ See Comparative Table of Highest Ranking Countries in Energy and Electricity Consumption Per Capita, 1967 next page.

3/ Comparative Table of Highest Ranking Countries in Energy and Electricity Consumption Per Capita, 1967

Energy Consumption Per Capita			Electricity Consumption Per Capita		
Rank	Country	Consumption (Kilograms of coal equivalent)	Rank	Country	Consumption (Kwh)
1	UNITED STATES	9,833	1	Norway	13,566
2	CANADA	8,061	2	CANADA	8,111
3	Kuwait	6,652	3	SWEDEN	6,762
4	Czechoslovakia	5,490	4	UNITED STATES	6,612
5	East Germany	5,338	5	New Zealand	4,297
6	UNITED KINGDOM	5,003	6	Switzerland	4,026
7	SWEDEN	4,805	7	UNITED KINGDOM	3,796
8	AUSTRALIA	4,790	8	AUSTRALIA	3,634
9	Belgium-Luxembourg	4,669	9	Finland	3,591
10	Greenland	4,418	10	Iceland	3,547
	World Average	1,647		World Average	1,131

Source: World Energy Supplies, 1964-1967, United Nations Statistical Papers Series J No. 12.

Comment: Among the 10 highest countries in energy consumption per capita, only 5 (names capitalized in the table) are also among the 10 highest in electricity consumption per capita. The United States is at the top of the first list, but is reduced to fourth place on the second list. Norway, which leads all other countries in electricity consumption per capita, does not make the list of 10 highest in energy consumption per capita. Canada is in second place on both lists. Kuwait, a leading petroleum producer, ranks third in energy consumption per capita and two Eastern European countries, Czechoslovakia and East Germany, rank fourth and fifth.

Comparable data for total as opposed to per capita consumption indicate that the United States, with less than 6 percent of world population, accounted for 35 percent of world energy consumption and 34 percent of world electricity consumption in 1967.

Our data for both series are from the United Nations. The energy statistics refer only to coal and coke, petroleum and its products, natural and manufactured gas, and electricity. Other fuels, such as wood, are excluded for lack of reliable information. The United Nations ranking of countries according to electricity consumption per capita is very nearly the same as the ranking by electricity production per capita in this Commission's publication, World Power Data (Table 3).

Another great asset of this nation is its heritage of clean air, clean water, and natural beauty. Yet each day we are becoming more conscious of the fact that our industrial growth too frequently has been accompanied by broadening trails of waste and devaluation of our natural environment. Strong redirection is needed to assure such future changes in our natural environment as will avoid unnecessary deterioration and accord with the kind of environment which we hope to build for America's future. The President of the United States signed and endorsed the National Environmental Policy Act of 1969 on January 1, 1970, 83 Stat. 852. 4/ The Council on Environmental Quality, established under the Policy Act, will coordinate by executive direction the environmental capability of Federal agencies and assume a leadership role among all concerned agencies at the state, regional and local levels in the execution of environmental policy.

4/ The new law is a comprehensive statement of national goals for the protection and enhancement of the environment. The law requires all Federal agencies to implement the terms of the Act "to the fullest extent possible." (§ 102).

As we look to that future, the need for increased supplies of reliable energy present an awesome picture. Natural gas now furnishes almost one-third of our total energy supply, and electric energy pervades every facet of modern life. The kind of total environment which we hope to build for all Americans over the next two decades may increase these requirements far beyond our present expectations.

Table I below outlines the composition of energy production and consumption in the United States by energy source for the year 1968, and Table II sets forth the composition of production and consumption of liquid and gaseous hydrocarbons in the United States in 1968.

Table I

Composition of Energy Production and Consumption in the United States, by Energy Source, 1968 1/

	Percentage of Total	
	Production	Consumption 2/
Coal (including lignite)	25.3	21.3
Crude petroleum and products	33.5	39.9
Natural gas, dry)	37.0	31.3
Natural gas liquids)		3.6
Electricity, hydro	4.0	3.7
Electricity, nuclear	0.2	0.2
Total	100.0	100.0

1/ Each energy source is converted to its energy equivalent in terms of British thermal units.

2/ Consumption includes net imports of fuel amounting to /.6 percent of total consumption in 1968.

Source: U.S. Bureau of Mines

Table II

Composition of Production and Consumption of Liquid and Gaseous Hydrocarbons in the United States, 1968

	Percentage of Total	
	Production	Consumption
Crude petroleum and products	47.5	53.3
Natural gas, dry)	52.5	41.9
Natural gas liquids)		4.8
Total	100.0	100.0

Source: Derived from statistics of U.S. Bureau of Mines

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Our Office of Economics prepared Table III showing estimates of the gross consumption of mineral energy resources and electricity from hydro and nuclear power in the United States until the year 2000.

Table III

Gross Consumption of Mineral Energy Resources and Electricity from Hydro and Nuclear Power in the U.S.
1968 (Preliminary) and Projections for 1980 and 2000
(in Quadrillion Btu and Percentages)

Energy Source	Bureau of Mines Conventional Energy Model (Quadrillion Btu)			Percent of Total		
	1968	1980	2000	1968	1980	2000
Coal						
Anthracite	.26	.25	-	.4	.3	-
Bituminous and Lignite	13.07	18.48 1/	20.72	20.9	21.0	12.3
Natural Gas, dry	19.56	25.45	41.70	31.3	28.9	24.7
Petroleum and Natural Gas Liquids	27.05	35.98	57.60	43.4	40.9	34.2
Hydropower	2.36	3.03	5.06	3.8	3.4	3.0
Nuclear Power	.13	4.88 2/	43.53	.2	5.5	25.8
Total Gross Consumption	62.42	88.07	168.60	100.0	100.0	100.0

Totals may not add due to rounding

1/ Average of bituminous coal use ranging from 17.68 to 19.29 quadrillion Btu.

2/ Average of nuclear power ranging from 4.08 to 5.68 quadrillion Btu.

Source: Data, Bureau of Mines Information Circular 8384 and Preprint from the 1968 Bureau of Mines Minerals Yearbook.

Explanatory Note:
The projections are based on historical trends and correlations with major economic indicators. This method of making projections assumes a continuation of the present conventional energy system with normal improvements

in efficiency and a continuation of long-run trends of interfuel competition and substitutability in the growing energy market.

The principal quantitative assumptions in the study are: (1) nuclear fuel will contribute 60 percent of total net generation in the year 2000 with fossil fuel plants accounting for about 32 percent; (2) economic activity as measured by real GNP will grow at a 4 percent average annual rate; and (3) population will grow at 1.6 percent annual rate. In addition, there are various other assumptions, such as no change in the real costs of primary energy resources relative to each other as well as to the general level of commodity costs, adequate supplies of energy resources to meet the projected demand, no large impact of environmental restrictions as a means of controlling pollution because of the expectation of technological improvements which will offset the effects of such regulations. (End Explanatory Note)

In order to attain our policy objective of the most efficient and productive utilization of our energy resources, I recommend for Congress' consideration the establishment of a National Energy Resources Council with the primary purpose of examining the Nation's energy resources in relation to long-term requirements, under a "total-energy" concept, recognizing the need to balance economic and environmental concerns.

The problem of providing adequate and reliable low cost energy in any form involves not only the future way of life of the United States but also of the world community. Optimum utilization of energy resources is necessary to assure quality of life on this continent and around the world.

Policy Summary

The Commission believes there is opportunity under its existing authority for beneficially expanding the joint participation of industry with regulatory agencies and with responsible local, state and Federal groups in the interest of adequacy of power and gas supplies and protection of our natural environment. Where we do seek further Federal statutory authority, or suggest further state or regional authority, it is our purpose to strengthen the ability of the Commission and relevant regulatory agencies to assure compliance with environmental standards and authorize projects conforming

to economic, service and overall public interest considerations to be timely constructed at reasonable costs to meet energy demands.

Underlying much of what I have to say regarding additional environmental legislation are the matters of timing and economic cost. As a society we are concerned with the quality of life, the use of our natural resources and the resultant impact upon our environments, air, land and water. With its present structure, our economy generates and supports an affluence in our living standards. The price we pay is pollution, the heavy cost of undesirable changes in our natural world.

Rectification of these changes already experienced, and those which will occur in the foreseeable future, will require reordered priorities, technological adaptation and innovation plus heavy capital expenditures, public and private. Unless economies of scale together with continued growth and improved efficiency in our industrial world offset added environmental protection costs, there will be cost impacts upon each of us as consumers of goods and services

or as taxpayers. Our environmental concerns will be tested by our willingness to make financial outlays. The President's State of the Union message last week is a forceful reminder of these realities. Additionally, time will be required for all industries, agricultural activities and municipal water and sewer services to accomplish the needed directional changes. At this point electric and gas utilities cannot stop dead in their tracks any more than can the automotive industry, the chemical industry or the basic metals industry, to mention but a few. If they did, the nation would grind to a halt. Obviously, a transition must be accomplished.

Expressed public and Congressional concerns for environmental protection and adequate power supplies are also evidenced by numerous bills now before the Congress. Other legislative actions are pending before state bodies and municipal councils. We share these legislative concerns.

The President in his State of the Union message stated as an overriding priority for national concern the preservation of the integrity of our natural and social environment

and stated that he would submit the most comprehensive and costly environmental program in the nation's history to assure clean air, clean water, open spaces, and to protect the environment against pollution.

Upon submission of the President's program for environmental legislation I will be in a better position to determine the precise course of action required to coordinate our proposals within the framework of national policy as reviewed by the Congress.

The Consumer - Because of the concern of the consumer with all of the FPC's activities, and our concern with protecting consumer interests, I will discuss our consumer protection actions in the relevant portions of my statement as they relate to electric and gas supply, reliability and adequacy of electric and gas service, environmental considerations, and other matters. I recognize the equally important legislative concerns for adequate safeguards of the consumers' economic and service

interests. The predominant responsibility and concern of the Federal Power Commission is to protect the consumer interest. We support the enactment of pending legislative proposals to strengthen consumer representation in all fields, not just utility services. In this regard, we have reported favorably on S. 3240 and H.R. 14758, the "Consumer Representation Act of 1969," and on S. 860 and H.R. 6037, the "Department of Consumer Affairs Act of 1969." S. 3240 and H.R. 14758 would establish an Office of Consumer Affairs in the Executive Office of the President and a Consumer Protection Division in the Department of Justice to represent consumer interests before Federal agencies and Federal courts. They would also require every Federal agency in taking any action substantially affecting the interests of consumers to give due consideration to the valid interests of consumers and to indicate in its public statement of action the manner of its consideration of consumer interests. S. 860 and H.R. 6037 would establish a new Department of Consumer Affairs in the Executive Branch. The Department would be

empowered to present the consumer's viewpoint in governmental policy making and to represent the economic interests of consumers in proceedings before courts and regulatory agencies. These bills would establish within the Department a National Consumer Information Foundation, an Office of Consumer Safety to protect consumers against hazardous household products and an Institute for Consumer Research to test consumer products. The majority of the Commission has also endorsed the principal objectives of S. 607, the "Intergovernmental Utility Consumers' Counsel Act of 1969" which provides for specialized representation of the interests of utility consumers. S. 607 would also require utilities to report to regulatory bodies information pertinent to regulation and to an understanding of utility rates and procedures, require the FPC and the FCC to report this information to Congress and the public in a timely and convenient manner using automatic data processing to the fullest extent possible and establish a grant program to finance the study of regulatory matters. Copies of the Commission's reports on these measures are attached in Appendix D.

Financial Requirements, Inflation - The inflationary pressures of the last several years are being felt in both of the industries which we regulate. 5/ They are being felt in the face of the 400-plus billion dollar capital requirements of the two industries which must be met between now and 1990. In the gas and the electric industry, capital and operating cost increases will be reflected in rate increase filings which, if justified, must be granted under the rate standards of the two Acts, Natural Gas Act, Sections 4, 15 U.S.C. 717c, 5, 15 U.S.C. 717d; Federal Power Act, Sections 205, 16 U.S.C. 824d and 206, 16 U.S.C. 824e, 6/ and judicial decisions interpreting these acts.

To meet these responsibilities and insure prompt disposition of pending cases we are employing a variety of

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5/ As of the third week in January, 1970, there were pending before the Power Commission four formally docketed cases involving rate increase requests under the Federal Power Act totalling $1,870,000 and 35 pipeline rate increases under the Natural Gas Act totalling $441,485,000. Producer area rates are in process of review in various actions pending before the Commission.

6/ Rates must be just, reasonable and not unduly discriminatory or preferential.

administrative and procedural techniques, including automatic data processing, settlement conferences and the split or phased hearing to dispose of the significant and disputed phases of rate proceedings consistent with procedural due process while resolving other parts by formal or informal agreement. Involved utilities, their customers, consumer groups, environmental interests, state regulatory bodies, and other interested parties have full opportunity to participate.

An environment of general inflation is highly disruptive of the regulatory process and even of some long-standing regulatory policies and practices. Regulation in its traditional role builds upon past records of prices, costs, and revenues and upon economic projections derived from past trends. Regulation works best, therefore, under conditions of general price stability and a predictable pattern of development within the regulated industries.

Inflation introduces shifting economic relationships and multiplies the uncertainties of financial planning. Regulated companies can no longer be confident of their

forecasts of market growth and their decisions on possible investment alternatives. Similarly, the regulatory agencies can no longer rely to the same degree upon an evidentiary record based largely on past experience, nor adhere to regulatory standards premised on a business-as-usual approach.

Inflation also generates pressures on regulated companies to cut costs and hold back on expansion programs. To avoid foundering on this dilemma the companies require assurance that their problems will not be compounded by regulatory uncertainties, or worst of all by regulatory inaction. They also require a structure of economic incentives which guide them in accomplishing the optimum result from the standpoint of the public interest.

For many years the steady advance of productivity in the gas transmission and electric power industries was generally adequate to enable the companies to absorb rising wage rates and rising costs of materials and capital without filing for rate increases. The retail price indexes published by the Bureau of Labor Statistics for gas and electricity were essentially stable from 1960 to 1967,

while the overall index of consumer prices advanced almost 13 percent.

The rate of inflation has accelerated since 1967, as have the Government's efforts to combat it. As a result, interest rates, as well as the cost of capital in general, have reached historic highs. This increase has had an especially burdensome impact on the two industries under FPC jurisdiction. Both are highly capital intensive and are growing at a faster rate than industries generally. In addition, as the means of energy delivery grow more complex and more technically sophisticated to meet environmental as well as power standards, the need for these industries to advance their own research and development becomes much more imperative. Moreover, companies in both industries are more heavily dependent on debt financing than the typical nonregulated company. Thus, they must sell substantial amounts of new securities each year, paying the record-high interest rates demanded in today's markets.

The marketability of electric utility and pipeline company securities is critically dependent on the posture of regulation, especially its effects on operating revenues and management incentives. It is a basic principle of rate regulation to allow rates which will recover all costs, including the cost of capital, but the allowed rates must not produce revenues exceeding the necessary cost of service. In the recent period of very high interest rates and rising costs generally, investors have been understandably concerned lest the regulatory system be laggard in sanctioning rate increases to cover the new cost levels. Regulatory responses which diminish such uncertainty will tend to reduce the cost of capital to regulated companies, for it is a paradox of regulation that significant delays in allowing higher costs to be reflected in higher rates may ultimately bring a higher cost of capital than would otherwise prevail.

The cost of capital allowed in the overall cost of service includes a large component of essentially fixed costs, representing the embedded debt cost and the required

dividends on preferred stock. Thus, it is possible for many regulated companies to be earning about 7 percent on their overall investment and yet incur new debt obligations at the current market rates of eight or nine percent. The cost of capital also includes a common stock equity component which is not fixed by contract but nevertheless is a real cost which must be covered at current market rates if the regulated firm is to continue as a going concern.

The allowed rate of return on invested capital has dual significance in a dynamic context. First, it is an important determinant of the regulated company's ability to compete with other borrowers in the capital markets. Second, it influences the company's incentive to undertake new investment. Inflation has necessitated a shift to higher rate-of-return allowances, because the standard we apply must be attuned to current market conditions and cannot be based on preconceptions of what a reasonable rate ought to be in an ideal setting.

Another effect of inflation is that it forces labor to seek substantial wage increases. Labor and management are being forced to the bargaining table at a time when power supplies are relatively tight and the near-term future outlook is none too bright. Thus, power suppliers are exposed to possible strikes of operating and construction personnel at a time their power supply situation is already precarious. This is compounded by the fact that the labor forces of the manufacturers of electrical equipment are also facing inflationary pressures and are therefore seeking higher wages. Thus, the electrical equipment manufacturers are faced with work stoppages when demand for their equipment is at a peak.

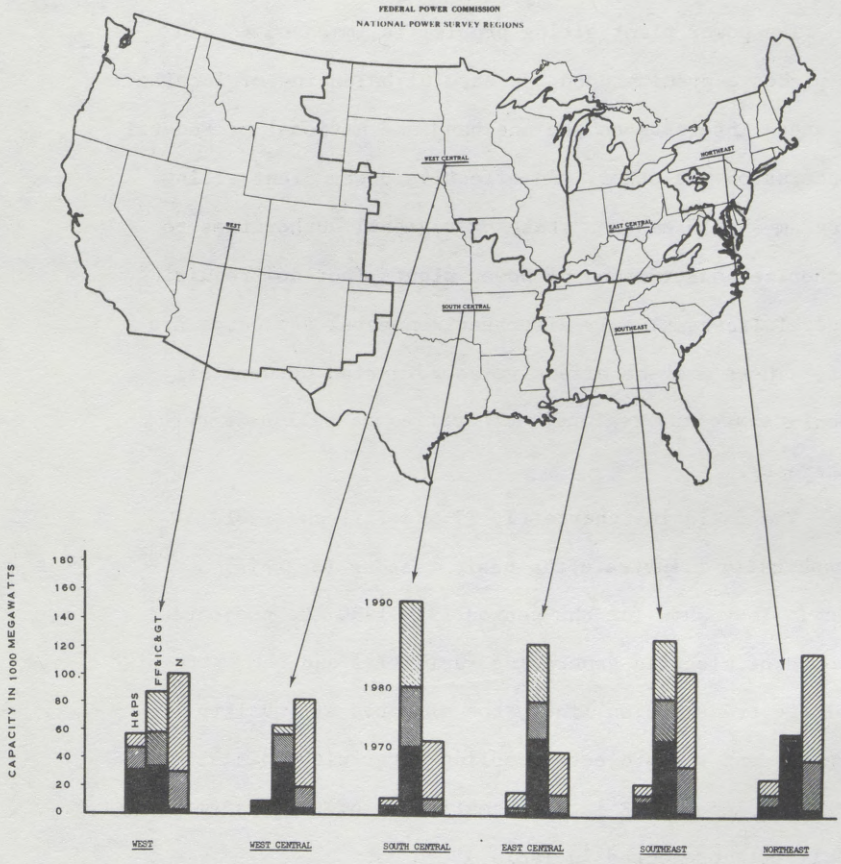
Environment and Plant Siting - In matters of environmental considerations relating to electric utility expansion programs we are currently reviewing the need for enactment of legislation to strengthen all levels of inter-governmental coordination in the implementation of land use planning, water quality standards and air quality standards without undue delay in construction of generating and transmission facilities.

The power plant siting problem is immense, 7/ and it places a premium upon the careful balancing of local or state interests on the one hand and national or Federal concerns on the other. An effective power plant siting program should empower state or regional authorities to authorize construction of power plants (not now requiring Federal licenses) only after environmental standards are met. There must be effective coordination between all local, state and regional authorities as well as Federal interests.

The following charts (I, II and III) and Table IV graphically illustrate the basic reasons for this view. They show for the period 1970-1990 the projected growth of electric generating facilities and the extra-high voltage transmission lines, the affected air quality regions and the projected cooling water withdrawals. Attached Appendix E is a schematic map of the transmission facilities projected in Table IV.

7/ A Report sponsored by the Energy Policy Staff, Office of Science and Technology issued in December 1968, analyzes "Considerations Affecting Steam Power Plant Site Selection."

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H - Hydroelectric; PS - Pumped Storage; FF - Fossil-Fueled Steam; IC - Internal Combustion; GT - Gas Turbines; N - Nuclear.

CHART I

PROJECTED NET ADDITIONS TO GENERATING CAPACITY

TABLE IV*/

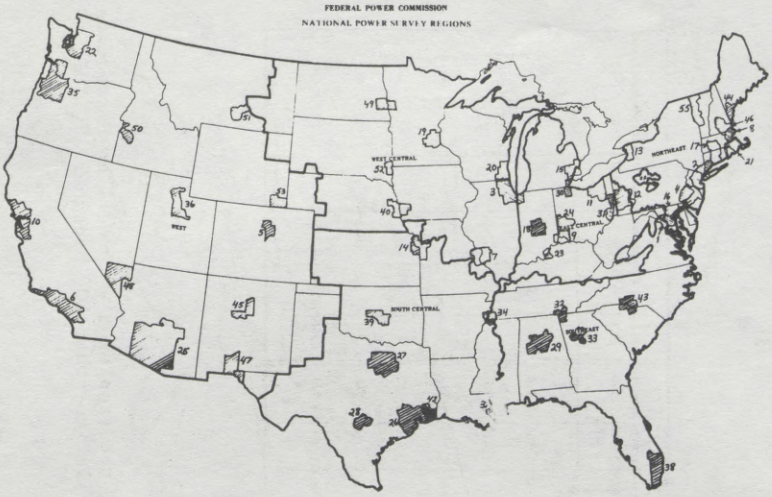
EHV TRANSMISSION LINES-PROJECTED GROWTH
1970-1990

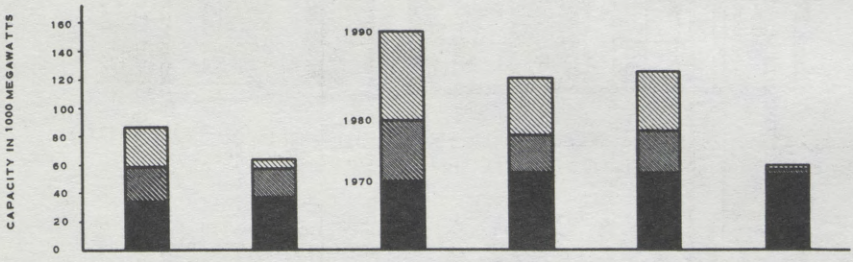
	230 KV			287 KV			345 KV			500 KV			765 KV			750 KV (DC)		
REGION	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990	1970	1980	1990
Northeast	5,360	6,140	6,900	--	--	--	1,210	3,110	3,960	880	1,600	2,200	--	--	1,320	--	--	--
East Central	160	230	230	--	--	--	5,950	10,900	12,420	830	1,500	1,810	560	2,750	4,540	--	--	--
West Central	5,650	6,400	6,700	--	--	--	3,380	6,950	12,750	--	1,410	2,740	--	220	2,660	--	--	--
Southeast	6,330	17,620	21,320	--	--	--	--	--	--	830	4,800	9,730	--	--	--	--	--	--
South Central	1,000	2,440	4,000	--	--	--	3,520	7,930	13,600	1,180	2,410	3,480	--	120	670	--	--	--
West	21,950	26,510	27,880	1,020	870	560	2,580	5,590	7,790	3,730	9,570	14,760	--	370	980	850	1,670	1,670
TOTALS	40,450	59,340	67,030	1,020	870	560	16,640	34,480	50,520	7,450	21,290	34,720	560	3,460	10,170	850	1,670	1,670

Total Line Mileage	69-200 KV	EHV	TOTAL
1970	235,000	66,970	301,970
1980	290,000	121,110	411,110
1990	335,000	164,670	499,670

*/ Source: Report to the Vice President and to the President's Council on Recreation and Natural Beauty, Working Committee on Utilities, page 50, December 27, 1968.

FEDERAL POWER COMMISSION
NATIONAL POWER SURVEY REGIONS





AIR QUALITY REGIONS

WEST	WEST CENTRAL	SOUTH CENTRAL	EAST CENTRAL	SOUTHEAST	NORTHEAST
*5 Denver	*3 Chicago	*14 Kansas City	*9 Cincinnati	*1 Washington, D.C.	*2 New York
*6 Los Angeles	*7 St. Louis	26 Houston	*11 Cleveland	29 Birmingham	*4 Philadelphia
*10 San Francisco	*19 Minneapolis-St. Paul	27 Dallas-Ft. Worth	*12 Pittsburgh	32 Chattanooga	*8 Boston
*22 Seattle-Tacoma	*20 Milwaukee	28 San Antonio	*15 Detroit	33 Atlanta	*13 Buffalo
25 Phoenix	40 Omaha	37 New Orleans	*18 Indianapolis	34 Memphis	*16 Baltimore
35 Portland, Oregon	49 Fargo-Moorhead	39 Oklahoma City	*23 Louisville	38 Miami	*17 Hartford
36 Salt Lake City	52 Sioux Falls	42 Beaumont-Port Arthur	*24 Dayton	43 Charlotte, N.C.	*21 Providence
45 Albuquerque			30 Toledo		44 Portland, Maine
47 El Paso			*31 Steubenville		46 Lawrence-Lowell-Manchester
48 Las Vegas					55 Burlington
50 Boise					
51 Billings					
53 Cheyene					

* Established Air Quality Regions as of January 14, 1970

CHART II

PROJECTED FOSSIL-FUELED CAPACITY
AND
AIR QUALITY REGIONS

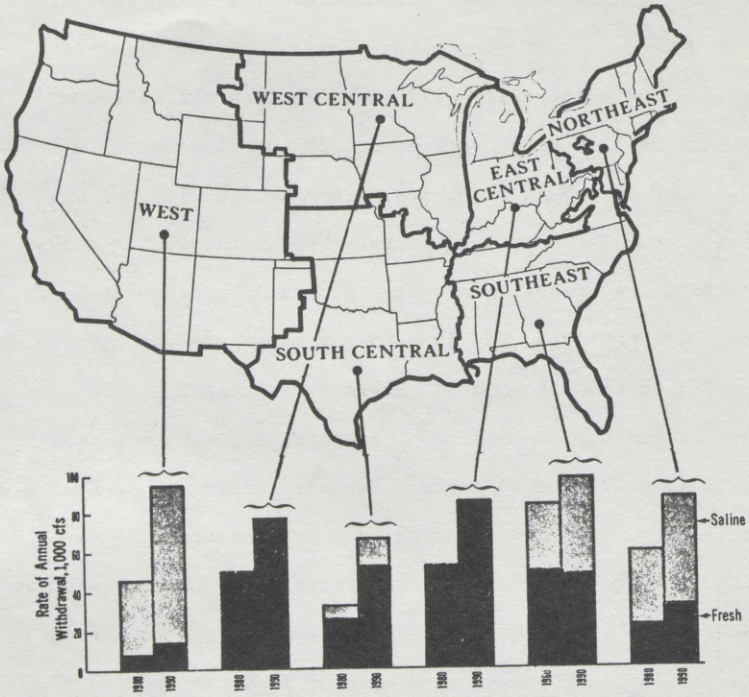


Chart III - Estimated Rate of Cooling Water Withdrawals for Major Utility Owned Steam-Electric Plants, by FPC National Power Survey Regions.

Chart III shows estimates of the cooling water withdrawals for major utility owned steam-electric plants in 1980 and 1990, by FPC National Power Survey Regions. These estimates are based on tentative selections of plant sites and preliminary appraisals as to the types of cooling, made by the Commission staff for the 1968 OST report on Considerations Affecting Steam Power Plant Site Selection. The withdrawals shown represent estimates of the condenser flows with once-through systems and the makeup requirements to cover losses where cooling ponds or cooling towers are used.

As part of updating the National Power Survey, a review and reappraisal will be made of the steam-electric plant site selections, based on information in the Regional Advisory Committee Reports and staff analysis of other pertinent information. Chart III will be revised on the basis of the additional analyses.

Barring some unforeseen change in our ever-increasing energy demands in the two decades ahead, the net electric power generating capacity will increase from over 300,000 megawatts in 1970 to an estimated 1,261,000 megawatts in 1990. Load forecasts developed in connection with the updating of our National Power Survey reveal the Nation's 1990 electric energy requirements as 5.83 trillion kilowatt hours. By way of comparison, the 1965 energy usage was approximately one trillion kilowatt hours. Based upon presently known and proven technology, we believe the operable generating capacity in 1990 will be 40 percent nuclear fueled, 44 percent fossil fired, 7 percent conventional hydroelectric, 5 percent pumped storage and 4 percent internal combustion and gas turbine. For 1970, the comparable estimates are 76 percent fossil, 15 percent conventional hydro, 1 percent pumped storage, 5 percent internal combustion and 3 percent nuclear.

Concurrently with this vast amount of new generation between 1970 and 1990, we estimate that operable circuit miles of major high voltage transmission will increase

dramatically: 230 kv from 40,500 to 67,000; 345 kv from 16,600 to 50,500; 500 kv from 7,500 to 34,700 and 765 kv from 560 to 10,200. The power delivery capability of these various voltages may be judged in the following ratios. If 230-kv transmission is taken as unity, the power delivery capability of 345 kv is 2-3/4, 500 kv is 6 and 765 kv is 16.

These are vast construction programs. Much of the equipment will be first generation when installed. Operating problems will arise. Increasing construction lead times are involved. Extended break-in periods will be necessary for the maturing large-scale units of the 1970's and 1980's and longer maintenance schedules will be needed. The operating utilities recognize these things as do we. 8 / Chart I (supra)

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8 / Available information shows that in the seven year period 1969 through 1976, 138 fossil-fired steam-electric generating units and 64 nuclear generating units of 300 mw capacity and over are scheduled for service Nation-wide. Twenty-seven fossil units totaling about 15,000 mw are reported as being delayed at the present time. Twenty-seven nuclear units totaling about 21,000 mw are delayed. Eighty-three fossil units and 37 nuclear units are now reported on schedule. But, since most of these units are scheduled for service in 1970 and after, it is quite likely that a number of these units will also be delayed as their in-service date approaches.

shows the six electric power supply regions of the contiguous United States. These regions are being used by the FPC in preparing the 1970 National Power Survey and this chart shows projected net generating capacity additions which must be built in each region. It also shows the changing capacity mix according to primary energy sources which we anticipate will be employed in the future generation of electricity.

The number of thermal generating plant sites of 500 megawatt capacity and above required for the year 1990, will, we believe, call for about 90 new sites for fossil-fuel plants and 165 new sites for nuclear plants. Providing the required number of suitable plant sites and assuring generation of electricity in a manner that will minimize the impact on the country's environmental assets is likely to present many formidable problems. The Federal Power Commission is profoundly concerned with finding satisfactory resolutions to these problems to insure both timely construction of new generating and transmission facilities and a reliable and adequate supply of electric power with minimum impact on the environment.

The environmental aspects of electric power generation concern primarily our air and water resources, and the land used for plant sites and transmission lines. We are also involved with development of sites for recreational, fish and wildlife uses, as well as the preservation of unique historic areas, and certain designated wild and scenic areas.

Charts II and III (supra), further develop the picture of the interaction between environmental standards and future power programs. Chart II outlines the Air Quality Regions proposed by the Department of Health, Education, and Welfare under the Air Quality Act of 1967, 42 U.S.C. 1857 and the anticipated growth of fossil-fuel fired generating capacity through 1990, by National Power Survey Regions.

Twenty-five Air Quality Regions have been designated by the Secretary of HEW as part of an expanding program to establish air quality standards and controls in all principal metropolitan centers. The present status of this program is summarized in Appendix B, Part IV. Future plans for fossil-fueled electric power generation, both within and

outside the Air Quality Regions, are critically affected by the need to control undesirable emissions of particulate matter, sulfur oxides, nitrogen oxides, and other pollutants through the development of suitable control devices, plant modifications, improvement of combustion cycles, or the use of high-quality fuels. As far as sulfur oxide and particulate matter emissions are concerned, natural gas and desulfurized residual oil are considered to be "clean" power plant fuels which can be distinctly helpful to the extent of their availability and adaptability to particular plants. From an overall air pollution point of view, an attractive fuel appears to be nuclear energy (recognizing that there is some dispute regarding radiological effects, and that thermal effects on ecology are by no means incontrovertible).

Both fossil-fueled and nuclear power plants require cooling water. As larger plant units are projected, including nuclear plants with relatively greater cooling requirements, the thermal effects on our water resources have become more critical matters. A projection of cooling water

requirements by National Power Survey Regions was presented in the 1969 FPC staff study on "Problems in Disposal of Waste Heat from Steam Electric Plants," and is shown in Chart III, (supra). A summary of State Thermal Criteria is given in Appendix B, Part IV. Because of the significance of the thermal effects on the Nation's limited water resources, this data is being further analyzed and refined by the FPC staff with the assistance of advisory bodies.

The need to meet air and water quality standards emphasizes the formidable planning tasks facing the electric power industry and the great importance of advance selection and qualification of sites for future plant construction.

Any of these potential sites (generation or transmission) will affect local economic and social interests in land, air or water resources. The effects may be severe in their impact. They may, in some instances, be occasioned by construction of utility plant for local or area use, for electric consumers in different parts of a state or those wholly within another state or states. To the extent that these interests diverge,

it becomes increasingly important to insure that all detriments and benefits are balanced and not ignored, and that the problem is not transferred for resolution to a wholly Federal forum which may be far removed from important local considerations.

We believe the trend in state siting regulation is highly desirable. (Appendix B, Part IV summarizes state authorities and activities relating to environmental controls affecting electric utilities.) Ideally the states will see fit to correlate their respective governmental actions directed to environmental considerations prior to or concurrently with their economic regulatory actions. By this, I mean state public service commission facility certificating controls, as well as state commission participation in joint coordinating operations now being undertaken through regional electrical councils recognized in our nationwide rulemaking proceeding directed to Reliability and Adequacy of Electric Service, Docket No. R-362.

In this way there can be informed judgments and proper planning on technical, economic and operating

problems associated with installation of large-scale generation and transmission plants, while at the same time affording appropriate analyses of competing uses of air, land and water. The end result should be a reliable power supply system consistent with environmental quality standards constructed on timely basis. In many respects this state-Federal balance would resemble the coordinate actions of state and Federal interests in the control of water and air pollution. 9/

We believe this strengthening of inter-governmental coordination can occur without creating in the FPC a new set of Federal certificating procedures controlling generating plants and transmission lines; or through additional Federal legislation setting up or mandating particular forms of industry organization, controlling utility

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9/ All states have established water quality standards under the general surveillance of the Water Pollution Control Administration of the Department of the Interior. Similar programs to establish air quality criteria are in the process of formulation under the supervision of the National Air Pollution Control Administration of the Department of Health, Education and Welfare. (Appendix B, Part IV.)

operating procedures or particular forms of governmental authority charged with the duty of completing major planning responsibilities in electric utility construction and operation. Regulatory control mechanisms, if they are to retain their historic independence from the economic interests which they restrain, should not impose the planning duty upon the regulator. That is the essence of the managerial task. Initial primary responsibility to assure reliable electric service is centered in utility management. I would not recommend legislation which dilutes or avoids this prime duty or obligation.

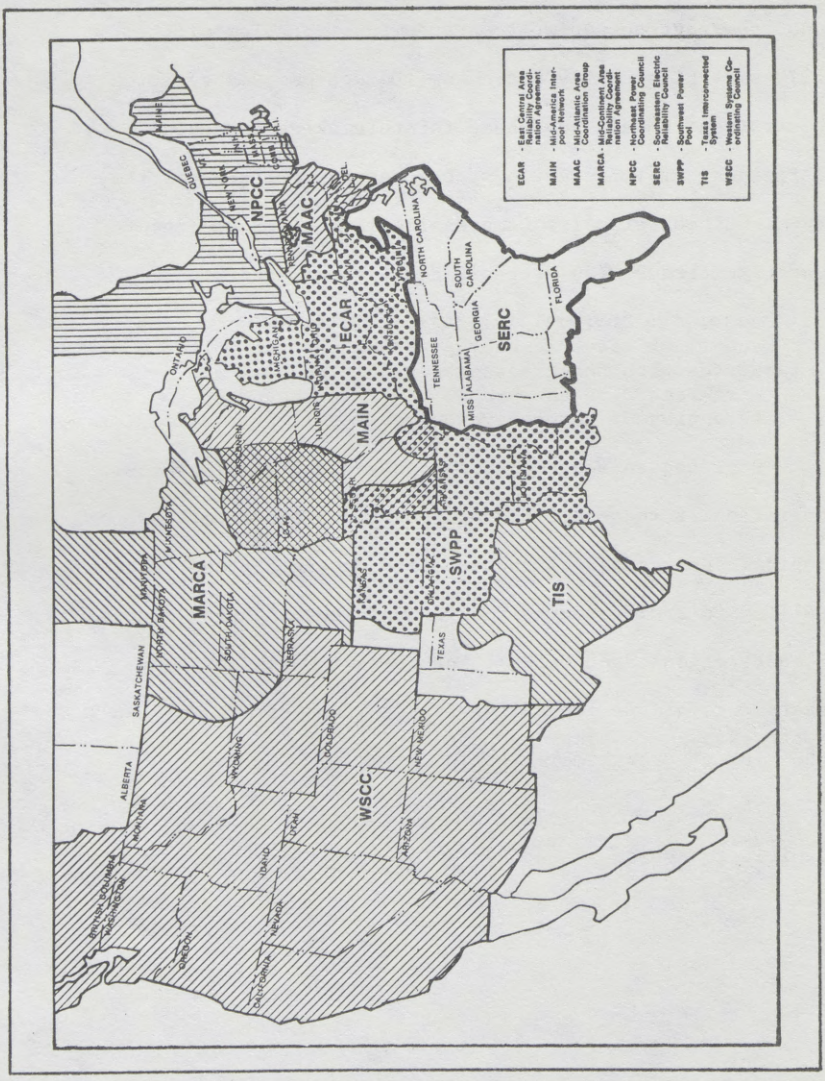
There are now a number of state regulatory commission procedures governing generating plant and transmission line certification and construction. 10/ We believe that reliability objectives can be attained by coordinated state action, regional Reliability Council work and industry action under policies coordinated by the FPC.

The Reliability Councils cover the respective geographic areas as shown on Chart IV.

10/ Attached Appendix F is a compilation of Federal and State Commission Jurisdiction and Regulation, Electric, Gas and Telephone Utilities (1967). Additionally, I refer you to "State Utility Commissions", prepared by the Subcommittee on Intergovernmental Relations, Committee on Government Operations, United States Senate, 90th Cong., 1st Sess. September 11, 1967. See also, Part IV, Appendix B; and Appendix 1 to the Report of the Working Committee on Utilities to the Vice President and to the President's Council on Recreation and Natural Beauty, issued December 27, 1968.

CHART IV

REGIONAL ELECTRIC RELIABILITY COUNCILS



Administrative Actions Relevant to Reliability and Environment - We believe timely installation of new generating and transmission facilities with minimum impact upon the environment will be a dominant problem of the 1970's. FPC's Policy Statement (Docket No. R-362) which has currently been published for rulemaking comments seeks a rational implementation of the responsibilities of the FPC in discharging its Congressionally delegated duty under Section 202(a) of the Federal Power Act:

> [f]or the purpose of assuring an abundant supply of electric energy throughout the United States with the greatest possible economy and with regard to the proper utilization and conservation of natural resources . . .

Building an interconnected power supply network and operating it in a reliable manner raises a host of technological, environmental and economic considerations, each pulling in a different direction and touching many state, local, regional and Federal interests. Quick and easy statements of the prevailing issues are possible only at the risk of over simplification.

The regional reliability council is an appropriate vehicle to achieve joint action of utility systems,

regulatory agencies - Federal, state, local - and other groups with direct responsibilities in reliability and environmental matters. (Attached Appendix G sets forth our Initial Reliability Policy Statement issued June 25, 1969, the Commission's Order of Reconsideration issued October 21, 1969, and the first Revision thereof issued January 13, 1970.)

The Commission's Policy Statements take note of the industry's actions in the formation of regional reliability councils consisting of investor owned, publicly owned and cooperatively owned systems. Complementing the regional councils is the National Electric Reliability Council. There are seven established regional councils today. 11/

The Commission requested participation in existing councils by the staffs of the FPC and the state commissions,

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11/ Northeast Power Coordinating Council, the Mid-Atlantic Area Coordinating Council, the East Central Reliability Council, the Southeastern Electric Reliability Council which was formally organized on January 14, 1970, the Texas Interconnected Systems, the Western Systems Coordinating Council, and the Mid-Continent Area Reliability Council. The NERC membership also includes two power planning groups: the Mid-America Interpool Network and the Southwest Power Pool.

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all as non-voting participants both in principal meetings of regional councils and the National Electric Reliability Council. Additionally, we called for yearly information reported through the councils covering the various operating systems within the respective regions. The data to be reported covers the gamut of system planning, operation and environmental factors.

Specifically, the reporting system calls for the projection of loads and system facilities on a 10-year program basis, and asks for information on past and proposed actions by utilities to assure that proposed major facilities will meet environmental and aesthetic criteria established at state, regional or local levels. 12/ The reported information would be made available to the FPC, to utilities, to

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12/ In our revised Policy Statement issued January 13, 1970 (Appendix G), we said:

> ". . . We believe careful attention to advance planning and the reporting of data as suggested will contribute to improved and more timely resolution of questions between utilities and responsible reviewing authorities. To this end, we believe it is particularly important that the reported data include information on the status of utility consultations with appropriate authorities on important environmental considerations associated with large generation and transmission facilities."

affected state regulatory commissions, to agencies having responsibilities in the fields of environments, to the Congress and other interested parties. The annual reporting feature is designed to provide the needed opportunity for updating electric utility plans in an overall 10-year advance framework. Current data will be available to reflect revisions in load estimates, the introduction of new developments and resources, and the resolution of environmental issues.

As proposed, the reports would identify monthly and seasonal peaks, generating reserve provisions, higher voltage interconnected network facilities, stability analyses, communication and facility monitoring procedures, load-shedding programs, maintenance practices, service restoration plans, status of pollution control consultations with local communities and groups, and status of applications to state or regional authorities with respect to new generating facilities (300 mw and larger) and the routing, configuration and overall environmental aspects of transmission facilities (230 kv and higher). The Commission's staff has worked in collaboration with representatives

of the National Electric Reliability Council to select and coordinate reporting requirements which will be beneficial to both the Commission and the Councils in reviewing system plans from the standpoints of adequacy and reliability of bulk power supply. Many systems are now maintaining greater operating reserves and they have undertaken planned load reducing steps to guard against cascading outages of the type which hit the Northeast in 1965.

When collated, this organized body of information generated through the Councils will be available to all affected utilities, state regulatory bodies, state, local and regional authorities having special responsibilities in the environmental area and the Congress. I visualize that detailed examination of the enumerated matters in advance and in contemplation of the reporting to the Federal Power Commission will preclude many questions of the type which now arise throughout the nation and delay the construction of urgently needed generating and transmission facilities. Stated positively, utility facilities, when critically analyzed in this manner, may be expected to harmonize electrically and environmentally with reliability criteria generated initially by the various regional

councils and subsequently considered by state regulatory bodies and the Federal Power Commission; with established standards for the control of air and water pollution; and in conformance with general guidelines for aesthetics. We anticipate substantial increases in state commission participation in the work of the regional councils.

This type of coordinated action with full knowledge of the advance planning and operating conditions of other systems will maximize the effectiveness of utility system planning. I stress our concept that all interested parties will have access to council data and deliberations. Smaller systems will have access to council work and may choose to participate in some representative fashion.

Coordinating these manifold efforts through the regional council concept should maximize the advantages springing from a vast reservoir of operating, planning and managerial talent now employed by the more than 3,500 utilities. In short, we think the councils will work. We believe they are up to the assigned tasks of providing a reliable adequate power supply with a minimum impact upon the environment. We anticipate that through access to the vast data

collection procedures of the councils and the intra-council and inter-council exchange of planning and operating data an efficient and proper utilization of the nation's air, fuel, land and water resources will obtain. Consumer interest in an abundant supply of low cost electric energy will be served along with the proprietary interest without the need for increased governmental intervention.

Environmental and aesthetic problems have been responsible for a number of objections to proposed new power stations and transmission lines, and in some cases have created delays which have added significantly to problems of power supply reliability. Such problems have been particularly acute in parts of the Pennsylvania-New Jersey-Maryland Interconnection, 13/ the Orange & Rockland Utilities, and the Consolidated Edison Company service areas. Construction of many other facilities are currently in

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13/ The pool is comprised of: Public Service Electric and Gas Company, Philadelphia Electric Company, Pennsylvania Power & Light Company, Baltimore Gas and Electric Company, Pennsylvania Electric Company, Metropolitan Edison Company, New Jersey Power & Light Company, Jersey Central Power & Light Company, Potomac Electric Power Company, Delmarva Power and Light Company, Atlantic City Electric Company, and Luzerne Electric Division of U.G.I. Corporation.

abeyance because of litigation, regulatory agency hearings, or other actions involved in resolving protests but so far have generally caused less serious power supply problems. If continued indefinitely, however, these power supply cases may lead to problems similar to those experienced in the metropolitan New York area. (See Appendix H, "A Review of Consolidated Edison Company 1969 Power Supply Problems and Ten-Year Expansion Plans".)

The Commission believes that the procedures called for in its Policy Statement on Reliability and Adequacy of Bulk Power Supply will provide a workable basis for the early re-evaluation of power system expansion plans and the cooperation needed to resolve differences before they become insurmountable problems in providing adequate facilities for local, regional, and national electric power needs.

A second administrative action which we are implementing involves the joint Federal-state procedural mechanism of Section 209 of the Federal Power Act, 16 U.S.C. 824h, which authorizes the FPC to employ joint state-Federal conferences to dovetail and implement all existing Federal-state regulatory authority.

Currently, we are undertaking discussions with the Mid-Atlantic States' utility regulatory bodies which are engaged in multi-state discussions as to how they can more effectively implement their respective regulatory authorities in the interests of reliable and adequate power supplies. The states are ones in which the interstate PJM Power Interconnection operates. Members of that pool are subject to FPC regulatory jurisdiction, and they report substantial amounts of useful data to us. We anticipate that other regions of the nation will be involved in similar meetings as needs arise.

As pointed out above, several state public utility regulatory statutes now provide state certificate procedures for construction of utility facilities. Part II of the Federal Power Act does not. It reflects the Congressional judgment that this type of regulation was legitimately a matter of state concern. However, Congress did confer upon the FPC general authority to reach the interstate transactions of electric systems which were constitutionally beyond state authority. Public Utilities Commission v. Attleboro Steam & Electric Co., 273 U.S. 83 (1927); FPC v. Southern California Edison, 376 U.S. 205,

215 (1964). The interstate jurisdiction is in addition to jurisdiction in state commissions over various aspects of electric systems. Section 209 is the procedural bridge across this Federal-state dichotomy. (See Footnote 14/, p. 56.)

Part II of the Power Act postulates a scheme of unified regulation for the investor owned segment of the electric utility industry: unified in the sense of constituting a comprehensive public control mechanism of complementary Federal jurisdiction and responsibility and state commission jurisdiction. In the area of interstate power supply Part II sets forth two general regulatory approaches in addition to the voluntary approach of Section 202(a) which I have described. They are the rate and service control procedures of Section 205, 16 U.S.C. 824d, and 206, 16 U.S.C. 824e, and the interconnection and service control procedures of Sections 202(b), 16 U.S.C. 824a(b), and 207, 16 U.S.C. 824f. In contrast to the voluntarism of Section 202a, Sections 202(b), 205, 206 and 207 embrace substantial amounts of compulsory authority. FPC v. Pennsylvania Water & Power Co., 343 U.S. 414, 422-3 (1952). Sections 205 and 206 are exercisable upon the

Commission's own motion. The authority of Section 202(b) is invoked by a complainant utility system, - investor owned, publicly owned or cooperatively owned - or an affected state regulatory commission. Section 207 is invoked upon complaint of a state commission. 14/

The Commission has not sought to test the limits of its compulsory regulatory jurisdiction as it relates to

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14/ An integral part of this state-Federal responsibility is the interagency conference technique of Section 209. Through that Section Congress afforded the Federal Power Commission considerable latitude in meeting with and suggesting mutual courses of action with state agencies. If the Power Commission has reason to believe that compulsory controls should be asserted under either Section, 202(b) or 207, it is free to call the relevant facts to the attention of appropriate state regulatory bodies which may in turn trigger proceedings under either Section. The Commission's Rules of Practice and Procedure 18 CFR 1.37(c) provide in part:

> * * * experience has proved that informal conferences are the means most often used to enable commissions to work together to promote good regulation * * * any commission, Federal or State, should always feel free to suggest a conference to another commission, concerning any matter of regulation subject to the jurisdiction of either, with respect to which it is believed that a cooperative conference may be in the public interest. * * *

reliability and adequacy of service. Our policy reasons for employing the procedures of Section 202(a) are reflected in our two statements in Docket No. R-362.

Power Pools and Reliability

Power pools have improved reliability and coordinated interchange of electricity among participating utility systems. There are twenty-two power pools in the United States, organized pursuant to formal contractual or operating arrangements among participant utilities. They have facilitated interconnection and coordination of electric production and transmission facilities in the interests of economy of utility operation and reliability of electric supply in their areas of operation. Various classes of power and energy are often sold at wholesale or interchanged among the connecting systems, particularly where peak loads and demands are not coincident. Many of these arrangements provide for generating reserve sharing, and with increased frequency, they undertake coordinated planning of future construction. Ten years ago there were only nine basic

power pools throughout the nation and four of these consisted of the respective operating companies of four holding companies systems - American Electric Power Company, Allegheny Power System, the Southern Company and Middle South Utilities, Inc. Attached Appendix I lists twenty-two pools and generally identifies their geographic location. Appendix B, Page III-9, correlates these areas with the areas of the regional councils. There is coordination between the operation of the power pools and the regional councils in system planning.

In addition to our regional council concept, in coordination with power pools, I call to your attention two general accounting rulemakings which the FPC has initiated and which are relevant to future power and gas supply planning and operation.

In Docket No. R-379, Accounting Treatment for Land Held for Future Utility Use and For Profit or Losses Realized Through Sales of Those Lands, issued January 22, 1970, we propose to modify our accounting and ratemaking

procedures to encourage more extensive advance acquisition of land needed by gas pipelines and electric utilities for utility purposes. Experience has shown that the availability of land for plant sites, transmission lines, and other facilities is becoming a limiting factor in the expansion of utility operations to meet the nation's growing needs. The need for advance acquisition of land is also accentuated by growing concerns over conservation, pollution, safety, aesthetic and other issues that arise more frequently when land acquisition programs are geared only to immediate needs. Our proposed modifications should provide an important stimulus to sound long-term utility planning for acquisition of sites for future utility facilities.

The second rulemaking, Docket No. R-381, Accounting Treatment for Expenditures for Research and Development, issued January 27, 1970, proposes to clarify and modify our accounting and ratemaking procedures to encourage natural gas pipelines and electric utilities to search for new ways of increasing their operating efficiencies and otherwise providing benefits to the consuming public.

The Commission strongly believes that the level of research and development activities needs to be raised and we propose to clarify the responsibilities of the rate payers in meeting costs related to legitimate utility outlays for research and development. We believe our proposal can lead to operating efficiencies and to beneficial effects on the future supply of power and natural gas, both of which will be beneficial to the consuming public.

Copies of our notices of rulemaking in these two dockets appear as Appendix J.

Antitrust -- Our experience with regional councils over the next several years will help ascertain the impact of antitrust laws on coordinated planning of generation and transmission facilities and pooling operations. We recognize that our policy statement in Docket No. R-362 does not, in and of itself, grant regional council participants immunity from the application of those laws. Indeed, Part I of the Federal Power Act, Section 10(h), 16 U.S.C. 803(h), expressly incorporates the provisions of the antitrust laws as a part of FPC licenses for hydroelectric projects. California v.

FPC, 369 U.S. 482 (1962), evidences the fact that regulatory agencies cannot immunize utilities from Federal antitrust laws absent express statutory authority. Remedies for violations of the antitrust laws may be pursued independently of FPC regulation of particular rates, charges or services under the Federal Power Act. Pennsylvania Water & Power Company v. Consolidated Gas, Electric Light & Power Company, 184 F.2d 552 (CA4), cert. denied 340 U.S. 906.

Historically, the Department of Justice has taken the position that interconnections, pooling, coordination or joint use of facilities for generation and transmission of electric energy do not result in per se violations of those laws and that power pooling and related arrangements were to be tested by the rule of reason. We understand that interested parties may use the Department's Business Review Procedure in cases of question under the rule of reason.

The regional council approach reflected in our Policy Statements is designed to secure economies of scale and to insure a reliable, adequate power supply. The Regional Councils are encouraged to open their meetings to all affected systems and to subject their activities to monitoring by representatives of the Power Commission and state regulatory commissions. In these circumstances we think that antitrust remedies will not become operative. If they do, it is our present intention to recommend appropriate legislation to grant immunity from antitrust for actions designed to serve the national interest in a reliable ". . . supply of electric energy throughout the United States with the greatest possible economy. . ." (Section 202(a) of the Federal Power Act.)

Federal-State Relationships -- In securing the further inter-governmental coordination which we propose between the economic regulatory bodies (public service commissions) and the resource agencies (environmental groups) two basic alternatives apply. Those state public service commissions now without authority may have their regulatory jurisdictions extended to reach environmental factors 15/. Alternatively, their processes and regulatory deliberations may be conclusively controlled in environmental matters by decisions of the responsible resource agency 16/. Importantly, under either choice there would be coordination of environmental concerns and licensing authority to construct required facilities. Pre-construction correlation should be undertaken upon a state-wide or regional basis to assure compliance with environmental standards. This is true in questions of land

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15/ The Federal Power Act's licensing procedures expressly require our consideration of environmental factors. Scenic Hudson Preservation Conference v. FPC, 354 F.2d 608, cert. denied 384 U.S. 941; and Udall v. FPC, 387 U.S. 428.

16/ Variations on these approaches and supporting arguments as they relate to the six-state New England Area are set forth in a highly informative Power and Environment Study (Second Draft), pp. 41-5, being conducted by the New England River Basins Commission. That study is attached as Appendix K. The New England River Basins Commission was created by Executive Order No. 11371 (32 FR 12903), pursuant to Subchapter II of the Water Resources Planning Act, 42 U.S.C. 1962.

use as well as thermal or atmospheric discharges. Water and air quality norms which have been promulgated pursuant to the Federal Water Pollution Control Act, 33 U.S.C. 466 et. seq., and the Air Quality Act, 42 U.S.C. 1857 et. seq. should be put to immediate use in the utility regulatory field. We would add to the various enforcement mechanisms of both acts a further form of implementation: a requirement that administrative regulatory bodies (state or Federal), implement these quality standards as a part of their facility licensing and certificating procedures. This would be without prejudice to existing regulatory authority.

I am studying the development of a possible legislative approach to state and regional responsibility for environmental protection while assuring reliability of electric power in an environment compatible with quality of life, along the following general lines. Public policy should require as a condition precedent to the grant of a permit or license for all generating plants - state or Federal - the issuance by a duly authorized state agency of a certificate of compliance with applicable environmental

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standards, or, if environmental authority is centered in a state public utility commission requirement that a finding of environmental compliance be made before authorizing construction by a utility of a generating facility. If a state within a reasonable period of time did not establish procedures for insuring compliance with environmental standards as a condition precedent to starting construction, then supplementary Federal procedures would be required to fill the gap. Through interstate compacts, regional agencies could coordinate various environmental activities of states in the region, or, if empowered by the affected states, could issue a certificate or license, after review of applicable environmental and power interests,

to authorize construction of a generating system. While states and regions have varying problems, it is conceivable that uniform legislation could be adopted by some states or regions to meet common problems.

Under this concept, the public convenience and necessity demanding a reliable low-cost energy system will be served without undue burden on the environment 17/.

This type of legislative action would, in effect, put affirmative public surveillance before construction as a complement to the after-the-fact abatement procedures which

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17/ The President's Interagency Power Plant Siting Study Group, under the direction of the Office of Science and Technology, has been studying plant siting problems in relation to the environment with a view to determining legislative guidelines and recommendations. The report of the committee should be issued within the next few months with recommendations for legislative guidelines relative to plant siting and transmission facilities. The members of the Interagency Power Plant Siting Study Group are: James T. Ramey, Commissioner, Atomic Energy Commission; John R. Quarles, Jr., Assistant to the Secretary of Interior for Program Planning and Coordination; David A. Hamil, Administrator, Rural Electrification Administration; Dr. John T. Middleton, Director of the National Air Pollution Control Administration; G.O. Wessenauer, Consultant to the Tennessee Valley Authority; S. David Freeman, Director, Energy Policy Staff, Office of Science and Technology; and John N. Nassikas, Chairman, Federal Power Commission.

are now relied upon to enforce air and water quality standards.

Transmission Certification and Utility Corridors -- Both concepts may be useful in meeting the timely construction of new transmission facilities and environmental standards 18/. As I pointed out previously, I do not recommend the establishment of Federal certification procedures at this time. In my judgment, the coordinated planning concepts and the utilities operating through the mechanisms of state and regional councils should have the opportunity to construct needed new facilities on a timely basis. If these procedures are ineffective and we require supplemental powers, we will propose appropriate legislation.

We recommend this approach in furtherance of our stated objective of maximizing the usefulness of all levels of governmental authority. Adoption of Federal certification

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18/ See Appendix L for Notice of Proposed Rulemaking issued July 29, 1969, for Protection and Enhancement of Natural, Historic and Scenic Values in the Design, Location, Construction and Operation of Project Works, Docket No. R-365.

legislation now would have the undesirable effect of pre-empting the existing certificating control machinery and talents of the states, and stultifying their efforts to implement regional authorities through the compact concept.

In reaching these conclusions we recognize the prime importance of electric reliability and stability in transmission networks. Much of our nation-wide rulemaking, Docket No. R-362, is directed to these matters. We also recognize the essential question of land use and the desirability of centralized responsibility in state authority implemented by regional planning coordinated with national policy in programs under the jurisdiction of the Department of Housing and Urban Development and other programs to be delineated under the concept of the President's State of the Union message and the forthcoming special Environmental Message.

The December 27, 1968 report of the Working Committee on Utilities estimates that the new transmission construction between now and 1990 will utilize more than 7,100,000 acres of land for rights-of-way, compared with 4,000,000 acres now used by existing transmission.

Also, there is the question of cost of aesthetic values: a matter of great importance to state regulatory bodies, the investor, and the ratepayer. The underground installation of long transmission lines presents technological and economic problems. Today's technology is not sufficiently advanced to permit underground installation of all high voltage transmission. Even if it were feasible, our estimates show the cost would be 18 to 20 times that of overhead construction. At distribution voltage levels (33 kv or below) the economics of undergrounding are not as severe. New residential underground services can now be installed at a cost factor of 1½ times that of overhead. Estimates of the cost of undergrounding existing overhead distribution lines between now and 1990 total about $200 billion.

In transmission certification there may be a useful place for the interstate compact mechanism to coordinate various state siting, environmental and utility regulatory considerations 19/. With the increasing size of units, more

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19/ Our staff made recommendations on matters of this type in its recent analysis of Consolidated Edison Company Power Supply Plans dated December, 1969, Appendix H. I refer in particular to pp. 77-78.

and more multi-state considerations will be affected by plant construction and operation. Large plants raise land use control questions such as zoning and eminent domain, water intake and discharge considerations, discharges to the atmosphere, and financial factors involving ownership and rate base in other states.

I view the usefulness of the compact mechanism in two ways: as a way of maximizing the effectiveness of existing levels of governmental authority of the states, among the states; and as a way of interrelating Federal and state interests in environmental matters without merging or superseding the identity of state interests while keeping intact legitimate Federal prerogatives.

If states do not act or are unable to complete their tasks so as to permit timely installation of power supply facilities, this Commission will make appropriate recommendations concerning preemptive Federal action. Certainly, the national interest in a reliable and adequate network must prevail.

Bulk Power Failures and Shortages -- Since 1967 the Commission has obtained reports on significant failures of

bulk power supply throughout the Nation, and has issued special reports on 16 of these occurrences. For the three-year period ended December 1969, the Commission received reports of 276 power interruptions. The annual number of failures shows a slightly decreasing trend -- 97 in 1967, 94 in 1968, and 85 in 1969.

During this three-year period the general pattern of interruptions has not changed significantly. The quantity of power involved and the durations of the outages have remained much the same. Virtually all sections of the country and all segments of the electric industry have been involved in power failures and some have experienced shortages that did not result in failures.

The interruptions reported to the FPC have been separated into four categories to indicate the types of causes:

Natural Phenomena -- Ice, snow, sleet, lightning, wind, tornado, hurricane, vibrating conductors, insulator contamination, flood and fire.

Equipment Failures -- Line conductors, cable, ground wire, insulator, control device, generator, transformer, other generating station or substation equipment, etc.

System Operations -- Overload, overvoltage, undervoltage, switching surge, instability, and misoperation of relays.

Human Acts, Foreign Objects, and Unknown -- Aircraft impacts, vehicular accidents, tree damage, animal and bird actions, personnel error, vandalism (including gunshot), sabotage, and unknown causes.

The number of interruptions within each category for the three-year period is shown in the following table:

	1967	1968	1969
Natural Phenomena	31	21	26
Equipment Failure	35	36	31
System Operation	13	11	7
Human Acts, Foreign Objects, and Unknown	18	26	21
Totals	97	94	85

Natural Gas Supply

Paralleling the magnitude of the construction and expansion program of electric utilities to meet energy demands without undue impact on our environment and to secure the necessary financial commitment to finance the

addition of generation and transmission facilities, we believe the major challenge confronting the natural gas industry during the decade of the 1970's will be recorded as the development of new natural gas sources and deliverability to meet increased natural gas demands at reasonable cost to the consumer in a competitive energy market. The Federal Power Commission's testimony at the hearing on November 13, 1969, before the Subcommittee on Minerals, Materials and Fuels of the Senate Committee on Interior and Insular Affairs is relevant to our analysis of gas supply problems. (Appendix A) In summary:

Discernible trends of supply and demand indicate a developing natural gas shortage in the United States requiring action to arrest undesirable trends 20/

20/ "A Staff Report on National Gas Supply and Demand" issued by the FPC on October 1, 1969 (Appendix A, asserts (at page 1): "Evidence is mounting that the supply of natural gas is diminishing to critical levels in relation to demand.")

Short range effects appear to be that some pipeline suppliers in various sections of the United States may be unable to meet demands of distribution companies for new service in the winter of 1970-1971. Over the longer term, assuming that the present annual incremental growth of demand continues at its present rate and that additions to supply do not correspondingly increase from increased discoveries in the lower forty-eight states or supplementary sources (e.g., liquefied natural gas, gasified coal, increased imports from Canada, or delivery of natural gas from the North Slope of Alaska) it is manifest that total gas energy demands will not be met by the natural gas industry.

The natural gas industry provides about one-third of the total United States energy consumption and it is the second largest source of our primary energy needs, surpassed only by crude petroleum, which in turn provide over 40 percent of total energy consumption. The natural gas and oil industries in combination account for 75 percent of U. S. energy consumption.

The immediate source of natural gas to meet short term energy demands is in the lower forty-eight states since

supplementary sources cannot be developed in commercially feasible quantities until the middle to the later years of this decade. Natural gas deliverability is limited by existing pipeline technology until the necessary ships and transport facilities, and liquefaction plants can be developed for delivery of liquefied natural gas in quantities from overseas. The supply problem is being compounded because demand has grown faster than was forecast by both government and industry. Adequate gas supply is essential to protect the consumer interest in a reliable source of energy at reasonable costs as well as to permit the growth of the natural gas industry by raising sufficient capital at reasonable costs to finance required system construction and expansion. According to statistics compiled by the American Gas Association, the average wellhead price of natural gas advanced 7.4 percent from 1961 to 1968, but the average price paid by all classes of ultimate consumers declined 0.8 percent. (See following Table V). The gas component of the Consumer Price Index, which applies to wage earners and clerical workers in the urban areas of the United States, increased 2.0% from 1961 to 1968, but

during the same seven-year period the overall Consumer Price Index rose 16.3 percent.

Table V

PATTERN OF PRICE CHANGES FOR NATURAL GAS, 1961 to 1968

	Percent Change 1961-1968
Index of wellhead prices	+7.4
Average prices to ultimate consumers, by class of service:	
Residential	+0.5
Commercial	-2.0
Industrial	+2.6
Other	+5.6
All Classes	-0.8

Explanatory note: The changes in average prices by class of service reflect higher usage, which reduces the cost per unit under the block type rate, and regional differences in rates of growth in gas consumption. The cost of gas in each region is partly determined by distance from source of supply. The gas price component of the Consumer Price Index (U. S. Bureau of Labor Statistics) increased 2.0 percent from 1961 to 1968. The latter index is based on fixed weights and applies to "wage earners and clerical workers in urban United States."

Source: Compiled from Gas Facts, 1969, American Gas Association.

Inflationary effects increase industry costs which can be partially counteracted only by increased productivity and the economies of scale afforded by pipeline technology to deliver assured supplies of gas to the consumer at prices competitive with other fuels. The electric utility industry is the largest single consumer of natural gas which supplies a considerable portion of its generating fuel. For example, in 1968 3.15 billion Mcf of natural gas was consumed in power plants, or, approximately 16 percent of all gas produced.

FPC Regulation of the Natural Gas Industry

Since the Phillips Petroleum case in 1954, the Federal Power Commission has regulated independent producer rates for gas sold for resale in interstate commerce. In its Permian Basin opinion, the Commission established a two-price system for sales of gas, determined a division between new and flowing gas, provided for price adjustments to reflect quality differentials, determined minimum area rates, established procedures for partial exemption of small producers from area rate regulation and procedures by which producers could request relief from area rates. In its Permian Basin opinion,

the Commission concluded "that the area approach offers a regulatory method which is best adapted to the discharge of our responsibilities for protecting natural gas consumers while providing the greatest incentive to producers to continue their search for needed additions to our gas supply." 34 FPC 159, 180. The Supreme Court upheld the Commission's area rate regulation in Permian Basin Area Rate Cases, 390 U.S. 747 (1968), but noted, at page 772 of its opinion, that "area regulation of producer prices is avowedly still experimental in its terms and uncertain in its ultimate consequences; it is entirely possible that the Commission may later find that its area rate structure for the Permian Basin requires significant modification." In a footnote, the Court added: "Finally, we must emphasize that we understand the present proceeding to be merely the first of many steps toward a more expeditious and effective system of regulation."

The Commission's second area rate opinion, issued in September, 1968, involved Southern Louisiana. That case is presently before the United States Court of Appeals for the Fifth Circuit. In its opinion, the Commission established a

three-part pricing system, stating that "the prices we are here fixing for application to future (third vintage) contracts should, in order to encourage continuation of necessary exploration and development activities and to recognize the greater uncertainties and possibilities of fluctuation to which the sellers are exposed, be set at a slightly higher price than for the second vintage of gas-well gas." 40 FPC 530, 645. Moreover, the Commission stated that "the price should be and indeed must be sufficient to induce the industry to carry on the search for new reserves, because it is only through a continuing program of exploration that the increasing demand for natural gas can be satisfied. The encouragement of industry exploratory activity is a valid objective of regulation, and is relevant to the determination of the fair rate of return for new gas-well gas." 40 FPC 530, 579. Other area rate proceedings to establish the just and reasonable price for production are pending before the Commission at this time.

Area rates will be determined on the basis of record evidence by testimony, exhibits and any relevant evidence

developed in hearings and regulatory proceedings. However, pending such determinations the Commission continues to certificate new sales in these areas at either guideline rates fixed on the basis of policy statements or in-line rates established after formal hearings and the development of an evidentiary record. The Commission's jurisdiction over producers is limited to rates; the Commission does not have jurisdiction to compel exploration or production. It cannot order producers to sell or look for gas. It is only after the producer has gas for sale that the FPC assumes jurisdiction.

The interstate pipeline sector of the natural gas industry has been subject to FPC regulation since the enactment of the Natural Gas Act in 1938. Under the Act, the Commission regulates the transportation of natural gas in interstate commerce, the sales of natural gas in interstate commerce for resale, and natural gas companies engaged in such transportation or sale. Under Sections 4 and 5 of the Act, pipeline companies are subject to rate regulation by the Commission. Under Section 7 the pipelines are also subject to the Commission's certification procedures for abandonments, new

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sales and related initial rates, and facilities used in interstate commerce. Section 1(c) of this Act, known as the Hinshaw Amendment, was passed in 1954. It exempts from FPC regulation certain intrastate pipeline and distribution companies which consume all the natural gas they receive within a single state, provided that the rates, services and facilities of such companies are subject to regulation by a state commission. Presently, 165 natural gas companies are exempted from FPC regulation under Section 1(c) of the Natural Gas Act and 125 natural gas pipeline companies are subject to FPC regulation.

The third sector of the industry, the distribution companies, is for the most part, subject to state regulation of rates and services. In some states like Texas and Minnesota, regulation of these companies is at the municipal level.

Future Requirements -- Our staff projects 800 billion Mcf of new reserves will be needed between 1968 and 1990 if requirements grow at an annual compound growth rate of 3.6 percent to 1990 as

estimated by the Future Requirements Committee, 21/ assuming requirements are to be met solely by domestic production while maintaining a reserves to production ratio of 10.

To appreciate the magnitude of this estimate we should note that projected future requirements to 1990 are one-third greater than the 630 billion Mcf of proved gas reserves discovered in the lower forty-eight states from the beginning of the natural gas industry up to the present time.

Our undiscovered potential gas reserves are estimated by the Potential Gas Committee 22/ at 1227 billion Mcf (800 billion Mcf excluding Alaska) and by the U. S. Geological

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21/ The Future Requirements Committee is sponsored by the Future Requirements Agency, Denver Research Institute, University of Denver and is composed of members from the gas producing, pipeline, and distribution industry, observers from state and Federal regulatory bodies, American Gas Association, American Petroleum Institute, Independent Natural Gas Association of America and the National Association of Regulatory Utility Commissioners. (Testimony before Subcommittee on Minerals, Materials and Fuels of Senate Committee on Interior and Insular Affairs, November 13, 1969, Appendix A.)

22/ The Potential Gas Committee is sponsored by the Potential Gas Agency, Mineral Resources Institute, Colorado School of Mines and is composed of members from the gas producing, pipeline, and distribution industry, observers from state and Federal regulatory bodies, American Gas Association, American Petroleum Institute, Independent Natural Gas Association of America and National Association of Regulatory Utility Commissioners. Ibid.

Survey of the Department of the Interior at 2100 billion Mcf (1550 billion Mcf excluding Alaska) -- adequate under either estimate to meet the required cumulative reserve addition of 800 billion Mcf in the next 20 years. The big proviso is whether reserves can be equated with production.

In my testimony before the Interior Subcommittee (Appendix A) I stated the problem as follows:

> "The crucial question is the rate at which the industry will develop these reserves and whether we can fully utilize our natural gas resource base while maintaining competitive prices. With the data and techniques presently available to us, we cannot reliably forecast the rate at which these resources will be used, and the economic conditions that will elicit the required supply. We have not yet developed a supply curve that will show us the relationship between the price level and discovery of reserves."

The decline in natural gas supply in relation to demand is illustrated in the following table:

Table VI
UNITED STATES NATURAL GAS SUPPLY*
Actual 1946 - 1968
(All Volumes in Billion Mcf @14.73 Psia and 60° Fahrenheit)

Year	Annual Net Production 1/	Cumulative Net Production	Annual Net Reserve Additions 2/	Year-End Proved Reserves	Cumulative Proved and Produced Reserves (3)+(5)	F/P Ratio (4)÷(2)	R/P Ratio (5)÷(2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1946	4.9	88.8	17.6	159.7	248.5	3.6	32.5
1947	5.6	94.4	10.9	165.0	259.4	2.0	29.5
1948	6.0	100.4	13.9	172.9	273.3	2.3	28.9
1949	6.2	106.6	12.7	179.4	286.0	2.0	28.9
1950	6.9	113.5	12.0	184.5	298.1	1.8	26.9
1951	7.9	121.4	16.1	192.8	314.2	2.0	24.3
1952	8.6	130.0	14.5	198.6	328.6	1.7	23.1
1953	9.2	139.2	20.9	210.3	349.5	2.3	22.9
1954	9.4	148.6	9.6	210.6	359.2	1.0	22.5
1955	10.1	158.7	22.0	222.5	381.2	2.2	22.1
1956	10.9	169.6	24.8	236.5	406.1	2.3	21.8
1957	11.4	181.5	20.2	245.2	426.7	1.8	21.4
1958	11.4	192.4	19.0	252.8	445.2	1.7	22.1
1959	12.4	204.8	20.8	261.2	465.9	1.7	21.1
1960	13.0	217.8	14.1	262.2	480.0	1.1	20.1
1961	13.4	231.2	16.5	265.4	496.6	1.2	19.8
1962	13.6	244.8	18.9	270.6	515.4	1.4	19.9
1963	14.5	259.3	18.4	274.5	533.8	1.3	18.9
1964	15.3	274.6	20.3	279.4	554.0	1.3	18.2
1965	16.3	290.8	21.3	284.5	575.3	1.3	17.5
1966	17.5	308.3	19.4	286.4	594.7	1.1	16.4
1967	18.4	326.7	21.3	289.3	616.0	1.2	15.7
1968	19.3	346.0	12.1	282.1	628.1	0.6	14.6

*Excluding Alaska.

Source: Based on American Gas Association Data

1/ Net production is defined as the total volume of natural gas withdrawn from producing reservoirs less the volume returned to such reservoirs in cycling, repressuring of oil reservoirs and conservation operations.

2/ Annual net reserve additions includes all new gas reserves resulting from new field and new reservoirs discoveries plus new reserves resulting from extensions and upward and downward revisions of reserves previously discovered.

Column (8) shows a decline in the R/P ratio from 32.5 in 1946 to 14.6 in 1968. During the period 1946-1968, demand (reflected in annual net production (Column 2)) rose from 4.9 billion Mcf in 1946 to 19.3 billion Mcf in 1968, an increase of almost 400 percent,whereas proved reserves increased only 77 percent during the same period. The finding to production (F/P) declined from a ratio of about 2.0 during the late 1940's and mid-1950's to almost 1.1 as an annual average over the last five years -- meaning that new reserve additions were approximately 10 percent greater than production. In 1968 the F/P ratio dropped to 0.6 or 40 percent more withdrawals than additions. The decline in both the R/P and F/P ratios can be related to the decreasing exploratory effort. While the American Petroleum Institute's report of drilling statistics for the year 1969 indicates a higher cumulative total than for 1968, we do not yet know whether the additions to reserves will again be less than withdrawals as in 1968. We should gain more insight regarding 1969 trends when the 1969 API Report of "Reserves of Crude Oil, Natural Gas Liquids, and Natural Gas in the United States and Canada" is issued in the next two or three months.

I repeat my statement before the Interior Committee on November 13, 1969 that a National Gas Survey comparable to the National Power Survey of the electric industry is essential: (1) to improve forecasting techniques for meaningful regulation and wise management and resource planning decisions by industry and government; and (2) to improve effective capability for the measurement of supply and demand to assure as part of the continuing regulatory process a reliable supply of gas to meet consumer demands.

An abundant supply of gas will permit competition in a multi-fuel economy, efficient and productive allocation of our resources, lower fuel costs with improved service to the consumer and expansion of our economy by meeting incremental demands for gas by industry and commerce.

Other Regulatory Actions Relating to Gas Supply

Other regulatory actions by the Commission to stimulate gas supply may be summarized as follows:

(1) On October 3, 1969, in FPC Opinion No. 567 (attached in Appendix A for inclusion in the record), the Commission adopted a revision of its area rate policy for

gas to be produced from acreage previously dedicated to interstate commerce. Under the old policy, gas from newly discovered reservoirs within the dedicated acreage took the price applicable at the date of dedication of the acreage. In most cases, this price was lower than the price for newer vintage gas. Under the revised policy, new reservoir discoveries will be rewarded by allowing them the higher price applicable to newly-contracted supplies even though the reservoir was discovered on acreage previously dedicated to interstate commerce. The effect of the policy change should encourage further exploration on leases already dedicated to pipelines. The price difference in question could be as high as 2 cents per Mcf in the Permian Basin area, 3 cents per Mcf in some portions of the Texas Gulf Coast, 0.5 to 1.5 cents in Southern Louisiana and as much as 6 cents in the Hugoton-Anadarko area.

(2) On October 7, 1969 in FPC Opinion No. 568, attached in Appendix A, the Commission adopted a new policy for natural gas pipeline companies which own gas reserves. In the past the Commission

allowed pipeline companies only costs for their gas production. During the past 10 years, production of natural gas by jurisdictional pipelines has declined proportionately to their gas purchased from other producers. Thus, in 1967 jurisdictional pipelines produced approximately 8 percent of their total gas requirements compared with 12 percent in 1957, or a one-third reduction. In Opinion No. 568, the Commission relieved pipeline companies from cost of service regulation as to future-acquired leases. Henceforth, pipeline companies may generally receive an allowance at parity with the area rate for their own gas production. We will, of course, study the performance of the pipelines in this area in the months ahead to determine the effect of our new price regulation in relation to gas supply. The pipeline companies' economic interests in protecting their gas transmission investments is a powerful incentive toward further gas exploration and production by these companies.

(3) On October 16, 1969, the Commission issued a Notice of Proposed Rulemaking (FPC Docket No. R-371) proposing area ceiling rates for the Appalachian-Illinois Basin.

Attached in Appendix A). This area accounts for only a small fraction of the Nation's present gas supply, but it is conveniently located with respect to the major consuming areas. There are a number of challenging innovations in that rulemaking proceeding, particularly the establishment of area rates by a rulemaking proceeding, and reducing unnecessary administrative review. Unlike most areas, the predominant sources of supply in the Appalachian-Illinois Basins come from small independent producers and the pipeline companies rather than the major oil companies.

Increased Imports from Canada

There are various applications pending before the Commission for increased gas imports from Canada. Upon review of all the evidence in the public interest, we will determine the extent to which they should be granted. We will act on a timely basis to assure that regulatory lag will not contribute to aggravating the current supply problem. In the long term I would hope to see a common energy policy between Canada and the United States which will require consideration not only of the FPC and the Canadian National

Energy Board but also the executive departments of both Nations.

On August 18, 1969, the Commission wrote to the Secretary of the Interior regarding resumption of systematic leasing and development of new gas reserves in the Outer Continental Shelf, particularly offshore Louisiana and Texas, which have contributed in rising proportion to the national gas supply and are estimated to be the source of approximately 25 percent of the additional potential reserves of the forty-eight contiguous states. (Letter attached to Appendix A) The Interior Department has resumed leasing in offshore Southern Louisiana and has held a drainage lease sale as well as scheduling a general lease sale in the Federal domain of offshore western Louisiana for the first half of 1970. Petroleum geologists have indicated favorable prospects of finding gas-well gas in offshore western Louisiana.

We have also suggested royalty-type lease bids in lieu of high bonus lease sales to stimulate development of gas

exploration on Outer Continental Shelf Federal domain lands 23/.

New Technology in Exploration

Improved technology in finding and extraction techniques in gas exploration may offer some hope for increased discovery rates. Attached is an Appendix M entitled, "Nuclear Stimulation of Gas Reserves" regarding the prospects of nuclear explosive stimulation of tight gas reservoirs as a potentially effective and economic means of increasing the Nation's natural gas reserves. Even on the assumption that nuclear stimulation will work, the inherent drawback is that the environmental effects will not yet have been conclusively determined. Thus, until science has established beyond any reasonable doubt that nuclear stimulation will not have substantially adverse effects on our biosphere, there is doubt that we can rely on this new technique to meet a significant share of energy demands.

23/ "The national interest calls for more sensitivity to multiple goals in the administration of our energy policy. We must not become preoccupied with the maximization of revenues in the management of our federally-owned lands at the price of adversely affecting the availability of an adequate domestic natural gas supply." (Interior Testimony, November 13, 1969, Appendix A).

Natural Gas as Motor Vehicle Fuel Propellant

Interesting experiments in the developmental stage are being conducted with natural gas-fueled vehicles as a substitute for the conventional gasoline fuel internal combustion vehicle to determine long range feasibility. Some utility companies, as well as the General Services Administration in Southern California, the State of California and others are converting vehicles to natural gas fuel on a trial basis. The Bureau of Mines is conducting emission test studies. As this Committee well knows motor vehicles of all types are the largest single polluters of the atmosphere. The potential of natural gas as a clean burning fuel with greatly reduced emissions in comparison to present fuels -- recognizing that research may produce cleaner burning characteristics for gasoline, diesel and other

petroleum fuels -- underscores the necessity for assuring gas supply at a comparatively economic price.

Research and Development Technology

Without attempting to specify all significant technological developments in the natural gas industry, it is worthy of note that this industry has been supporting research and development efforts to produce a natural gas-fueled fuel cell which might be installed on the customer's premises to convert directly, the chemical energy of natural gas to electricity. This unit could replace reciprocating engines and turbines as the prime mover in commercial and industrial total energy systems and extend the feasible size range to systems as small as 10 kw 24/. Appendix N summarizes developments in this area.

Oil Imports

The mandatory Oil Import Control Program has been the subject of exhaustive investigation and analysis by a

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24/ One kilowatt is a unit of electrical energy equivalent to 1,000 watts, or 1.341 horsepower.

Cabinet Task Force on Oil Import Control appointed by President Nixon on March 25, 1969. The Task Force under the chairmanship of George P. Shultz, Secretary of Labor, consists of the Secretaries of State, Defense, Treasury, Commerce, Interior and the Director of the Office of Emergency Preparedness. As observers there are representatives of the Department of Justice, the Federal Power Commission, the Office of Science and Technology, the Council of Economic Advisers, the Office of the Special Trade Representatives, and the Bureau of the Budget. I have served as an observer on the Task Force since taking office as Chairman of the Federal Power Commission on August 1, 1969.

A Cabinet Task Force Report has now been completed and I understand it is in process of being printed for submission to the President for his decision regarding revision or modification of the Oil Import Program as the President may determine in the national interest. I am not privileged to comment on the Task Force Report since the Report is confidential until and if released by the White House. However,

there were several public submissions by the Federal Power Commission to the staff of the Task Force which may be of interest in the hearings before the Senate Subcommittee on Minerals, Materials and Fuels conducted by Senator Frank E. Moss as Chairman. My statement attached a copy of the July 31, 1969 policy views of the Commission submitted to the Cabinet Task Force on Oil Import Control. See Appendix A 25/. In addition, the Commission on July 15, 1969 submitted its response to a Task Force questionnaire. (Appendix O)

Conclusion: Gas Supply

We conclude that there is no immediate solution to the gas supply problem. No single factor is determinative in assuring new domestic gas supplies to meet growing demands.

25/ The Commission stated that "the public interest calls for a vigorous exploration program to discover domestic oil and gas reserves, coupled with development of adequate productive capacity for the primary and secondary recovery of such reserves. At the same time, we urge expanded research and development of means to economically process liquid and gaseous fuels from coal and shale reserves and to make greater utilization of solid fuels and nuclear reactive materials." (p. 2)

Strategic considerations governing related investments abroad or on the North Slope of Alaska, the effect on economic incentives of growth rates in investments, sales, profits, cost trends, tax laws, change in oil import policy -- all these factors materially influence the rate of capital commitment to the search for, and development of gas and the magnitude of investment in pipeline and distribution facilities. The precise dimension or magnitude of the gas supply problem cannot be established until probative evidence relevant to the problem has been presented in rate proceedings before the Commission, or until a reliable gas survey has defined supply in relation to deliverability and demand. Analysis of deliverability in relation to projected demand compels the conclusion that we cannot defer decision to protect the consumer or the investor interest pending precise measurement or "mathematical nicety." The public interest requires full, continuous and expeditious examination of the gas supply problem and regulatory and governmental and industry action to assure adequate service to the consumer.

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Current Legislative Program

Review of our current legislative recommendations has not yet been completed by the Bureau of the Budget. We will outline the general nature of these proposals.

We are reviewing a proposal of the Securities and Exchange Commission to transfer the regulatory functions of that Commission under the Public Utility Holding Company Act, 15 U.S.C. 79, to this agency.

Under the Natural Gas Act our current legislative recommendations are four in number. We seek:

1. Broadened Informational Responsibility under the Natural Gas Act.

2. Certificate of Public Convenience and Necessity Authority Prerequisite to Acquisition of Controlling Stock Interest in Natural Gas Pipeline Company and Anti-trust Immunity for Certified Acquisitions Provided Requested Information Is Timely Furnished to Department of Justice.

3. Grant of Commission Jurisdiction over Securities Issues of Natural Gas Companies.

4. Clarification of Commission Jurisdiction over "Natural Gas" Regardless of its Physical State designed to assure continuing regulation of its expanding liquefied natural gas commerce.

Apart from amendments to our Natural Gas Act we also believe a National Gas Survey is needed. We have outlined our current legislative program in further detail in Appendix P

Administrative Actions Relative to Environment -- Administratively, we have undertaken specific rulemakings relating to environment and aesthetic factors arising in the exercise of our hydroelectric licensing authority under Part I of the Power Act (Docket No. R-365), and certification authority relative to natural gas pipeline facilities under the Gas Act (Docket No. R-360). The notices in these two rulemaking proceedings are attached as Appendix L. The electric proceeding is designed to implement procedures for the preservation of environmental, aesthetic and related values in the design, location, construction and operation of project works. The gas proceeding has a similar purpose as environmental and related values are affected by pipeline facilities.

The importance of environmental factors in hydroelectric licensing activities and our staff work has been accelerating 26/. In 1963 we hired a fishery biologist. The Section

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26/ The Commission has a long history of considering environmental issues in electric matters. I have reference to the Commission's work in licensing hydroelectric projects under the 1920 Federal Water Power Act and now under the 1935 Federal Power Act. Licenses have long included provisions for the protection and

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of Recreation, Fish and Wildlife was established within the Division of Licensed Projects of the Commission's Bureau of Power in 1965. Since then, the acquistion of specialized staff in the Bureau of Power has resulted in improved and expanded actions in the planning of recreational facilities, and in the protection of fish and wildlife and environmental values. On December 29, 1969, the Commission established an Office of the Advisor on Environmental Quality to concentrate full time on environmental issues and recommended solutions.

Studies of environmental matters also are being made in the updating of the National Power Survey 27/. These

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26/ Footnote continued from preceding page.

enhancement of fish and wildlife and for the recreational use of licensed project facilities. Attached hereto as Appendix Q is a publication, "Recreation Opportunities at Hydroelectric Projects Licensed by the Federal Power Commission."

27/ The Federal Power Commission, this week established a Task Force on Environment to counsel with the Commission and staff on studies of environmental aspects associated with updating the National Power Survey which will project the growth of the electric power industry to the year 1990. These studies will examine current and projected effects of power system facilities

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27/ Footnote continued from preceding page.

on the quality of air and water environments, upon land use, and upon scenic and historic areas and natural and developed environments. The advisory group will counsel on long-range programs of site selection, data collection, and investigations and research that may appear to be needed to effect timely and satisfactory resolution of questions on preserving and where possible improving these environments.

The Task Force members are:

Mr. Frederick Smith	An associate of Laurance S. Rockefeller; Member of the National Parks Advisory Board in the Department of the Interior and of the Long Island State Park Commission and Parkway Authority; Chairman of the Advisory Committee to the New York State Conservation Department and Chairman of the Advisory Committee to the New York State Recreation Council.
Dr. Rolf Eliassen	Professor of Environmental Engineering, Stanford University, Palo Alto, California.
Mr. Richard H. Stroud	Executive Vice President, Sport Fishing Institute, Washington, D. C.
Dr. Donald I. Mount	Acting Director, National Water Quality Laboratory, Duluth, Minn.
Mr. John R. Quarles	Assistant to Under Secretary of Interior for Environmental Planning.

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27/ Footnote continued from preceding page.

Dr. Frank E. Gartrell	Director, Division of Environmental Research and Development, Tennessee Valley Authority, Chattanooga, Tennessee.
Mr. S. David Freeman	Director, Energy Policy Staff, Office of Science and Technology, Washington, D. C.
Dr. John T. Middleton	Commissioner, National Air Pollution Control Administration, Department of Health, Education, and Welfare, Washington, D.C.
Mr. Joseph J. DiNunno	Special Assistant to General Manager for Environmental Affairs, Atomic Energy Commission, Washington, D. C.
Mr. Bryon O. Lee, Jr.	Assistant to the President, Commonwealth Edison Company, Chicago, Illinois.

The first meeting of the Task Force on Environment will be held in Washington, D. C. on February 9, 1970.

include reports on Aesthetics of Power Facilities; and Problems in Disposal of Waste Heat from Steam-Electric Plants. In addition, the Commission issued a report on Air Pollution and the Regulated Electric Power and Natural Gas Industries. The staff participated in the preparation of the report by the Office of Science and Technology on Considerations Affecting Steam Power Plant Site Selection. It is cooperating with the Office of Science and Technology in further studies of environmental matters. The FPC Chairman serves as an Associate Member of the Standing Committee on Outdoor Recreation of the President's Environmental Quality Council, and also serves as a member of the Interagency Panel on Plant Siting of the President's Office of Science and Technology. Commissioner Bagge headed the Working Committee on Utilities which prepared the 1968 report to the Vice President and to the former Council on Recreation and Natural Beauty on actions required to assure that utility transmission and distribution lines and utility plant sites are compatible with environmental values. The FPC's Chief, Bureau of Power, has been designated as liaison to the National Air Pollution Control Administration for consultation on criteria and control technology documents.

The Commission is considering the advisability of establishing an Advisory Committee on Utilities and the Environment. Such a committee would be broadly representative of environmental interests at Federal, state, regional and local levels, of electric and natural gas utility environmentalists and from organizations of a public nature and individuals who are especially equipped to contribute in this field 28/.

28/ On September 25, 1969, an Electric Power Council on Environment, composed of representatives of the Nation's privately owned electric utility companies, municipal electric systems, rural electric cooperatives, U.S. Department of the Interior and the Tennessee Valley Authority, was formed. The Council's objectives will be (a) coordination of industry environmental programs, (b) encouragement of cooperation between government agencies and the industry, and (c) stimulation of environmental research. Four committees of the Council will cover air pollution, water pollution, land use and aesthetics. The organization is patterned after the Electric Research Council.

The American Public Power Association, on July 14, 1969, established a Committee on Environment. This Committee has formulated a 15-point program designed to assist in providing protection and enhancement of national environmental assets while assuring the availability of an abundant, reliable supply of low-cost electricity.

The National Rural Electric Cooperative Association, in June 1969, established a Subcommittee on Environmental

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These considerations were among those brought out in my testimony before the Joint Committee on Atomic Energy. I there further indicated the extent of some of our substantive regulatory requirements in the environmental field.

These considerations include the effect of project construction and operation on fish and wildlife resources, scenic and recreational values, provision of minimum flows in the interest of water quality, the health and safety of the public, and the effect that steam generating plants and other industrial users will have on the thermal and chemical properties of the project waters. This latter item has become a very important factor in connection with joint use of hydroelectric project reservoirs.

28/ Footnote continued from preceding page.

Control to study the environmental problem and utility operations.

The Edison Electric Institute, which has a Committee of Environment that is responsible for gathering information on all matters of aesthetics and the physical environment as they relate to the electric utility industry. Particular attention is given to the technological and economic problems involved, and the Committee has the responsibility for recommending appropriate activities within the framework of the Institute.

The Commission has required studies of the effect of thermal loading from new units in a steam generating plant to be constructed on Lake Catherine reservoir of Project No. 271 in Arkansas, 40 FPC 522. The Commission in its order of approval authorizing use of the reservoir for cooling water decided it has the authority to develop requirements with respect to thermal pollution more stringent than those specified by the Federal or state agencies. The Commission, in its approval of a 3,000 mw steam-electric plant at Keowee reservoir of Project No. 2503 in North Carolina, 36 FPC 675, required the licensee to monitor the thermal effects of any proposed additional steam plants. The construction of a steam plant on Morris Sheppard reservoir, Project No. 1490, on the Brazos River in Texas, 34 FPC 1507, must be designed and operated to prevent an increase in the temperature of waters to a level which would be detrimental to the fishery and recreational resources. A biological study program is to be undertaken in connection with the operation of the Muddy Run pumped storage project located on the Conowingo reservoir in Pennsylvania to determine the effect of project operation on the aquatic environment, 37 FPC 89.

Because of the transcendent sweep of environmental considerations, we believe regional, state and local interests must be brought actively into this problem. We note with favor the recognition occurring in several states that the siting problems associated with generation and transmission facilities may well be a state-wide or regional consideration.

Our review of activities at the state level indicates that many states have adopted constructive legislative programs and are currently studying the ramifications of siting and environmental factors. These various activities are summarized in the attached Appendix B, Part IV. We have also summarized other relevant administrative actions in Appendix R.

Thank you for granting us this opportunity to discuss with you important policy questions confronting the Commission and our course of action to resolve these issues in the public interest.

List of Appendices to and made a part of the prepared statement of John N. Nassikas, Chairman, Federal Power Commission, presented to the Subcommittee on Energy, Natural Resources, and the Environment of the Committee on Commerce, United States Senate, January 30, 1970.

A. Materials Submitted for the Record on November 13, 1969 and thereafter through November 28, 1969, to the Subcommittee on Minerals, Materials and Fuels of the Committee on Interior and Insular Affairs, United States Senate.

B. Projections of Power Industry Growth, Environmental Considerations, Reliability Policy and Organizations, State and Interstate Authorities and Activities Relating to Power Plant Siting, Takeover or Relicensing of Hydroelectric Projects, Recreation Inventory Program, Federal Power Commission Regulation of the Electric Power Industry Under Parts II and III of the Federal Power Act.

C. Synopsis of Statutes and Executive Orders Related to the Federal Power Act and the Jurisdiction of the Federal Power Commission.

D. Selected Reports of the Federal Power Commission on Consumer Protective Legislation, 91st Congress.

E. Map of Possible Patterns of Transmission Development 1990.

F. Federal and State Commission Jurisdiction and Regulation 1967.

G. Order No. 383-1 (First Revision) Request For Comments On First Revision Of Statement Of Policy issued January 13, 1970.

Order Granting Further Consideration Of Order No. 383 issued October 21, 1969.

Order No. 383 Statement Of Policy issued June 25, 1969.

H. A Review of Consolidated Edison Company 1969 Power Supply Problems And Ten-Year Expansion Plans.

I. Members of Formal Power Pools (Data As Of January 1, 1968).

J. Docket No. R-381 Notice Of Proposed Amendments Of The Uniform System Of Accounts Under The Federal Power Act And The Natural Gas Act To Reflect Changes In Accounting Treatment Of Research And Development Expenditures.

Docket No. R-379 Notice Of Proposed Rulemaking. (Accounting Treatment For Land Held For Future Utility Use and For Profits Or Losses Realized Through Sales of Those Lands).

K. New England River Basins Commission Report December 5, 1969.

L. Docket No. R-360 Notice Of Proposed Statement Of General Policy And Proposed Rulemaking. (Selection, Clearing and Maintenance of Rights-of-Way Routes and Construction and Maintenance of Aboveground Facilities by Natural Gas Companies).

Docket No. R-365 Notice Of Proposed Rulemaking. (Protection and Enhancement of Natural, Historic and Scenic Values in the Design, Location, Construction and Operation of Project Works).

M. Nuclear Stimulation of Gas Reserves.

N. Natural Gas Fueled Fuel Cells.

O. Letter to George P. Shultz, Chairman, Cabinet Task Force on Oil Import Control from Lawrence J. O'Connor, Jr., Acting Chairman, dated July 15, 1969, Submitting Answers to Certain Detailed Questions of the Cabinet Task Force on Oil Import Control.

P. Current Legislative Program.

Q. Recreation Opportunities at Hydroelectric Projects Licensed by the Federal Power Commission.

R. Other Administrative Actions.

APPENDIX B

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

/18 CFR Part 2, § 157.14(a)/7

Selection, Clearing and Maintenance of Rights-of-Way Routes and Construction and Maintenance of Aboveground Facilities by Natural Gas Companies	))))	Docket No. R-360

NOTICE OF PROPOSED STATEMENT OF GENERAL POLICY
AND PROPOSED RULEMAKING

(June 6, 1969)

1. Notice is given pursuant to section 4 of the Administrative Procedure Act that the Commission proposes to issue a statement of policy and amend the Regulations Under the Natural Gas Act, relating to the practices which should be followed by natural gas pipeline companies in the planning, locating, clearing and maintenance of rights-of-way and the construction of aboveground facilities. The proposed policy statement sets forth guidelines which should be followed and provides that, if not followed, the Commission reserves the right to determine the appropriateness of those guidelines adopted by individual pipeline companies. The proposed amendments to the Regulations require the filing of two new exhibits setting forth (a) the consideration given by the Applicant to the feasibility of using existing, rather than additional, rights-of-way and the effect of the proposed facilities upon scenic, historic and recreational values and (b) whether the guidelines contained in the proposed policy statement have been adopted and, if not adopted, what guidelines have been adopted.

2. The construction of natural gas facilities can affect scenic, historic and recreational values which are factors to be considered as part of the public interest by the Commission in determining whether facilities proposed to be

constructed are required by public convenience and necessity. The Commission believes that rights-of-way should be selected to minimize conflict between the natural gas pipeline company rights-of-way and other present and foreseeable uses of the land on which they are to be located.

From our general knowledge, it appears that the proposed guidelines are consistent with the present practices of many natural gas pipeline companies. It has come to the Commission's attention, however, that some facilities authorized by certificates granted under the Natural Gas Act may not have been constructed with adequate consideration of the effect on aesthetic values. Accordingly, the Commission proposes to issue a policy statement and to amend its Regulations Under the Natural Gas Act to set forth guidelines for the selection, clearing and maintenance of rights-of-way routes and the construction and maintenance of aboveground facilities and to require the filing of specific information concerning route selection and construction and maintenance practices. The proposed guidelines are adapted from those set forth in the Report of the Working Committee on Utilities which was submitted on December 27, 1968 to the Vice President of the United States, who was Chairman of the President's Council on Recreation and Natural Beauty.

3. The Commission proposes, subject to consideration of comments by interested parties, to amend Part 2, General Policy and Interpretations, Chapter I, Title 18 of the Code of Federal Regulations by adding a new § 2.66 to read as follows:

> § 2.66 Guidelines to be followed by natural gas companies in the planning, locating, clearing and maintenance of rights-of-way and the construction of aboveground facilities.
>
> (a) In the interest of preserving scenic, historic and recreational values, the construction and maintenance of facilities authorized

by certificates granted under Section 7(c) of the Natural Gas Act should be undertaken in a manner that will minimize adverse effect on these values. Accordingly, the Commission believes that the planning, locating, clearing and maintenance of rights-of-way and the construction of aboveground facilities should, as a general practice, conform to the guidelines set forth below.

(1) Pipeline Construction

(i) Rights-of-way should avoid scenic, recreational and historic areas where practical. If rights-of-way must be routed through scenic, recreational or historic areas, they should be located in corridors least visible from areas of public view.

(ii) Rights-of-way should avoid heavily timbered areas and steep slopes, where practical.

(iii) Right-of-way clearings should be kept to the minimum width necessary to prevent interference of trees and other vegetation with the proposed transmission facilities. Trees which would interfere with construction of the proposed transmission facilities should be selectively cut and removed.

(iv) The time and method of clearing rights-of-way should take into account matters of soil stability, protection of natural vegetation and the protection of adjacent resources.

(v) Trees and other vegetation cleared from rights-of-way in areas of public view should be disposed of without undue delay. If trees and other vegetation are burned, local fire and air pollution regulations should be observed. Tree stumps which are adjacent to roads and other areas of public view should be cut close to the ground or removed.

(vi) Trees, shrubs, grass and top soil which are not cleared should be protected from damage during construction.

(vii) Efforts should be made to prevent clearance of rights-of-way to the mineral soil, except in the ditch itself. Where this does occur in scattered areas of the rights-of-way, the top soil should be replaced and stabilized without undue delay by the planting of appropriate species of grass, shrubs and other vegetation which are properly fertilized.

(viii) Soil which has been excavated during construction and not used should be evenly filled back onto the cleared area or removed from the site. The soil should be graded to comport with terrain of the adjacent land, and the top soil should then be replaced and appropriate vegetation planted and fertilized.

(ix) Terraces and other erosion control devices should be constructed where necessary to prevent soil erosion on slopes on which rights-of-way are located.

(x) Where rights-of-way cross streams or other bodies of water, the banks should be stabilized to prevent erosion. Construction on rights-of-way should not damage shorelines, recreational areas or fish and wildlife habitats.

(xi) Replacement of earth adjacent to water crossings should be at slopes less than the normal angle of repose for the soil type involved and sodding or seeding should be accomplished without undue delay.

(xii) Rights-of-way should cross streams or other bodies of water at low lands rather than at high banks or wild areas, where practical.

(xiii) Blasting should not be done within or near stream channels without adequate protection for fish and other aquatic life.

(xiv) Consideration should be given to use of the so-called "jacking" technique for laying pipe beneath stream beds where approach elevations and soil conditions permit, and where distance and size of pipe are suitable.

(xv) Cofferdam techniques to lay pipe across streams should be used where necessary to permit full flow in one part of the stream while construction work is being performed in another part.

(xvi) Care should be taken to avoid oil spills and other types of pollution while work is performed in streams and other bodies of water.

(xvii) Water used for pipe testing purposes and taken from streams or other bodies of water should be limited to volumes which will not cause harm to the ecology or aesthetics of the area. When the testing water is released, it should be done at least one-fourth mile from the streams or bodies of water into vegetation on levels upland so as not to cause erosion and siltation.

(xviii) Rights-of-way strips through forest and timber areas should be deflected and should follow irregular patterns, provided the overall length is not extended unduly. This will prevent the rights-of-way from appearing as tunnels cut through the timber.

(xix) Rights-of-way strips through forest and timber areas should be cleared with curved, undulating boundaries and trimmed to comport with the topography of the terrain.

(xx) Small trees and plants should be used to feather back the rights-of-way from grass and shrubbery to larger trees.

(xxi) Rights-of-way should not cross hills and other high points at the crests, particularly where such crossing is in forested areas and clearly visible from the highway.

(xxii) Roads used during construction should be stabilized without undue delay by erosion control measures and the planting of appropriate grass and other vegetation. These roads should be designed for proper drainage, and water bars to control soil erosion should be installed.

(xxiii) Rights-of-way should cross hills and mountains obliquely rather than straight up and down the sides.

(xxiv) Where rights-of-way enter dense timber from a meadow or other clearing, trees should be feathered in at the entrance of the timber for a distance of 150-200 yards.

(xxv) Native shrubs and trees should be left in place or planted randomly, with the necessary allowance for safety, near the edges of rights-of-way adjacent to roads.

(2) Right-of-Way Maintenance

(i) Once a cover of vegetation has been established on a right-of-way, it should be properly maintained.

(ii) Access roads and service roads should be maintained with grass cover, water bars and the proper slope in order to prevent soil erosion. They should be jointly used with other utilities, where practical.

(iii) In scenic areas, when chemicals are used for weed control, etc., they should be applied in late autumn or early spring to minimize the impact of temporary discoloration of the foliage. Chemical growth retardants which would cause permanent discoloration of the foliage should not be used. Care should be taken to assure that chemicals used to control the growth of tree stumps do not damage other vegetation.

(iv) During inspection of rights-of-way attention should be given to locate gullies and fallen timber and to observe the condition of the vegetation. The use of aircraft to inspect and maintain rights-of-way should be encouraged.

(3) Construction of Above-Ground Appurtenant Facilities

(i) The proposed design and location of compressor stations, and other above-ground facilities, including meter and regulator stations and communication towers, should be made available to local agencies which have jurisdiction over these matters sufficiently in advance of construction deadlines to permit adequate review.

(ii) Unobtrusive sites should be selected where practical for the location of aboveground facilities.

(iii) Potential noise should be considered when the location for compressor stations is being determined. Such facilities should be located in areas where sound will not be resonated.

(iv) The size of aboveground facilities should be kept to the minimum feasible.

(v) The design of the exterior of compressor stations and other aboveground facilities should comport with the surroundings and other buildings in the area.

(vi) Trees and shrubs should be planted in the areas adjacent to aboveground facilities in order to both conceal and enhance their appearance.

(vii) Storage tanks should be placed below ground where technology and economics make it feasible. If storage tanks must be placed aboveground, their appearance should be enhanced by planting of appropriate trees and shrubs.

(viii) Yards and surrounding areas should be kept clean and free of unused or discarded materials.

(b) If an applicant requesting a certificate to to construct facilities under Section 7(c) of the Natural Gas Act has not adopted the guidelines in paragraph (a) supra, the Commission reserves the right in such certificate proceeding to determine the appropriateness of the construction and maintenance guidelines that have been adopted.

4. The Commission proposes to amend § 157.14(a), Subchapter E, Chapter I of Title 18 of the Code of Federal Regulations by adding new subparagraphs (6-a) and (6-b) to read as follows:

§ 157.14 Exhibits

(a) To be attached to each application.

* * * * * *

(6-a) Exhibit F-I -- Factors considered in location of facilities.

A statement explaining why the location of facilities shown in Exhibit F was selected. The statement shall include the following:

(i) Explanation of what consideration was given to using, enlarging or extending existing rights-of-way belonging either to applicant or to others such as pipelines, electric power lines, and railroads.

(ii) Explanation of what consideration was given to the effect of proposed facilities upon scenic, historic and recreational values. This explanation should indicate

whether the proposed construction will have any effect on any of the districts, sites, buildings, structures, or objects significant in American history, architecture, archeology, and culture, that are included in the National Register maintained by the Secretary of the Interior in accordance with Public Law 89-665 (1966), Sec. 101(a)(1).

(iii) List of federal, state and local agencies which were consulted prior to the filing of the application with respect to matters of facility location and scenic, historic and recreational values.

(6-b) Exhibit F-II -- Statement of instructions to employees or agents of applicant concerning right-of-way and construction activities. A statement indicating whether the guidelines set forth in § 2.66 of this chapter have been issued as instructions to construction personnel of applicant, contractors, sub-contractors, and right-of-way agents for all right-of-way acquisition activity and construction done for applicant. If applicant has not adopted these guidelines it shall file a copy of the instructions it has issued.

5. These amendments to the Commission's General Policy and Interpretations and to the Regulations Under the Natural Gas Act are proposed to be issued under the authority granted by the Natural Gas Act, as amended, particularly sections 7, 16 and 20 thereof (52 Stat. 825, 830, 832, 56 Stat. 84, 15 U.S.C. 717f, 717o, 717s).

6. Any interested person may submit to the Federal Power Commission, Washington, D. C. 20426, on or before July 21, 1969, data, views, and comments in writing concerning the amendments proposed herein. An original and fourteen (14) copies of any such submittals should be filed. The Commission will consider any such submittals before acting on the proposed amendments.

By direction of the Commission.
(S E A L)

Commissioner Carver opposes the issuance of the within notice upon the ground that it is non-regulatory in content and effect.

Gordon M. Grant,
Secretary.

APPENDIX C

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

(18 CFR, 2.12, 4.41, 4.50, 4.71, 4.82)

Protection and Enhancement of Natural, Historic and Scenic Values in the Design, Location, Construction and Operation of Project Works.	))))	Docket No. R-365

NOTICE OF PROPOSED RULEMAKING

(July 29, 1969)

1. Notice is given pursuant to section 553 of the Administrative Procedure Act (5 USC 553) that the Commission is proposing to include a new section 2.12 of the Rules of Practice and Procedure and amend Part 4 of the regulations under the Federal Power Act relating to the implementation of procedures for the preservation of aesthetic and related values in the design, location, construction and operation of project works.

2. There has been an ever increasing concern in the preservation and enhancement of the nation's natural, historic and scenic values. The Court in Scenic Hudson Preservation Conf. v. F.P.C. 354 F2d 608 (CA2 1965), cert. den., sub nom. Consolidated Edison v. Scenic, 384 US 941, interpreted the Commission's power to condition a license pursuant to section 10(a) of the Federal Power Act /41 Stat. 1068, 16 USC 803/ as encompassing "the conservation of natural resources, the maintenance of natural beauty and the preservation of historic sites." Following the passage of the National Historic Preservation Act of 1966 (80 Stat. 915) the Commission has included articles in permits and licenses designed to affect the policies of that Act. On May 2, 1969 by Executive Order No. 11472, President Nixon established the Environmental Quality Council and the Citizens Advisory Committee on Environmental Quality to assist in the preservation and enhancement of scenic, natural and recreational values.

The design, location, construction and operation of a project can affect aesthetic, recreational, and other beneficial public considerations in determining whether the project is best adapted to a comprehensive plan for improving or developing a waterway.

The form and appearance of project works can be improved if creatively designed and constructed. Rights-of-Way can be

planned to utilize the features of the landscape in order to make transmission lines less conspicuous and minimize their effect on the Nation's natural environment. The Commission, by the proposed rulemaking, intends that future applications for licenses and certain applications for amendments to licenses contain exhibits showing the efforts taken toward the preservation and enhancement of aesthetics in the project plans.

3. The Commission proposes to amend Part 2, General Policy and Interpretations, by adding a new section 2.12 to include a policy statement with the provision that the Commission will neither authorize the disposition of any interest in project lands, nor agree to the amendment of any license, for the construction of any facilities without a showing that the facilities will be constructed to preserve aesthetics values.

4. The Commission proposes to amend section 4.41 to prescribe a new Exhibit V for inclusion in applications for license. This exhibit, the text of which is hereinafter set forth, provides for a showing by the applicant of its efforts to preserve and enhance aesthetic values in its plans for the project.

5. The Commission proposes to amend section 4.50 to prescribe a new Exhibit V for inclusion in applications for license for constructed projects. This exhibit, the text of which is hereinafter set forth, consists of a map showing the location of transmission facilities and other project works in relation to recreational areas.

6. The Commission proposes to amend section 4.71 Exhibits J and K by deleting the next to last sentence thereof which will then require the applicant to submit a detailed Exhibit K covering the entire transmission line.

7. The Commission proposes to amend section 4.71 to prescribe a new Exhibit V for inclusion in applications for license. This exhibit is to be the same as Exhibit V of section 4.41.

8. The Commission proposes to amend section 4.82 Exhibit H with reference to an application for a preliminary permit by changing the wording of lines 10 and 11 to include rather than exclude transmission lines.

9. Concurrently with the issuance of any rule the Commission intends to issue a report entitled "Guidelines for the Protection of Natural, Historic, Scenic and Recreational Values in the Design and Location of Rights-of-Way and Transmission Facilities." This report contains the guidelines developed by the Working Committee on Utilities of the President's Council on Recreation and Natural Beauty.

10. These amendments to the Commission's General Policy and Interpretations and to the Regulations Under the Federal Power Act are proposed to be issued under the authority granted to the Federal Power Commission by the Federal Power Act, as amended, particularly sections 4(e), 6, 9, 10, and 309 thereof (41 Stat. 1065, 1067, 1068; 49 Stat. 858; 16 USC 797(e), 799, 802, 803, 825h). Accordingly, it is proposed to amend:

(1) Part 2, Subchapter (A), Chapter I, Title 18, Code of Federal Regulations by adding a new § 2.12 to read as follows:

§ 2.12 Aesthetic design and construction.
The Commission has issued a report entitled "Guidelines for the Protection of Natural, Historic, Scenic and Recreational Values in the Design and Location of Rights-of-Way and Transmission Facilities." It is contemplated that licensees will make maximum utilization of these guidelines in planning transmission facilities as to enhance those values or minimize the adverse effect upon them. Similar consideration should be given to the preservation and enhancement of these environmental values in the planning of other project works. In furtherance of this policy the Commission will not (1) permit the amendment of any license for the purpose of construction of additional facilities or (2) authorize the disposition of any interest in project lands for construction of any type, unless a showing is made that the construction will be designed to avoid conflict with the aesthetics of the area.

(2) Part 4, Subchapter (B), Chapter I, Title 18, of the Code of Federal Regulations by adding Exhibit V to § 4.41 as follows:

§ 4.41 Required Exhibits

* * * * * * *

Exhibit V. A map, together with text, photographs or drawings as may be needed to describe the location of, and architectural design, landscaping and other reasonable treatment to be given to project works, including transmission lines, in the interest of protecting and developing the natural, historic and scenic values and resources of the project area. The exhibit shall include measures to be taken during construction and operation of the project works including temporary facilities such as

roads, borrow and fill areas, and clearing of the reservoir area to prevent damage to the environment and to preserve and enhance the project's scenic values, together with estimated costs of such treatments, location and design. Applicant shall prepare this exhibit on the basis of studies made after consultation with Federal, State and local agencies or organizations and individuals having an interest in the natural, historic and scenic values of the project area, and shall set forth herein the nature and extent of this consultation. To the extent that these requirements have been fulfilled in other Exhibits, a specific reference to the applicable parts of those exhibits will suffice.

(3) Part 4, Subchapter B, Chapter I, Title 18 of the Code of Federal Regulations by adding Exhibit V to § 4.50 as follows:

§ 4.50 Contents

* * * * * * * * *

Exhibit V. A map showing the location of the project's transmission lines, in relation to natural, historic, scenic and recreational areas, and areas set aside for furure recreational development. Appropriate details should be shown to allow for an adequate assessment of the effect of the lines on the areas of public interest If the information desired herein can be shown with sufficient detail on Exhibit K or R this exhibit may be omitted.

(4) Part 4, Subchapter B, Chapter I, Title 18 of the Code of Federal Regulations by adding Exhibit V to § 4.71 as follows:

§ 4.71 Required Exhibits

* * * * * * * *

Exhibits J and K. Maps conforming to the requirements of §§ 4.40 to 4.42, inclusive, for applications for proposed major projects insofar as said requirements are applicable to transmission lines. If the application covers only part of a transmission system, Exhibit J shall show the connection to the nearest

substations or main transmission lines through which the project line obtains and delivers its energy and either the general map or a small key map shall show the relation of the project to the main transmission system of the applicant in that region and to any previously licensed portions of said system. For short lines exhibits J and K may be combined in one map.

* * * * * *

Exhibit V. As prescribed by §§ 4.40 to 4.42 inclusive for applications for proposed major projects insofar as said requirements are applicable to transmission lines.

(6) Part 4, Subchapter B, Chapter I Title 18 of the Code of Federal Regulations by amending Exhibit H of § 4.82 to read as follows:

§ 4.82 Contents of application

* * * * * *

Exhibit H. A general map showing the nature of the proposed project, its principal features and their location, and the location of the project as a whole with reference to some well-known town or stream. On this map shall be placed a line indicating the approximate project boundary of the area to be occupied by the principal project works, such as, dams, reservoirs, forebays, waterways, powerhouses, and transmission lines, and where necessary in order to determine the location of such structures on the ground, there shall be shown on the map their relative positions with respect to permanent monuments or objects that can be readily recognized from desriptions thereof noted on the map. (See specifications for drawings, § 4.42.)

10. Any interested person may submit to the Federal Power Commission, Washington, D. C. 20426, on or before September 15, 1969, data, views, and comments in writing concerning the amendments proposed herein. An original and fourteen (14) copies of any such submittals should be filed. The Commission will consider any such submittals before acting on the proposed amendments.

By direction of the Commission. Commissioner Carver not participating.

Gordon M. Grant,
Secretary.

APPENDIX D

UNITED STATES OF AMERICA
FEDERAL POWER COMMISSION

(18 CFR Parts 101, 104, 105, 201, 204, and 205)

(Accounting Treatment For Land Held For Future Utility Use and For Profits Or Losses Realized Through Sales of Those Lands) Docket No. R-379

NOTICE OF PROPOSED RULEMAKING

(January 22, 1970)

1. Notice is hereby given, pursuant to Section 553 of Title 5 of the United States Code and Sections 301, 302, 303 and 309 of the Federal Power Act (49 Stat. 854, 855, 885, 858, 16 U.S.C. 825, 825a, 825b, 825h), and Sections 8, 9 and 16 of the Natural Gas Act (52 Stat. 825, 826, 830, 15 U.S.C. 717g, 717h, 717o), that the Federal Power Commission is proposing to amend its Uniform System of Accounts prescribed under the Federal Power Act and the Natural Gas Act for licensees, public utilities and natural gas companies to revise the requirement for recording plant in Account 105, Electric (Gas) Plant Held for Future Use, and to establish new accounts for recording the profits or losses realized through the sale of plant held for future utility use.

2. In recent years, our attention has been directed to the concern of utility companies over the growing scarcity of land available for plant sites, transmission lines, and other utility functions. The scarcity of land for these purposes is due, inter alia, to the increase in population, the growing use of water front property for recreational, residential, and industrial sites, and the expanding economy of our country. In addition, the problem is compounded by objections raised to proposed locations of utility properties on the basis of conservation, safety, aesthetics, and other grounds. Consequently, land that is available for utility use is obtainable only at increased costs, which are eventually paid by consumers. It appears that this situation will continue into the future.

3. At present, utility companies under our jurisdiction have been acquiring land under short range planning to meet the present accounting and ratemaking criteria for inclusion in Account 105, Electric (Gas) Plant Held for Future Use, and in rate base. The present requirement for Account 105 permits the land costs to be included therein, if the land purchased was part of a "definite plan" for its use. Periods of less than 10 years have generally been regarded as being part of a company's "definite plan." Ratemaking practice is generally consistent with this accounting procedure. However, under the current economic conditions, we believe that our present accounting and ratemaking policies may be inadequate to meet the future public interest needs of the utility companies and their consumers. Accordingly, we are proposing to revise those policies, to the extent possible, in order to encourage utility management to acquire land for long range utility needs.

4. To meet the future needs of licensees, electric utilities, natural gas companies, and the public, we are considering a revision of, and amendments to, the Uniform System of Accounts prescribed for licensees, electric utilities, and natural gas companies. Specifically, we are considering the revision of Account 105, Electric (Gas) Plant Held for Future Use, by deleting therefrom the requirement pertaining to "definite plan," which will permit the recording therein of land acquired under long range planning.1/ We are not here considering any change in the present accounting treatment of leases acquired for natural gas supply. Accordingly we are considering a new account, Production Properties Held for Future Use, for natural gas companies in order to retain the present accounting procedure for those leases and to provide an appropriate account for leases acquired after October 7, 1969 in accordance with Commission Opinion No. 568 issued October 7, 1969.

1/ Under Proposal C, infra, a new account would be established for land held for future use and the language relating to "definite plan" would not be deleted from Account 105, which would include only electric (gas) plant other than land.

5. In general, it will be our policy to allow the ratemaking treatment of land held for future use to track the accounting treatment prescribed therefor, insofar as such treatment is consistent with the evidence developed in individual cases. It is our intention in following such policy to provide impetus to utility management for prudent acquisition of land for utility purposes well in advance of specific construction needs. This policy, in our opinion, will benefit the consumers in the long run through reducing land costs and assuring sites for future expanded utility needs.

6. We believe this policy will best serve the public interest if electric utilities and natural gas companies acquire land with a view toward preserving environmental quality. To this end, we would encourage all jurisdictional companies to consult with appropriate planning agencies concerned with the orderly development of land within their service areas. In our opinion, the principles set forth herein provide an opportunity for jurisdictional companies to take an important step to establish a beneficial working relationship between agencies concerned with land use planning and utilities.

7. In revising our accounting treatment of these land acquisitions, as herein contemplated, we are aware of certain problems that may arise. If these land acquisitions are included in the utility's rate base, the consumer will then be required to pay, in current rates, return on property that will not be used to provide service until many years later. After years of such payment, the need for that land may be obviated, and management may then sell or otherwise dispose of the land for a profit or loss, thus raising the problem: should the stockholder or the consumer realize the profit or absorb the loss? Under present Commission policy, gains or losses from sales of property are generally treated as nonutility transactions. However, since we propose to liberalize the criteria under which land will be recorded in Account 105, we believe that our present policy on treatment of the gains and losses from the sale or other disposition of that type of property should be re-evaluated. We are presently considering several alternatives. We solicit comments by interested persons on the alternatives discussed below as to the proper method to be adopted by this Commission.

8. First, we are considering a procedure (Proposal A) that will be adaptable for permitting the gains or losses from the sale of property recorded in Account 105 to accrue to the ratepayers. This alternative recognizes the consumer benefit of long range planning and when followed for rate-making purposes would have the ratepayers underwrite the costs of that benefit. This method would require changes in the present Uniform System of Accounts reflected by the proposed revisions set forth in Appendix A attached hereto. Separate new accounts will be established for the gains or losses realized and the results of those transactions will be readily available and ascertainable for use in ratemaking proceedings.

9. A second alternative (Proposal B) would permit the ratepayers to benefit from any gain realized through a transaction disposing of Account 105 property, but would require the stockholders to absorb any loss from such transaction. That loss would be recorded in Account 421.2, Loss on Disposition of Property. This alternative would reflect the fact that the consumers had paid return on property that was never used nor would be used in utility service and would provide, when followed for ratemaking purposes, that any further loss should be absorbed by the stockholders. The argument in support of Proposal B is that if management, the sole authority in buying and selling property, enters into an improvident transaction, it should not be cushioned by further payments from the ratepayers. This alternative would restrain management from entering into indiscriminate land purchases and would discourage management from land speculation with funds provided by utility customers. To achieve this alternative, the proposed changes and revisions set forth in Appendix B hereto will be required.

10. The third alternative considered here (Proposal C) is to permit the utility to capitalize its "carrying charges" on land held for future use, i.e., interest and property taxes, in a manner similar to that allowed by our present policy of recording taxes and interest during construction. In this manner, the consumer benefit is recognized by the capitalization of costs incurred by the utility during the years it has held the property, in a new Account 105.1. It would be our policy that the land and carrying charges would not be included in the rate base until the land was placed in utility service. If the property should be sold prior to its dedication to utility service, the gain or loss would be treated as a nonutility item, since the ratepayer would not have been charged with any of the costs of the property. Under this alternative, the

proposed changes reflected in Appendix C attached hereto will be required.

11. This Amendment to the Commission's Uniform System of Accounts for Public Utilities and Licensees and for Natural Gas Companies, 18 CFR 101, 104, 105, 201, 204 and 205, is proposed to be issued under the authority granted by the Federal Power Act, as amended, particularly sections 301, 302, 303 and 309 thereof (49 Stat. 854, 855, 885, 858, 16 U.S.C. 825, 825a, 825b, 825h) and the Natural Gas Act, as amended, particularly sections 8, 9 and 16 (52 Stat. 825, 826, 830, 15 U.S.C. 717g, 717h, 717o).

12. Any interested person may submit to the Federal Power Commission, Washington, D.C. 20426 on or before March 16, 1970, data, views, and comments in writing concerning the various alternatives set forth above and the proposed changes set forth in the Appendices hereto. An original and fourteen (14) copies of any such submittals shall be filed with the Secretary of the Commission. The Commission will consider any written submittals before taking action in this matter.

13. The Secretary shall cause prompt publication of this notice to be made in the Federal Register.

By direction of the Commission.

Gordon M. Grant,
Secretary.

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PUBLIC UTILITIES AND LICENSEES

1. Proposal A, under which gains and losses on disposition of property would accrue to consumers, proposes to amend Account 105 in Parts 101, 104 and 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations, so that as revised Account 105 would read as follows:

105 Electric plant held for future use

A. This account shall include the original cost of electric plant owned and held for future use in electric service. There shall be included herein property acquired but never used by the utility in electric service, but held for such service in the future, and property previously used by the utility in electric service, but retired from such service and held pending its reuse in the future, in electric service.

* * * *

C. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall notify the Commission of such condition and request approval of journal entries to remove such property from this account. Any gains or losses from the sale or other disposition of such property previously recorded in this account and not placed in utility service shall be transferred to Account 256, Deferred Gains from Sale of Utility Plant, 187, Deferred Losses from Sale of Utility Plant, 411.5, Gains from Sale of Utility Plant, and 411.6, Losses from Sale of Utility Plant, as appropriate, upon approval of such accounting from the Commission.

NOTE A: Materials and supplies, meters and transformers held in reserve, and normal spare capacity of plant in service shall not be included in this account.

NOTE B: Accounts 256 and 187 shall be the appropriate accounts when the gains or losses from sales or other dispositions are sufficiently large so as to warrant amortization over a future period of time. Any insignificant gains or losses would be recorded directly in Accounts 411.5 and 411.6 as appropriate.

2. Proposal A proposes to amend Parts 101, 104 and 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations to add new Accounts 187, 256, 411.5 and 411.6 as follows:

187 Deferred losses from sale of utility plant

This account shall include losses from the sale or disposition of property previously recorded in Account 105, Electric Plant Held for Future Use, where such losses are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Electric Plant Held for Future Use.) The amortization of the amounts in this account shall be made by debits to Account 411.6, Losses from Sale of Utility Plant.

* * * *

256 Deferred gains from sale of utility plant

This account shall include gains from the sale or other disposition of property previously recorded in Account 105, Electric Plant Held for Future Use, where such gains are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Electric Plant Held for Future Use.) The amortization of the amounts in this account shall be made by credits to Account 411.5, Gains from Sale of Utility Plant.

* * * *

411.5 Gains from sale of utility plant

This account shall include, as approved by the Commission, amounts relating to gains from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Electric Plant Held for Future Use.

411.6 Losses from sale of utility plant

This account shall include, as approved by the Commission, amounts relating to losses from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Electric Plant Held for Future Use.

NATURAL GAS COMPANIES

1. Proposal A, under which gains and losses on disposition of property would accrue to consumers, proposes to amend Account 105 in Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations so that as revised Account 105 would read as follows:

105 Gas plant held for future use

A. This account shall include the original cost of gas plant owned and held for future use in gas service. There shall be included herein property acquired but never used by the utility in gas service, but held for such service in the future, and property previously used by the utility in gas service, but retired from such service and held pending its reuse in the future, in gas service. This includes land and land rights held to insure a future supply of natural gas acquired prior to October 8, 1969.

* * * *

C. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall notify the Commission of such condition and request approval of journal entries to remove such property from this account. Any gains or losses from the sale or other disposition of such property previously recorded in this account and not placed in utility service shall be transferred to Accounts 256, Deferred Gains from Sale of Utility Plant; 187, Deferred Losses from Sale of Utility Plant; 411.5, Gains from Sale of Utility Plant; and 411.6, Losses from Sale of Utility Plant, as appropriate, upon approval of such accounting from the Commission.

* * * *

NOTE B: Include in this account natural gas wells shut in after construction which have not been connected with the line; also, natural gas wells which have been connected with the line but which are shut in for any reason excepting seasonal excess capacity or governmental proration requirements or for repairs, provided that the related production leases were acquired prior to October 8, 1969.

NOTE C: Accounts 256 and 187 shall be the appropriate accounts when the gains or losses from sales or other dispositions are sufficiently large so as to warrant amortization over a future period of time. Any insignificant gains or losses would be recorded directly in Accounts 411.5 and 411.6 as appropriate.

2. Proposal A proposes to amend Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations to add new Accounts 105.1, 187, 256, 411.5 and 411.6 as follows:

105.1 Production properties held for future use

A. This account shall include the cost of production properties acquired after October 7, 1969, held under a definite plan for future use to ensure a future supply of natural gas for use in pipeline operations. This shall include the cost of: land held in fee, leaseholds, gas rights, rights-of-way, other land rights, and any related structures or equipment which were acquired for a future supply of natural gas for pipeline operations but which are not currently in service.

B. The property included in this account shall be classified according to the detailed accounts (Accounts 325.1 to 347) prescribed for natural gas production and gathering plant in service and such classification shall be maintained in the same detail as though the property were in service.

187 Deferred losses from sale of utility plant

This account shall include losses from the sale or disposition of property previously recorded in Account 105, Gas Plant Held for Future Use, where such losses are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Gas Plant Held for Future Use.) The amortization of the amounts in this account shall be made by debits to Account 411.6, Losses from Sale of Utility Plant.

256 Deferred gains from sale of utility plant

This account shall include gains from the sale or other disposition of property previously recorded in Account 105, Gas Plant Held for Future Use, where such gains are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Gas Plant Held for Future Use.) The amortization of the amounts in this account shall be made by credits to Account 411.5, Gains from Sale of Utility Plant.

411.5 Gains from sale of utility plant

This account shall include, as approved by the Commission, amounts relating to gains from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Gas Plant Held for Future Use.

411.6 Losses from sale of utility plant

This account shall include, as approved by the Commission, amounts relating to losses from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Gas Plant Held for Future Use.

PUBLIC UTILITIES AND LICENSEES

1. Proposal B, under which gains from the disposition of property would accrue to consumers and losses on such disposition would be absorbed by stockholders, proposes to amend Account 105 in Parts 101, 104 and 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations, so that as revised Account 105 would read as follows:

105 Electric plant held for future use

A. This account shall include the original cost of electric plant owned and held for future use in electric service. There shall be included herein property acquired but never used by the utility in electric service, but held for such service in the future, and property previously used by the utility in electric service, but retired from such service and held pending its reuse in the future, in electric service.

* * * *

C. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall notify the Commission of such condition and request approval of journal entries to remove such property from this account. Any gains from the sale or other disposition of such property previously recorded in this account and not placed in utility service shall be transferred to Accounts 256, Deferred Gains from Sale of Utility Plant, and 411.5, Gains from Sale of Utility Plant, as appropriate, upon approval of such accounting from the Commission.

* * * *

NOTE C: Account 256 shall be the appropriate account when the gains from sales or other dispositions are sufficiently large so as to warrant amortization over a future period of time. Any insignificant gains would be recorded directly in Account 411.5.

2. Proposal B proposes to amend Parts 101, 104 and 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations, to add new Accounts 256 and 411.5 as follows:

256. Deferred gains from sale of utility plant

This account shall include gains from the sale or other disposition of property previously recorded in Account 105, Electric Plant Held for Future Use, where such gains are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Electric Plant Held for Future Use.) The amortization of the amounts in this account shall be made by credits to Account 411.5, Gains from Sale of Utility Plant.

411.5 Gains from sale of utility plant

This account shall include, as approved by the Commission, amounts relating to gains from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Electric Plant Held for Future Use.

NATURAL GAS COMPANIES

1. Proposal B, under which gains from the disposition of property would accrue to consumers and the losses from such disposition would be absorbed by the stockholders, proposes to amend Account 105 in Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations, so that as revised Account 105 would read as follows:

105 Gas plant held for future use.

A. This account shall include the original cost of gas plant owned and held for future use in gas service. There shall be included herein property acquired but never used by the utility in gas service, but held for such service in the future, and property previously used by the utility in gas service, but retired from such service and held pending its reuse in the future, in gas service. This includes production properties held to insure a future supply of natural gas acquired prior to October 8, 1969.

* * * *

C. In the event that property recorded in this account shall no longer be needed or appropriate for future utility operations, the company shall notify the Commission of such condition and request approval of journal entries to remove such property from this account. Any gains from the sale or other disposition of such property previously recorded in this account and not placed in utility service shall be transferred to Accounts 256, Deferred Gains from Sale of Utility Plant, and 411.5, Gains from Sale of Utility Plant, as appropriate,upon approval of such accounting from the Commission.

* * * *

NOTE B. Include in this account natural gas wells shut in after construction which have not been connected with the line; also, natural gas wells which have been connected with the line but which are shut in for any reason excepting seasonal excess capacity or governmental proration requirements or for repairs, provided that the related production leases were acquired prior to October 8, 1969.

NOTE C. Account 256 shall be the appropriate account when the gains from sales or other disposition are sufficiently large so as to warrant amortization over a future period of time. Any insignificant gains would be recorded directly in Account 411.5.

2. Proposal B proposes to amend Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations, to add new Accounts 105.1, 256 and 411.5 as follows:

105.1 Production properties held for future use.

A. This account shall include the cost of production properties acquired after October 7, 1969, held under a definite plan for future use to ensure a future supply of natural gas for use in pipeline operations. This shall include the cost of land held in fee, leaseholds, gas rights, rights-of-way, other land rights, and any related structures or equipment which were acquired for a future supply of natural gas for pipeline operations but which are not currently in service.

B. The property included in this account shall be classified according to the detailed accounts (Accounts 325.1 to 347) prescribed for natural gas production and gathering plant in service and such classification shall be maintained in the same detail as though the property were in service.

256 Deferred gains from sales of utility plant.

This account shall include gains from the sale or other disposition of property previously recorded in Account 105, Gas Plant Held for Future Use, where such gains are significant and are to be amortized over a period of time of from three to five years as approved by the Commission. (See Account 105, Gas Plant Held for Future Use.) The amortization of the amount in this account shall be made by credits to Account 411.5, Gains from Sale of Utility Plant.

411.5 Gains from sale of utility plants.

This account shall include, as approved by the Commission, amounts relating to gains from the sale of utility plant including amounts which were previously recorded in and amortized from Account 105, Gas Plant Held for Future Use.

PUBLIC UTILITIES AND LICENSEES

1. Proposal C, under which carrying charges would be allowed to accrue on land held for future utility use, proposes to amend Account 105 in Parts 101, 104 and 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations, so that as revised Account 105 would read as follows:

105 Electric plant held for future use

A. This account shall include the original cost of electric plant, other than land, owned and held for future use in electric service under a definite plan for such use. There shall be included herein property acquired but never used by the utility in electric service, but held for such service in the future under a definite plan, and property previously used by the utility in electric service, but retired from such service and held pending its reuse in the future under a definite plan, in electric service.

* * * *

2. Proposal C proposes to amend Parts 101, 104 and 105 of subchapter C, Chapter I, Title 18 of the Code of Federal Regulations, to add new Account 105.1 as follows:

105.1 Land held for future use

A. This account shall include the original cost of land owned and held for future use in electric service. There shall be included herein land acquired but never used by the utility in electric

service, but held for such service in the future, and land previously used by the utility in electric service, but retired from such service and held pending its reuse in the future in electric service.

B. The land included in this account shall be classified according to the detailed accounts (301 to 399) prescribed for electric plant in service and the account shall be maintained in such detail as though the property were in service.

C. On and after _____ 1/,utilities are allowed to accumulate carrying charges on land in this account until such time as construction is started. The carrying charges are to be computed on the same basis as "interest during construction" allowed in electric plant instructions 3(17).

In the event that such land included in this account is no longer required or appropriate for future electric plant operations, then, upon the sale or other disposition of such land, the company shall request approval from the Commission of the journal entries removing such land from this account. Any gains or losses, including the effect of the accumulation of the carrying charges, incurred upon the sale or disposition of land previously included in this account shall be recorded as a nonutility transaction in Accounts 421.1, Gain on Disposition of Property, and 421.2, Loss on Disposition of Property, as appropriate.

3. Proposal C would also require the amendment of Account 121 in Parts 101, 104, 105, subchapter C, Chapter I, Title 18 of the Code of Federal Regulations to read as follows:

121 Nonutility property

A. This account shall include the book cost of land, structures, equipment or other tangible or intangible property owned by the utility, but not used in utility service and not properly includible in accounts 105, Electric Plant Held for Future Use, or 105.1, Land Held for Future Use.

*. * * *

1/ Effective date of order

NATURAL GAS COMPANIES

1. Proposal C, under which carrying charges would be allowed to accrue on land held for future utility use, proposes to amend Account 105 in Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations, so that as revised Account 105 would read as follows:

105 Gas plant held for future use

A. This account shall include the original cost of gas plant, other than land appropriately included in Accounts 105.1 or 105.2, owned and held for future use in gas service under a definite plan for such use. There shall be included herein property acquired but never used by the utility in gas service, but held for such service in the future under a definite plan, and property previously used by the utility in gas service, but retired from such service and held pending its reuse in the future, under a definite plan, in gas service. This account includes production properties held to ensure a future supply of natural gas acquired prior to October 8, 1969.

* * * *

Note B. Include in this account natural gas wells shut in after construction which have not been connected with the line; also, natural gas wells which have been connected with the line but which are shut in for any reason excepting seasonal excess capacity or governmental proration requirements or for repairs, provided that the production properties were acquired prior to October 8, 1969.

2. Proposal C proposes to amend Parts 201, 204 and 205 of subchapter F, Chapter I, Title 18 of the Code of Federal Regulations, to add new Accounts 105.1 and 105.2 to read as follows:

105.1 Land held for future use

A. This account shall include the original cost of land owned and held for future use in gas service, exclusive of production properties. There shall be included herein land acquired but never used by the utility in gas service, but held for such service in the future, and land previously used by the utility in gas service, but retired from such service and held pending its reuse in the future in gas service.

B. The land included in this account shall be classified according to the detailed accounts (301 to 399) prescribed for gas plant in service and the account shall be maintained in such detail as though the property were in service.

C. On and after _____ 1/companies are allowed to accumulate carrying charges on land properly included in this account until such time as construction is started. The carrying charges are to be computed on the same basis as "interest during construction" allowed in gas plant instruction 3(17).

In the event that such land included in this account is no longer required or appropriate for future gas operations, then, upon the sale or other disposition of such land, the company shall request approval from the Commission of the journal entries removing such land from this account. Any gains or losses, including the effect of the accumulation of the carrying charges, incurred upon the sale or disposition of land previously included in this account shall be recorded as a nonutility transaction in Accounts

1/ Effective date of order

421.1, Gain on Disposition of Property, and
421.2, Loss on Disposition of Property, as appropriate.

105.2 Production properties held for future use

A. This account shall include the original cost of production properties acquired after October 7, 1969, and held under a definite plan for future use to insure a future supply of natural gas for use in pipeline operations. This shall include the cost of land held in fee, leaseholds, gas rights, rights-of-way, other land and land rights, and any related structures or equipment which were acquired for a future supply of natural gas for pipeline operations, but which are not currently in service.

B. The property included in this account shall be classified according to the detailed accounts (Accounts 325.1 to 347) prescribed for natural gas production and gathering plant in service and such classification shall be maintained in the same detail as though the property were in service.

Note A. Include in this account natural gas wells shut in after construction which have not been connected with the line; also, natural gas wells which have been connected with the line but which are shut in for any reason excepting seasonal excess capacity or governmental proration requirements or for repairs, provided that the production properties were acquired after October 7, 1969.

3. Proposal C would also require the amendment of Account 121 in Parts 201, 204 and 205, subchapter F, Chapter I, Title 18 of the Code of Federal Regulations, as follows:

121 Nonutility property

A. This account shall include the book cost of land, structures, equipment or other tangible or intangible property owned by the utility, but not used in utility service and not properly includible in accounts 105, Gas Plant Held for Future Use, 105.1, Land Held for Future Use, or 105.2, Production Properties Held for Future Use.

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The CHAIRMAN. Our last group this morning will be a panel consisting of Mr. Thomas L. Kimball, executive director, National Wildlife Federation and Mr. Gordon K. Zimmerman, executive secretary, National Association of Soil and Water Conservation Districts.

We will adjourn until 2 o'clock after hearing from these witnesses, and the remaining witnesses will be heard this afternoon.

Mr. Kimball, we are delighted to welcome you, and Mr. Zimmerman also, to the committee. Who will lead off?

Mr. KIMBALL. I will lead off, Mr. Chairman.

In the interest of time, may we submit our statements, and then we will attempt to summarize.

The CHAIRMAN. They will be included in full. Go ahead and summarize.

STATEMENT OF THOMAS L. KIMBALL, EXECUTIVE DIRECTOR, AND GORDON K. ZIMMERMAN, EXECUTIVE SECRETARY, NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS

On behalf of the National Association of Conservation Districts I want to express our appreciation to Senator Jackson for the introduction of S. 3354, "To amend the Water Resources Planning Act to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning."

The bill, and the hearings being held by this committee with respect to it, serve to focus new and urgently needed attention on one of the Nation's most basic and neglected resources. For most of our early history, the United States had an abundance of land of all kinds for most all purposes. In the intervening years, as our population and demands on the land increase, we have generally continued to act as though land of all kinds was plentiful. We have not been selective in land use. Until very recently, we have tended to function as though every acre was equal in its capabilities to every other acre.

In the National Association of Conservation Districts we have been deeply concerned for the past several years about the indiscriminate, and frequently wasteful uses to which our lands are being put. We have been worried, too, about how little attention was being given to land-use problems, and how little was actually known about land conditions. In the same vein, we have been troubled by the virtually complete failure of government programs bearing on land use to anticipate oncoming needs.

More than a year ago, we took a position in support of:

> Establishment of a Senate Select Committee on Land Resources to study the relation of the privately-owned land resource activities in the United States to the national interest and the extent and character of land resource activities, both governmental and nongovernmental, that will be required to take care of the Nation's needs for lands of all kinds and capabilities for all purposes between now and the year 2000; and to make such recommendations with respect to governmental policies and programs pertaining to privately-owned lands as may be appropriate.

It was our position then—before the introduction of S. 3354—that the Nation ought to have the benefit of the same kind of searching study and analysis of land resources that had been given so successfully to

water resources by the Senate Select Committee on National Water Resources under the chairmanship of the late Senator Robert Kerr of Oklahoma.

The present and long-range interests of the Nation in its publicly owned lands have been receiving thorough study by the Public Land Law Review Commission. Now, either under the leadership of a Select Committee on Land Resources or through a broadening of the responsibilities of the Water Resources Council, as proposed in S. 3354, the country urgently needs to give the same kind of attention to its privately owned lands.

We live by and with these lands. They are limited in extent and highly vulnerable to damage and waste. Today they are under pressures that are unprecedented. A growing economy, a broadening technology, and an increasing population are demanding more and more from land—more uses, more products, and on all sides a better environment for living.

In this setting, the arithmetic of landownership is exceedingly important. It underscores where most of the work must be done and by whom.

Three-fifths of all the land in the United States is owned by citizens. The arithmetic shows that of a total of approximately 2,266 million acres in the 50 States, somewhat more than 1,370 million are privately held. If we consider the contiguous 48 States, the arithmetic shows that about three-fourths of the land is privately owned.

More than land itself is involved in this ownership pattern. With the land are all the interrelated resources of water, timber, game, fish, and wildlife. The meaning of this is clear. Individual citizens control most of the American countryside, landscape, and natural resources. It is on this privately owned land that the biggest and most difficult job of resource management is being performed. This is where, by necessity, it will have to be performed in the future.

S. 3354 speeds up the hour at which the Nation would start coming to grips with the whole complex of land-people problems. In a sense, it would leapfrog past the kind of study undertaken in the case of water by the Senate Select Committee on National Water Resources, and in the case of public lands by the Public Land Law Review Commission. The major factfinding responsibility would be assigned, instead, to a Land and Water Resources Planning Council.

The bill would require the Council to "Maintain a continuing study of the adequacy of administrative and statutory means for the coordination of Federal programs which have an impact upon land use and of the compatability of such programs with State and local land-use planning and management activities." It would also be called on to "appraise the adequacy of existing and proposed Federal policies and programs which affect land use" and make recommendations to the President with respect to such policies and programs.

Presumably it would be the Council, under these provisions, that would give consideration to the protection and future use of the Nation's 47 million acres of prime cropland. This is the rich, level, well-drained and relatively scarce land—only 2 percent of the country's privately owned acreage—that is rated class 1 by the Department of Agriculture.

Presumably it would be the Council that would give consideration to the Nation's needs for vastly increased production of wood products, as well as environmental use, on the 300 million acres of nonindustrial private forests.

It would be the Council, if we are reading the bill correctly, that would be giving consideration to the extent and timetable of land reclamation by irrigation and drainage, to the protection of lands uniquely suitable for wildlife, to the effects of tax policies on land use, and to the oncoming land requirements for recreation, transportation, suburban and industrial development, and a host of other purposes.

Without doubt, there is need for top-level governmental consideration of these and many other aspects of land use. There is need for the kind of coordinated analysis proposed by the bill. A land and water resources planning council, with the range of responsibilities set forth, may be the best means of achieving these vital purposes. Certainly it would have the advantage of employing an existing agency of Government, rather than creating a wholly new one.

Two serious questions come to mind, however. One pertains to money and the other to the structure of the Congress itself.

In the final analysis, most resource decisions are budgetary decisions. To what extent would be budgetmakers in the executive branch, and the Appropriations Committees of the Congress, be responsive to the recommendations of the Land and Water Resources Planning Council?

Vital decisions affecting the nature and future of land use in our country are regularly made by several committees of the Senate and House. To what extent can we expect that Council recommendations for the coordination of programs, projects, and policies affecting land use would receive a coordinated consideration and judgment by the Congress?

We are mindful, too, that Congress just recently provided for the establishment of a Council on Environmental Quality, with a wide range of responsibilities affecting land use. The relationship of the Land and Water Resources Planning Council and the Council on Environmental Quality should be clarified.

Landownership and elements of private property in all their ramifications are so pervasive in our society, so deeply rooted in our culture and institutions, that guidance and planning in land use and management will not be brought about easily. Nevertheless, it is becoming increasingly evident that land cannot continue to be regarded as a simple commodity in an economic jungle. Neither can we continue forever with the headlong operation of a land pricing system that not only permits speculation but very often grants unlimited choice of land use with the downpayment.

S. 3354 seeks to provide a remedy for some of these problems and elevate the position of land as a vital resource. The National Association of Conservation Districts applauds these purposes.

Mr. KIMBALL. Mr. Chairman, as far as the National Wildlife Federation is concerned, we wholeheartedly support S. 3354 and commend you, Mr. Chairman, for your recognition of the real problem in America of land use planning.

We think the time is long overdue that we need it, and we think that this bill goes a long ways toward providing the facility to do it.

In the beginning, what determines the wealth and progress of the Nation is a good piece of real estate, and we think we have perhaps the greatest chunk of real estate in the whole world in the United States, and our philosophy of development up to now has been described by some people as the frontier ethic, where our waters need to be retained, and our land subdued, and I think that era has now passed, and now that we are perhaps the greatest industrialized nation on earth, and we are beginning to consecrate our people in smaller and smaller enclaves that it poses problems that require a change in attitude.

Previously our tradition has been that if a person owns a piece of real estate, he has a right to do anything he wants to, but now, I think that we have to change that philosophy a little bit, and say he can do what he wants to do with it after giving careful consideration to what he does, and the effect it has on his neighbors and community and the State, and the Nation, and so one has to sit in judgment to make sure that those types of actions are in the overall public interest.

I like your carrot stick approach, Mr. Chairman, to encourage the States to do this, and I like to back up to within a reasonable length of time that if this is not progressing satisfactorily, that the Federal authorities step into the gap.

The CHAIRMAN. Mr. Kimball, do you have more?

Mr. KIMBALL. No, I am finished, Mr. Chairman. I thank you for an opportunity to summarize my remarks.

The CHAIRMAN. Is your judgment similar to that of some of us on the committee that the States at least have not been able to do this job based on the experience up to date. I am referring of course to the job of planning for statewide or regional planning, in which all the appropriate interests of our society, conservation, wildlife preservation, open space, industrial sites including utility requirements are not being properly planned and zoned for?

Mr. KIMBALL. I think that is a correct statement. Mr. Chairman, and I agree with it wholeheartedly, and I think even on the Federal level, it has not been done properly.

The CHAIRMAN. Right. The efforts must be coordinated, the zoning of our Federal lands as well as the non-Federal lands.

Mr. KIMBALL. That is correct.

The CHAIRMAN. That is a very fine statement, and coming from a very fine organization, the National Wildlife Federation, Mr. Kimball, it is very helpful to us.

Mr. Zimmerman, you may go ahead now and make your comments.

Mr. ZIMMERMAN. I would like to join with Mr. Kimball, in expressing the appreciation of our association, 3,000 conservation districts across the country that have for 30 years been trying to deal with land-use problems, and at the extremely local level.

We have thought for a long time that there was an urgent need for an expression of national land-use policy, and we must say that we are delighted, the districts everywhere are, that the chairman of this committee has taken this kind of initiative.

I would like to mention one or two problems that worry us, not particularly in the bill, but which arises because the bill focuses attention on the problem.

It is perfectly proper to include and assign responsibilities to the States where the development of State land-use planning, but mind-

ful, however, in land-use planning particularly, this kind of planning responds to certain national goals, particularly national resource goals.

In the bill, certainly responsibility would be assigned to the Land and Water Resources Planning Council, but at the point of which these recommendations which were made by the Council to the President sooner or later must come to the Congress, and I am not aware of any good system for coordinating the various committees of the Congress to implement recommendations of this kind in a coordinated way.

We have had this problem a long time, the different attitudes of the Public Works Committee, of the Agriculture Committee, Interior Committees, and others which have strong bearing on what is done with resources, equally, the Appropriations Committees to that effect, have had these various kinds of progress, so we urge that the committee give further attention to some procedure or process whereby a total package of resource goals could be established, or wrote into being, and the ways in which the Congress itself could address itself to these goals.

What we do, what is done in the Agricultural Committee, what is done in the Public Works Committee, and in the various Committees on Appropriations, substantially affects what we will do in the future.

I would like to conclude that we are delighted the chairman has introduced this bill to get some action in this direction.

It is long, long overdue. We are wasting millions of acres in many various ways, and this kind of action is desperately needed.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Zimmerman.

I am sorry I had to step out. I gather that you are concerned with the coordination problem, and we can understand it.

As for the number of committees dealing with the environment, I must say this is inevitable because the environment covers everything.

There is no area of immunity. We do hope however, that the findings and recommendations of the Council will be widely disseminated. We on the Hill have to work out a means by which the various aspects of given problem will be referred to the appropriate committees and acted upon.

I think we can do that. I really do.

Mr. ZIMMERMAN. There is some objection, I gather, to joint committees, but I don't know of any kind of way to get at this problem.

The CHAIRMAN. Well, we cannot have one legislative committee on the environment. I do not think this will work. We are working on a non-legislative joint committee, to hold hearings and that sort of thing, but the efficiency, the effectiveness of the committee structure would be violated by a single legislative committee on the environment. There would be just one committee up here, because every committee in the Congress has some aspects of the environmental problem. Let's just take the Armed Services Committee. Many matters with which it is concerned have tremendous impact on the environment. They have some 30 million acres of land, not counting their activities.

Mr. ZIMMERMAN. There has been some problem of the activity, and not merely a renaming of the Department of the Interior either, but I think it would necessitate a similar environmental committee in Congress to hold hearings on its projects and its programs and so

forth, and that is at least perhaps one of the solutions that will probably be raised.

The CHAIRMAN. This is a possibility, but we are working on a joint committee on the environment with a nonlegislative procedure, so we can marshall the facts and the information, and then coordinate activities with the appropriate legislative committee.

There would be great concern if we had one legislative committee on the environment. The problem there is that you would have to involve every other committee of the Congress at the same time.

I do not know how we would get to it. It is a tough one, but the main thing is to get some of the basic laws on the books that we need. This act we are considering today is a beginning, and we hope that by attacking the pollution of the land also with the use of the National Environmental Policy Act, we may well be dealing with a central issue in this environmental hassle.

If we can get some order out of chaos on land planning, then we will be on our way to developing for a program that at least will help us in fighting air pollution and water pollution. We will also lay the groundwork for a new towns concept and get away from the great urban sprawl that is rapidly becoming a disaster to the American scene.

Mr. KIMBALL. It is not a pollution problem, but a land problem. I am sure some of you will understand what I mean. Those that are highly concerned about protecting habitat lands, wetlands, marshlands, and we also have a very rare and unique category of land that the Department of Agriculture classified as class 1 land.

It is land with capability for truck crop productions, and now this land is being polluted, but not in the customary sense.

It is being soaked up by suburban developments, by highways, by airports, and you just cannot replace this land to agriculture. This class 1 land is just being pushed farther and farther away from markets by these developments. Now, it seems to me before we could have a good exercise of State land-use planning, we have to have some kind of national purpose on these unique lands as we do with the wetlands.

The CHAIRMAN. Russell Train testified yesterday about a panel set up to deal with tax policy, and its impact on land use matters.

I think the problem that you have just mentioned has its basis in the tax policies, too. Property taxes go up on some of these lands. We have witnessed the value of lands fluctuate from $40 an acre to $15,000 an acre in the last few years. As the taxes go up, the farmer is compelled to stop farming and sell his land.

Now, this is an aspect of land-use policy that we hope would be covered in State planning, so that we could avoid the danger that is inherent in this kind of situation.

Very fine agricultural lands are being lost to industrialization, which is considered the best and highest use of these lands. This is one of the great tragedies, and this is one of the reasons why zoning has to take place early.

Mr. ZIMMERMAN. That is one of the reasons why this action is imperative, if we are going to use all of our class 1 land, for every other conceivable purpose other than growing crops, we cannot grow those crops on class 2 or 3, and 4 agricultural lands, so eventually down

the road we will follow the same process that previous civilizations have done, squandered and utilized their resources in an unplanned way until they become a have-not nation depending on the wealth of other peoples to get by.

The CHAIRMAN. This is where we will run into some hassles. Let's face it.

Mr. ZIMMERMAN. And some opposition.

The CHAIRMAN. That is an understatement. Both opposition and hassles. It will be an explosion. We can avoid a lot of that by laying out the requirements well in advance, and on a statewide basis.

It seems to me this is fundamental to the solution of the problem posed by Mr. Zimmerman. It makes no sense, does it, really, to turn around and take your limited class 1 land, and use it as a base for a nonfarm purpose, when that type of land is limited?

At the same time, our population is increasing, and intervention is needed at some point surely. We are really aggravating the Malthusian theory when we have such disorderly land usage in connection with heavy loss of this class 1 land.

Mr. ZIMMERMAN. Unless we wind up with some kind of protection, we could end up in 30 or 40 years with our crop production in Mexico. I do not think we can really solve it unless we can convince the majority of the people in the United States that this type of land use planning is in the overall public interest.

What happens is that the average citizen, he goes about his daily pursuits, those who have a monetary interest, doing with lands what they want to do, and they are the ones that govern in the final analysis what actually happens, and that is not necessarily in the overall public interest, so in some way we have got to inform people that this is what they face, and get their active interest and support, although they may not have a particular or monetary interest in land use planning.

Senator STEVENS. We may well be entering the field of constitutional amendments. I am sure you realize that, in terms of the comments both of you have made.

Although you might be able to approach your suggestion, Mr. Zimmerman, in the same way we approach the concept in terms of protecting the areas surrounding the national parks, Mr. Chairman, I note in Committee Print No. 2, there are some suggestions in Mr. Zimmerman's area, and perhaps he might want to review that in the point of view on the increased impact in agricultural concepts.

The CHAIRMAN. We welcome any subsequent comments. After reading the latest committee print, you can drop us a note, and go over the bill indicating what you think should be offered in the way of amendments or suggestions.

Mr. ZIMMERMAN. We appreciate the opportunity very much.

The CHAIRMAN. Thank you very much for your very fine statements.

We are holding these hearings sincerely to get ideas, and we use this to get people involved with constructive suggestions, and we will go over this record very carefully so that we get a bill out which will be good. We are anxious to pass a bill out of this committee and get Senate action within the next few weeks, so we welcome your help and cooperation, as we have always received it in the past.

Thank you very much. We will start this afternoon with the panel from the American Law Institute at 2 o'clock.

(Whereupon, the committee was in recess until 2 o'clock.)

AFTER RECESS

(The committee reconvened at 2 p.m., Senator Mike Gravel presiding.)

Senator GRAVEL. The committee will be in order.

We will now hear from a panel consisting of Prof. Allison Dunham and Mr. Fred P. Bosselman, reporters for the American Law Institute's project to develop a model land development code.

STATEMENTS OF PROF. ALLISON DUNHAM AND FRED P. BOSSELMAN, REPORTERS FOR THE AMERICAN LAW INSTITUTE'S PROJECT TO DEVELOP A MODEL LAND DEVELOPMENT CODE

Mr. DUNHAM. My name is Allison Dunham, a professor of law at the University of Chicago.

We serve as reporter and associate reporter of the American Law Institute's Model Land Development Code.

We would like to thank the chairman for the invitation to describe the work in which we are engaged and its possible relevancy to your consideration of S. 3354 before you.

We appear, as the chairman knows, solely in our individual capacity. One very important reason for this is the fact that preparation of the model code, by the law institute, has not advanced to a point where it can be said that the institute has a position on any of our proposals.

It is our duty as reporters to formulate issues for consideration by the institute and to prepare draft legislation which offers a proposed resolution of the conflicts which appear.

To date, no more than this tentative position taken by Mr. Bosselman and me has happened because the institute has not had an opportunity to consider our tentative proposals, or any matter connected with the State regulation of land use.

The project of the American Law Institute to draft new city planning, zoning and State planning laws, started some years ago when the institute concluded that it could render an educational service to many persons and groups by a critical examination and reworking of the law relating to public control of land use and land development.

At the time this project was commenced, State laws dealing with planning and control of land use were almost uniformly based on model legislation which had been drafted by the Department of Commerce in the 1920's, the Standard Zoning Enabling Act and the Standard City Planning Enabling Act.

These models, as their titles indicate, took the form of State legislation enabling or authorizing various classes of local government to establish planning agencies and to enact ordinances which regulated various aspects of private use of land.

For this historical reason, among others, the reporters started with reformulation of the grants of power from the State legislature to local government.

At the annual meeting of the institute in this city in May, there will be submitted for discussion a small portion of the code dealing with proposed revisions and procedures for the planning and regulation of land use by local governments. The institute has a rigorous process of study and discussion prior to final approval.

We, as reporters, prepare initial drafts which are discussed with one or more committees of expert advisers and consultants. These drafts are intended to identify issues and formulate resolutions of policy conflicts.

After revision on the basis of these discussions, the drafts are submitted to members of the council of the institute for their thorough review.

If approved by the council, the drafts are submitted to the membership of the American Law Institute for discussion, as a portion will be this coming month.

Only after a model has gone through a number of drafts and has been studied on a line by line basis at several meetings will there be any consideration of final approval by the institute. Final approval of a portion is not sought until the whole has been considered.

The model land development code is at a relatively early stage in this process. As I have indicated, the portion of land planning law currently being formulated treats with the grants of power and procedures for regulation by local government. At this moment in time there has been presented for institute consideration only material on local governments.

We cannot say, therefore, whether the model land development code will include provisions which would enable States to qualify under S. 3354.

As reporters, it is our duty to identify issues for consideration in the institute process. We have noticed in our research that there is increasing concern about the social and environmental consequences created by uncoordinated and uncontrolled regulation of land use decisions by local governments. Indeed, it might be said if one compares the literature during the past decade, the literature at the time zoning was started in this country in 1910, that the criticism at that time that private owners of land could use their land to the detriment of the citizenry of the local government has now been changed to point out that local governments can regulate land within their community to the detriment of neighboring local governments and the State as a whole.

It is true most States have some agency which serves as a State planning agency, authorized to prepare beautiful maps and ideal statements of policy, but very few have given a State agency power to control local land use regulations or power to regulate directly private land development decisions, or for that matter, even to control or coordinate the land use activities of operating departments of State governments.

There has been some small experimental development in the field of State control.

For example, within the past year, the State of Massachusetts has passed a law providing for statewide review of local decisions prohibiting low-income housing, or having the effect of prohibiting.

The State of Maine has passed a statute requiring State approval of large-scale industrial development anywhere in the State.

The State of California has enacted a law providing for State certification of prefabricated housing, and thereafter, that housing may be built in any local community, notwithstanding the local building codes.

The State of New Jersey has created a State-level commission to plan and regulate the development of the Hackensack Meadowlands, and the State of New York has created an urban development corporation with powers to establish development that is not subject to regulation by local governments.

Other attempts are underway and they all have experienced a great deal of difficulty.

Governor Love described, this morning, proposals to give the States some power to regulate land in the State—run into conflict with strongly held views about the sanctity of local government.

We, as reporters, have been discussing a very preliminary draft of a portion of our model dealing with the powers of State agencies to control land use and to control land-use regulations of local governments.

We are formulating, for consideration by the institute and its committees, provisions that would give State agencies the power to intervene in major land use decisions of local governments having an important impact on the State as a whole or a region of the State.

At the same time, this approach would reserve for local governments the power to deal with most ordinary land use decisions.

We can, of course, make no commitment regarding the eventual content of the American Law Institute's model land development code.

It would appear, however, that either through our individual efforts or because of the increased interest in the citizenry and States in this matter, the question of whether State agencies should be given powers to plan and control land use will be given serious consideration by the institute in the coming years.

The introduction of S. 3354 has served a very useful educational purpose to focus attention on a very serious problem of land use regulation, and we in a self-serving way thank the committee for having this bill as a vehicle to bring attention to our group of this serious problem.

Clearly, if S. 3354 is enacted, the question of whether such powers should be included in the American Law Institute's model land development code will become more immediate for resolution. But we cannot foretell what the deliberations will produce.

In summary: Very few if any States, at the present time, have existing State agencies that have the authority to implement or carry out a statewide land-use plan by acquiring property or placing police-power restrictions on its use.

Each year sees more State consideration of the problem and some legislation. Even without the additional incentive which passage of S. 3354 would provide, it is not unrealistic to expect that within a short time contemplated in S. 3354 a number of States will have adopted proposals which will enlarge the powers of State agencies over land use along the general lines suggested in the bill.

For this impetus to consideration for the need for State power to coordinate conflicting and divergent regulations imposed by local governments, we thank Senator Jackson and the committee.

I would like now for my associate to give you some of our judgment as individuals about the content of the committee print.

Mr. BOSSELMAN. Our comments will be directed primarily to section 406 because, obviously, from our viewpoint, as lawyers involved with drafting State legislation, section 406, which contains Federal guide-

lines and requirements that a State agency must comply with in order to come under this bill is the crux of the bill.

I think everybody would agree that when the talk is about State zoning or State land-use control that this does not mean that the State government should become involved in every land-use or zoning decision. Probably 99 percent of the zoning decisions that are made by local government should be made by local government because they have no State interest, they have no effect on the State or region.

The crucial question we have been wrestling with is how to define those major land-use decisions that do have a regional or State impact, and provide a means by which the State government can become involved in the making of those decisions without injecting a whole new State bureaucracy, a new State level of government into the local land-use decisions that should still be made locally.

One way in which the bill deals with this problem is by authorizing the State to exclude from the operation of the State land-use plan, lands which are located within the boundaries of any incorporated city which has exercised land use planning and authority.

There is some question whether this is the ideal way to deal with this problem.

In the first place, States vary a great deal to the extent to which they delegate zoning authority to cities, counties, townships, or other governmental units, and by using the term "incorporated city," it may unduly limit the States in this respect.

Furthermore, it offers an easy opportunity for a local community, by incorporation or annexation, to avoid the operation of the State agency and in many ways subvert the intent of the bill in the State land-use plan.

However, it is clear that the State should be given authority to exclude some areas from the statewide land-use plan, and we would suggest that this be made somewhat more flexible.

In our own deliberations about the ways in which the State might define those decisions on which State review is desirable, we considered a number of alternatives. For one example, they might define particular types of land uses that should be subject to State control.

There are some easy examples: The powerplant, the airport, very large, major land uses that could be subjected to State control. They might take another approach and define particular areas of the State that are areas of critical State concern.

The Rockefeller administration in New York has a currently pending proposal of this nature. They are areas where environmental problems are especially acute, or perhaps areas that are located near runways of major airports, or have other particular problems.

It might also be possible to try to define development in term of size. The 10-home subdivision probably has no regional impact. The 200- or 1,000-home new community probably does.

So it might be possible to create criteria of this type. It is also clear to us, though, from our study of this problem that these criteria are going to have to vary a good deal from State to State.

A decision that may have major impact on a statewide basis in Rhode Island may not have major inpact in Alaska, or vice versa. The problems are going to vary a great deal from State to State, and I think it is important that the legislation allow the State a great deal

of flexibility in determining who it is going to implement its statewide land-use plan and what decisions the State agency is going to regulate.

The Federal statute should not try to force the State agency into any single system of deciding where it is going to become involved in land-use matters.

In this respect, I think the bill is quite flexible, but it might be made even more so.

Senator STEVENS. Could I interrupt you there? You are suggesting you want to set up a procedure whereby the burden is on the State to intervene in a local proceeding if it wants to protect the State plan? Or are you suggesting that this can be set up similar to the concept involved in this bill that the State, itself, passes on the carrot to those who comply and uses the stick on those who don't comply with the total State land-use plan?

Mr. BOSSELMAN. We would assume that the State would make the initial land-use plan. I assumed that the bill gave the State agency a good deal of flexibility in whether they wanted to become involved in this thing in the land-use decision at the initial level or as an appeal at agency.

For example, one way is the Massachusetts statute, mentioned by Professor Dunham. That is an example of how a State agency can become involved in land use decisions only as an appeal at review board.

In others words, it is only if you are turned down by a local agency that you appeal that decision to a State agency. On the other hand, it is also possible, as the State of Maine has recently done, to provide for the initial issuance of permits directly by a State agency.

Again, I assumed, and I think we would suggest, that the Federal statute allow the State to choose either of those methods, depending on local conditions.

I am not sure if that adequately responds to your question.

Senator STEVENS. Professor Dunham, at page 4, indicated you were considering a provision that would give State agencies the power to intervene in major land-use decisions by local governments having an impact on the State. That would mean to me that you were going to reccommend that the State would have to involve itself in a local proceeding in order to obtain compliance with the land-use plan of the State. That would appear to be a very cumbersome proposal as compared to what we are trying to do, to give an incentive to compliance and if there is no compliance you cut off the funds on the one hand, and assume responsibility at a higher level with the other hand.

Mr. DUNHAM. In our particular proposal, we are considering when the local government has a proposal they should submit it to the State agency for comment and review. But at this point we do not have many sticks, if you will, saying the community cannot do it.

Senator STEVENS. It does not imply approval at the State level?

Mr. DUNHAM. No. It requires comment saying, "We don't like what you are doing for the following reasons," or "We approve of this, but you ought to change it in this way."

Senator STEVENS. I take it under section 406 the State would lose its funds at the end of 3 years, if that was the case.

Mr. BOSSELMAN. Yes, that is right. We don't suggest that this would authorize the State to qualify. We might well go further than that.

Senator STEVENS. Are you suggesting that we modify section 406 and take the teeth out of it?

Mr. BOSSELMAN. No, sir; not at all. The only suggestion we are making is that the procedure by which the State exercises the stick be left sufficiently flexible that they may use a number of alternative techniques.

Senator STEVENS. But you don't disagree with the provision of 406 that says the State must have power to use its police power and to enforce the State land-use plan or it is going to lose its funds?

Mr. DUNHAM. No. That is the principle on which we would operate, that whenever you define what is a matter of statewide concern—and Mr. Bosselman has suggested we think there are a lot of issues that are not statewide concern, whether housing is two-story or single-story in a single-family area—when that has been defined that the important thing is that the State have a way of saying to the local community you must, or you cannot, as the case may be, and that it is not terribly important at which point of time they come in.

Maybe the point to come in is when a developer says, "I want to do this," and the local community says, "Even though it promotes the State interest, you cannot."

Senator STEVENS. I have one other question on 406. Is the carrot a sufficient incentive? Is the denial of funds a sufficient inventive to bring about compliance?

I know of one situation in our State right now where the council is refusing to amend a local ordinance that prevents it from obtaining Federal assistance is one of its programs. The moneys involved aren't really important, but the real question is the matter of principle, as far as they are concerned. They just won't give in.

Is the enforcement that is involved in this section 406 sufficient, in your opinion, to obtain compliance?

Mr. DUNHAM. To obtain compliance from the local government?

Senator STEVENS. Compliance of the local government with the statewide plan and compliance of the State with the Federal plan.

Mr. BOSSELMAN. In regards to the relationship between the State and the local government, the State government is clearly going to have to have more authority than just the power to withhold funds under State programs or something of that nature.

I assume the bill contemplated that the State government would have greater authority. Insofar as the relationship between the Federal and the State Governments are concerned, it is clear that the States, even without any carrots or sticks from the Federal Government, are becoming more and more interested in this problem, as Governor Love's testimony awhile ago indicated, and the other examples that Professor Dunham mentioned around the country.

So I think there is going to be a lot of interest in this type of thing at the level of the State house regardless of any incentives that the Federal Government can give.

Senator STEVENS. They are politically one more step removed from direct contact with the people affected, I think. That has more to do with it than anything else.

Mr. BOSSELMAN. That is certainly one of the problems, though, with any attempt to evolve a State agency in land-use decisions. It would be particularly true in a large State like Alaska. People are not going

to be willing to go long distances to decide minor land-use issues. You will not be able to convince people that they ought to travel 300 miles for a hearing on whether they should have a front porch in their neighbor's yard.

That is why we say that, in the first place, you must define pretty carefully the major issues that the States are going to get involved in. It is also why we are going toward the idea of having the State government intervene in local proceedings, because it brings the hearing closer to the people.

It allows more citizen participation, and it prevents the necessity of people having to travel to the State capital.

Senator STEVENS. Let me ask you this: Are we as lawyers getting ourselves in the position where if someone wants to put an overhang over the sidewalk, he has to hire a lawyer, instead of just going to the local planning board to obtain approval?

I don't know about you, but I have practiced in small towns, and I can assure you that there is not a lot of money involved in it. Besides that, it is very cumbersome to involve lawyers in something that is essentially a policy decision that is within the existing framework of law anyway.

I really have an aversion to this mention of the word "intervene." I see the prospect of lawyers coming down from some State office and dealing with a bunch of people who are serving part time, about one Tuesday every month, and they are either the planning board or the zoning commission of some small town, trying to do a good job. Suddenly they have the legal talent of the State descend upon them in the back room of the city hall.

I just can't see the legalism involved in this concept we are dealing with here. If someone is aggrieved and wants to appeal it up, that is another matter.

But in terms of just the local decisions, I can't see bringing the intervention down onto the local level.

Mr. DUNHAM. One of the reasons we are thinking in those terms is because of the inadequacy of the records that are before the local zoning board in many, many communities.

It would be better, if the State is interested in the particular problem, for the State to prevent its evidence at that level rather than the other way around, of having the aggrieved party having to, in a sense, do it all over again before the State agency because there is no record before the zoning board of the local community.

Senator STEVENS. You have a point. In terms of a trial de novo procedure on a statewide level, it seems to me that the equities are on the side of forcing the recordkeeping at the level where there are very few decisions relative to those that a planning board or planning commission make every month in a community under a zoning ordinance.

I would urge you not to do that. I don't know your backgrounds, but, again, I have been involved in those. The impact of what you are saying is going to, again, involve the situation where the guy who has the dough will get a lawyer and he will go to the planning board and have a record, but a fellow who just goes in to help himself and try to adjust conditions will not have a record. When he appeals, he is going to be out the door.

I would hope that you would reconsider that intervention.

Mr. BOSSELMAN. Senator, we certainly agree with you in many respects, and the problems that you described certainly exist.

Let me go back to the point I made earlier. That is that we think the most important question, even before you reach that, is to define those areas in which the State even has a right to intervene, so that they are kept out of 99 percent of the local land-use disputes that should be decided informally at the local level.

So the only time the State becomes involved is if something really important happens. I think if we can solve that problem, then when you have the disputes that the State is involved in limited to the large and important disputes, I think it is then important that the hearings be held a the local level rather than forcing all the participation to go to a State agency and present their testimony.

That even more than the question of the cost of hiring a lawyer is a limiting factor on people who do not have a lot of money or a lot of time. Again, this is particularly true in a very large State such as Alaska, where a trip to the State capital from any parts of the State is a major undertaking.

Senator STEVENS. I should think our objective would be to bring about the establishment of statewide land-use plans within which the individual communities would have a deciding role, and that the bulk of the decisions would be administrative. You wouldn't be involved in any disputes, as such, until there was in fact a substantial conflict.

If that is the case, then it would seem to me that what we really need to do is to make sure that the bill requires that the State have the authority to modify decisions on the local level, and to leave it up to them as to how they do that, but that the State must have the final decision or else it is not going to get the Federal funds.

Would you agree with that?

Mr. BOSSELMAN. I think we would agree with that wholeheartedly. We wanted to make sure that the State would have a good deal of flexibility on what procedure it should use to bring about that result.

The result we would certainly agree with.

Senator STEVENS. Thank you.

Mr. BOSSELMAN. There are, I am sure, many other areas of the bill that could be commented upon in detail, but I don't know that we want to spend your time on them at this point.

The relationship of the river basin commissions under the act that this amends to the new act we feel could be clarified. The provisions regarding right of way permits on Federal lands in section 407(2) we believe also could use some modification.

We would be happy, if you like, to submit some more detailed comments on these or other provisions of the bill.

Mr. DUNHAM. On the right-of-way provision, here we are ignorant, really, of the total scope of the Federal lands that are involved. If one is thinking of rights-of-way across the public domain, such as national forest and the like, it would turn out, I think, that the total impact of this bill would be on the Western States and not on the States east of the Mississippi.

There is very little public domain in the traditional sense, even in Illinois, and practically none in the big eastern urban areas.

It would seem to us that in addition to that particular situation, there may be others that the Congress could put in that would make the bill equally applicable in Ohio and Oregon.

Senator GRAVEL. If you do have additional comments, we would appreciate receiving them at some early time in the future.

Mr. DUNHAM. Thank you.

Senator GRAVEL. Mr. Ruth will be the next witness.

STATEMENT OF HERMAN D. RUTH, CITY AND REGIONAL PLANNING CONSULTANT, ON BEHALF OF THE AMERICAN SOCIETY OF CONSULTING PLANNERS

Mr. RUTH. Thank you, Mr. Chairman.

Mr. Chairman, members of the Committee on Internal and Insular Affairs, my name is Herman D. Ruth. I am a city and regional planning consultant. I am appearing on behalf of the American Society of Consulting Planners. The ASCP is a national society whose members practice city and regional planning as consultants to all levels of government and private developers.

The members serve over 3,500 communities at all levels of government and many large-scale private developers in planning and development activities.

Mr. Chairman, the American Society of Consulting Planners welcomes this opportunity to present testimony on S. 3354, a bill to establish a national land use policy.

The members of our society, in the course of their professional work, have been confronted with the increasing number of major land use conflicts. Whereas, in earlier years, many of these land use conflicts were within the confines of our urban areas, we now find that they engulf the lands of the entire Nation.

Urban growth, that is, land required to accommodate our expanding population, has far-reaching effects. Our once considered abundant resources are threatened on many sides. In particular, our land and water resources are threatened from the increasing competition for land as between natural resource uses and urban uses, such as residential subdivisions, vacation and second homes, intensive recreation, and increased demands for fuel, energy, and power to serve urban populations.

The increased competition for land—rising out of the increased demands of land—for urban purposes and for natural resources is one of the surest signs that our world is shrinking.

There is no need to recite the liturgy of the ailments of our cities, open spaces, and total environment. They are well known.

We have reached the point in development of our Nation where it is necessary to develop policies which will provide for a better life in our cities, towns, and farms; to provide a reasoned approach to the utilization of our land resources; and a balance between conservation and development. Major land use conflicts can be avoided provided we have a national policy for land use.

We, therefore, strongly support the purpose of the proposed bill.

Many persons and organizations support and promote some aspect of such a policy. We have compiled a list of such policies which have

emerged over the past few years. They have been expressed as follows:

1. Urbanization policy.
2. National urban growth policy.
3. National policy for the environment.
4. Open space policy.
5. National policy for urban land development.
6. National policy for urbanization.
7. National policy for urban land.
8. National land use policy.

Each is important and each points to an important aspect of a comprehensive policy which is probably best reflected in the bill S. 3354 which seeks to develop a national land use policy.

However, the proposed bill needs some clarification. Rather than examine the bill section by section, we believe it may be more helpful to the committee if we set out some general guidelines for consideration. plan.

CONTENT OF LEGISLATION

A national land use policy will have meaning if it is an expression of the people of our Nation, if it provides legislative guidelines for the Congress and the administration, and if it establishes an administrative framework with appropriate financial and other support, to direct our resources and energies into the provision of a more desirable living environment in our cities, towns, and countryside for all Americans.

We suggest that there are four major parts which should be incorporated in such legislation. They are stated here and expanded below.

1. A national land use policy should be a legislative statement expressing the goals and objectives of the people of the Nation and the intent of Congress as to how our lands should be used for all purposes.

2. The legislation should contain the administrative and procedural requirements to involve the Federal Government and all levels of government in the preparation of a coordinated, unified, comprehensive, and workable statement of national land use policy.

3. The legislation should contain administrative and procedural requirements to obtain a national land use plan to give expression and direction to the national land use policy.

4. Legislation should be devised which will aid in the achievement of the goals and objectives expressed in a national land use policy and a national land use plan. These are expanded as follows:

1. Legislative expression of a national land use policy

A national land use policy should provide the framework for growth and development for the entire Nation, including the public and private sectors.

For the Congress and the administration it will provide the framework for approving legislation, for the creation of new programs, for the allocation of funds, for the expression of major policies which in many areas have been heretofore considered unilaterally, and which will be henceforth examined as to their contribution toward the fulfillment of the national land use policy.

Such a policy is a tremendous undertaking in intergovernmental relations. It will involve all levels of government and on a magnitude which is unprecedented in this Nation.

Without attempting to exhaust the content of such a policy, it will include those elements expressed in S. 3354 and the following:

1. A spatial distribution of our cities and towns.
2. Recommendation on urban containment and intensification.
3. Planned regional urban expansion.
4. Satellite new town or city dispersal.
5. New metropolises.
6. Urban growth corridors.
7. Growth reduction through interstate compacts.
8. Use of the public lands for new cities and open space.
9. A system of transportation that will serve our cities and regions.
10. The distribution of economic activities to serve an expanded urbanizing nation.
11. A system of social services and facilities so that all people can participate in a full life in America.
12. Direction and opportunity for corporate and private investment.

2. Administrative and procedural requirements to prepare a national land use policy

A national land use policy should be expressed in legislation. Such legislation should reflect the goals and objectives of the people of the Nation. In a nation of 205 million people this is a formidable task, but not an impossible one. Comprehensive planning depends upon goals and objectives in the community.

These are expressed in land use preferences, the allocation of scarce resources, and eventually in priorities of development. If the planning profession has learned anything, it has learned that unless there is broad participation in the preparation of goals and objectives of the community, the likelihood of plans being achieved is small indeed.

It may be instructive to the committee to quote from our report "Regional and Local Land Use Planning," prepared for the Public Land Law Review Commission.

> The lessons of city planning, which has long been preoccupied with "comprehensive" land use plans, are instructive to Federal agencies.
>
> Static, fixed-arrangement plans are virtually useless, or even a disservice, to communities that are developing rapidly, and are changing economic and social composition and especially *values*.
>
> Schematic land use plans are useful for crystallizing opinions and influencing expectations, but should be understood to be impermanent. The procedures by which they are to be changed should be well-known and relatively public.
>
> Second, city planners have learned that the community of interests around land is not easily summarized in a single plan. Different groups will have different values—some emphasizing dollar returns, some preservation of amenities, some the short run, some the long run, some favoring one kind of development, others another kind.
>
> These values will rarely be reconciled in a single plan. The fact that it is not possible to maximize several variables at one moment will lead to the preparation of alternative plans.
>
> City planners have learned that it is inevitably an adversary process by which some alternative is favored. Accordingly, they have increasingly come to prepare for this process, and build it into planning as an orderly form.

Senator METCALF. Is it necessary that this business of the acquisition of land be an adversary process? What I mean is in the ordinary condemnation we go into court and we present evidence on one side and the other, and that is a customary procedure.

But can't we work out some other way to make an acquisition of land in these areas without forcing people into an adversary process?

Mr. RUTH. The adversary process to which I am referring pertains to how plans are prepared, and the alternatives which are considered among various communities as part of their planning process.

That, it seems to me, leads to an adversary process because they represent different interests. I am not at this point talking about the acquisition of land, but just the preparation of the plan itself.

Senator METCALF. Thank you. I am sorry to have interrupted you. I am interested and concerned with this business of regulatory commissions and so forth, all of whom are gradually drifting toward an adversary process rather than some other process that would be quicker and easier, and better.

Mr. RUTH. Senator Metcalf, if you will read my statement in its entirety, you will see that my whole tenor and approach is, hopefully, to eliminate the adversary process and to recognize the possibility of reconciling land use conflicts in some orderly process.

Senator METCALF. Thank you.

Mr. RUTH. (to continue).

> Third, public controls have limited influence on private actors. Private property continues to be a strongly preserved principle of the society.
>
> At the same time, public objectives can rarely be achieved by public action alone, even where there is predominant public ownership of the land, for the economy is organized around private initiative.
>
> Accordingly, the implementation of land planning has become a task of organization and persuasion of private energies in the interest of community goals. Planning procedures which omit this step, or take it for granted, are rarely successful.

The proposed legislation would benefit from administrative and procedural requirements necessary to reconcile differences among land use preferences at all levels of government as a basis for developing a coordinated, unified and comprehensive land use policy.

Experience has indicated that such requirements should be detailed in the legislation so that all levels of government will have a statutory responsibility to solicit and respond to citizen participation.

Without statutory commitment, citizen participation has been large pro forma.

There is no doubt that this makes the process more difficult, more time-consuming and subject to extraneous issues but experience has also indicated that when policies are developed in this manner as a basis for the preparation of plans, those plans have a higher incidence of acceptance, approval and realization.

A national land use policy, which will cover many aspects of our national life, need not be rigid. It should provide the framework and the parameters in which development, conservation and preservation policies can be evaluated.

3. Administrative and procedural requirements to obtain a national land use plan

The proposed bill refers to a statewide land use plan, to State and national land use planning, but there is no mention of a national land use plan.

The bill gives the impression that the collection of statewide land use plans will add up to a national land use plan or at least a national land use policy. It is unclear as to how differences among States, or land use preferences among States will be resolved.

The preparation of a coordinated, unified and comprehensive national land use plan requires similar administrative and procedural requirements as are required to produce a national land use policy.

Each jurisdiction—city, county, metropolitan area, State and interstate agency—that prepares a plan does so from the vantage point of its jurisdictional and functional objectives.

It is too much to expect that all jurisdictions will in the course of the preparation of a land use plan resolve all land use conflicts to the satisfaction of other governmental jurisdictions.

The planning process must provide the procedural mechanism which will enable the reconciliation of land use conflicts and which are expressed in different land use proposals or plans.

A State land use plan cannot be a collection of the plans of the governments within the State. Nor, can a collection of State plans add up to a national land use plan or a national land use policy.

We should anticipate that there will be difficult and conflicting land use proposals which will require resolution. The first place to provide for their resolution is in a national land use policy which will reflect the intent of the Congress, and the second place is in the administrative and procedural requirements which will produce a national land use plan.

4. Legislation to achieve a national land use plan

If Congress enacts legislation which will give expression to a national land use policy, and which will aid States and Federal agencies in the preparation of a national land use plan, then the stage is set for the implementation of the plan. Many salutory effects can be achieved. Operating departments and agencies will have to reexamine their missions to determine whether they contribute to the national land use plan.

This may result in a reexamination of basic missions, the elimination of overlapping missions, and possible reorganization among operating agencies, particularly those concerned with land.

Other devices have already been reported to the committee including urban development corporations, State capital programing, and governmental organization in metropolitan areas. These are mainly aimed at the State and local governments to provide some control over urban growth and expansion.

However, the role of the Federal Government in directing economic activity, urban transportation and urban concentration should not be overlooked.

Federal policies as expressed in legislation concerning continental water development, surface and air transportation, the release of public domain lands for urban and regional development, the investment in Federal facilities and in federally aided private facilities, and the role of tax incentives to direct the location of economic and urbanizing activities should be thoroughly examined for their ability to influence and direct development in accordance with a national land use plan.

ORGANIZATION

The organization required to develop a national land use policy, a national land use plan, and the machinery—administrative, procedural, legislative and financial—required to achieve the goals and objectives as expressed in a national land use plan may be somewhat more complex than as expressed in S. 3354.

First, to achieve a national land use policy, the Congress should create a Joint Committee for National Land Use Policy.

Such a policy is complex, diverse in its objectives, and literally involves all operating agencies and departments of the Federal Government. It is of sufficient importance to the Nation to warrant a Joint Committee of the Congress.

The main function of the Joint Committee is to develop, in legislative terms, a coordinated, unified, comprehensive national land use policy which will eventually become the guide for many individual programs. Such a committee might have a life of 3 to 4 years and could then be dissolved.

An alternative would be to model such a committee after the Public Land Law Review Commission. The Congress may elect to continue the committee after it has prepared a national land use policy with a legislative analysis staff to advise how proposed legislation helps achieve the national land use policy or tends to countermand the policy.

Second, reconciliation of local and State land use plans, metropolitan and regional land use plans, land use plans of intergovernmental agencies, and the land use plans of the many Federal agencies and departments, must be reconciled to avoid future land use conflicts. They must be resolved so that public and private commitments for development can proceed within the framework of policies and plans.

To achieve this objective, the agency must act in the name of the President.

Furthermore, the agency or commission members should not be the secretaries of existing departments and agencies.

The fundamental reason for this separation is the difference in the outlook of an operating agency which has a relatively short span of 1 to 2 years for achievement of results, as against a planning agency which would look ahead, one, two, or several generations. A short-range view is clearly the antithesis of a national land use policy or land use plan.

There are too many examples at all levels of the Government where long-range plans have been nullified by short-term expediency.

The agency should have authority to administer the grant program, have all the powers enumerated in S. 3354, and suggest ways to the President and the Congerss to achieve the national land use policy.

Thirdly, the agency should suggest types of legislation which will help achieve the objectives and goals as expressed in the national land use plan. This could also be a major function of the Joint Committee on national land use policy.

The agency or committee would be charged with the examination of all legislative proposals from the point of view of their contribution toward a national land use policy.

The Joint Committee could work with functional committees dealing with the subject of lands, water, transportation, housing, urban development, agriculture, resources, recreation and open space, and so forth. It could have as an important a monitoring function as the rules of Appropriation Committee.

A national urban growth policy is not likely to be meaningful if it is a collection of State land use plans.

There must be administrative and procedural machinery to reconcile the differences in land use proposals in order to achieve a national land use policy and affect a national land use plan.

In addition, Federal legislation should be developed which will achieve the objectives and goals expressed in the national land use plan.

The American Society of Consulting Planners supports the development of a national land use policy and a national land use plan.

It would emphasize out of its professional experience, that the processes by which policies and plans are achieved are as important as the policies and plans which emerge. The processes frequently set the stage for future success or failure.

Both require wide community participation that starts early, and which continues throughout the formulation of policies and plans. Policies and plans prepared in this manner provide the greatest opportunity for using scarce resources for the maximum benefit of all citizens.

A national land use policy provides a new domestic frontier with all that is implied in the achievement of a full life for all citizens of the Nation.

Senator METCALF (presiding). I have little to inquire about from your statement. I largely concur. I think we should have national land use policy.

I have advocated this in various other committees, in various other areas.

(Mr. Ruth's complete statement follows:)

STATEMENT OF HERMAN D. RUTH, CITY AND REGIONAL PLANNING CONSULTANT, ON BEHALF OF THE AMERICAN SOCIETY OF CONSULTING PLANNERS

INTRODUCTION

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Urban growth, that is, land required to accommodate our expanding population, has far reaching effects. Our once considered abundant resources are threatened on many sides. In particular, our land and water resources are threatened from the increasing competition for land as between natural resource uses and urban uses, such as residential subdivisions, vacation and second homes, intensive recreation, and increased demands for fuel, energy and power to

serve urban populations. The increased competition for land (rising out of the increased demands of land) for urban purposes and for natural resources is one of the surest signs that our world is shrinking. There is no need to recite the liturgy of the ailments of our cities, open spaces, and total environment. They are well known. We have reached the point in development of our nation where it is necessary to develop policies which will provide for a better life in our cities, towns and farms; to provide a reasoned approach to the utilization of our land resources; and a balance between conservation and development. Major land use conflicts can be avoided provided we have a national policy for land use. We, therefore, strongly support the purpose of the proposed Bill.

Many persons and organizations support and promote some aspect of such a policy. We have compiled a list of such policies which have emerged over the past few years. They have been expressed as follows:

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8. National land use policy.

Each is important and each points to an important aspect of a comprehensive policy which is probably best reflected in the Bill S. 3354 which seeks to develop a national land use policy. However, the proposed Bill needs some clarification. Rather than examine the Bill section by section, we believe it may be more helpful to the committee if we set out some general guidelines for consideration.

CONTENT OF LEGISLATION

A national use policy will have meaning if it is an expression of the people of our nation, if it provides legislative guidelines for the Congress and the administration, and if it establishes an administrative framework with appropriate financial and other support, to direct our resources and energies into the provision of a more desirable living environment in our cities, towns, and countryside for all Americans. We suggest that there are four major parts which should be incorporated in such legislation. They are stated here and expanded below.

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4. Legislation should be devised which will aid in the achievement of the goals and objectives expressed in a national land use policy and a national land use plan.

These are expanded as follows:

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10. The distribution of economic activities to serve on expanded urbanizing nation.
11. A system of social services and facilities so that all people can participate in a full life in America.
12. Direction and opportunity for corporate and private investment.

2. Administrative and procedural requirements to prepare a national land use policy

A national land use policy should be expressed in legislation. Such legislation should reflect the goals and objectives of the people of the nation. In a nation of 205 million people this is a formidable task, but not an impossible one. Comprehensive planning depends upon goals and objectives developed in the community. These are expressed in land use preferences, the allocation of scarce resources, and eventually in priorities of development. If the planning profession has learned anything, it has learned that unless there is broad participation in the preparation of goals and objectives of the community the likelihood of plans being achieved is small indeed.

It may be instructive to the Committee to quote from our report "Regional and Local Land Use Planning," prepared for the Public Land Law Review Commission.

> The lessons of city planning, which has long been preoccupied with "comprehensive" land use plans, are instructive to Federal agencies. Static, fixed-arrangement plans are virtually useless, or even a disservice, to communities that are developing rapidly, and are changing economic and social composition and especially *values*. Schematic land use plans are useful for crystallizing opinions and influencing expectations, but should be understood to be impermanent. The procedures by which they are to be changed should be well-known and relatively public.
>
> Second, city planners have learned that the community of interests around land is not easily summarized in a single plan. Different groups will have different values—some emphasizing dollar returns, some preservation of amenities, some the short-run, some the long-run, some favoring one kind of development, others another kind. These values will rarely be reconciled in a single plan. The fact that it is not possible to maximize several variables at one moment will lead to the preparation of alternative plans. City planners have learned that it is inevitably an adversary process by which some alternative is favored. Accordingly, they have increasingly come to prepare for this process, and build it into planning as an orderly form.
>
> Third, public controls have limited influence on private actors. Private property continues to be a strongly-preserved principle of the society. At the same time, public objectives can rarely be achieved by public action alone, even where there is predominant public ownership of the land, for the economy is organized around private initiative. Accordingly, the implementation of land planning has become a task of organization and persuasion of private energies in the interest of community goals. Planning procedures which omit this step, or take it for granted, are rarely successful.

The proposed legislation would benefit from administration and procedural requirements necessary to reconcile differences among land use preferences at all levels of government as a basis for developing a coordinated, unified and comprehensive land use policy. Experience has indicated that such requirements should be detailed in the legislation so that all levels of government will have a statutory responsibility to solicit and respond to citizen participation. Without statutory commitment, citizen participation has been largely *pro forma*. There is no doubt that this makes the process more difficult, more time consuming and subject to extraneous issues; but experience has also indicated that when policies are developed in this manner as a basis for the preparation of plans, those plans have a higher incidence of acceptance, approval and realization.

A national land use policy, which will cover many aspects of our national life, need not be rigid. It should provide the framework and the parameters in which development, conservation and preservation policies can be evaluated.

3. Administration and procedural requirements to obtain a national land use plan

The proposed Bill refers to a Statewide Land Use Plan, to State and National land use planning, but there is no mention of a national land use plan. The Bill gives the impression that the collection of Statewide Land Use Plans will add up to a national land use plan or at least a national land use policy. It is unclear as to how differences among states, or land use preferences among states will be resolved.

The preparation of a coordinated, unified and comprehensive national land use plan requires similar administrative and procedural requirements as are required to produce a national land use policy. Each jurisdiction—city, county, metropolitan area, state and interstate agency—that prepares a plan does so from the vantage point of its jurisdictional and functional objectives. It is too much to expect that all jurisdictions will in the course of the preparation of a land use land resolve all land use conflicts to the satisfaction of other governmental jurisdictions. The planning process must provide the procedural mechanism which will enable the reconciliation of land use conflicts and which are expressed in different land use proposals or plans. A State Land Use Plan cannot be a collection of the plans of the governments within the state. Nor, can a collection of state plans add up to a national land use plan or a national land use policy.

We should anticipate that there will be difficult and conflicting land use proposals which will require resolution. The first place to provide for their resolution is in a national land use policy which will reflect the intent of the Congress, and the second place is in the administration and procedural requirements which will produce a national land use plan.

4. Legislation to achieve a national land use plan

If Congress enacts legislation which will give expression to a national land use policy, and which will aid states and Federal agencies in the preparation of a national land use plan, then the stage is set for the implementation of the plan. Many salutory effects can be achieved. Operating departments and agencies will have to reexamine their missions to determine whether they contribute to the national land use plan. This may result in a reexamination of basic missions, the elimination of overlapping missions, and possible reorganization among operating agencies, particularly those concerned with land.

Other devices have already been reported to the Committee including urban development corporations, state capital programming, and governmental organization in metropolitan areas. These are mainly aimed at the state and local governments to provide some control over urban growth and expansion.

However, the role of the Federal government in directing economic activity, urban transportation and urban concentration should not be over-looked. Federal policies as expressed in legislation concerning continental water development, surface and air transportation, the release of public domain lands for urban and regional development, the investment in Federal facilities and in federally-aided private facilities, and the role of tax incentives to direct the location of economic and urbanizing activities should be throughly examined for their ability to influence and direct development in accordance with a national land use plan.

ORGANIZATION

The organization required to develop a national land use policy, a national land use plan, and the machinery—administrative, procedural, legislative and financial—required to achieve the goals and objectives as expressed in a national land use plan may be somewhat more complex than as expressed in S. 3354.

Firstly, to achieve a national land use policy, the Congress should create a Joint Committee For National Land Use Policy. Such a policy is complex, diverse in its objectives, and literally involves all operating agencies and departments of the Federal government. It is of sufficient importance to the nation to warrant a Joint Committee of the Congress. The main function of the Joint Committee is to develop, in legislative terms, a coordinated, unified, comprehensive national land use policy which will eventually become the guide for many individual programs. Such a committee might have a life of three to four years and could then be dissolved. An alternative would be to model such a committee after the Public Land Law Review Commission. The Congress may elect to continue the committee after it has prepared a national land use policy

with a legislative analysis staff to advise how proposed legislation helps achieve the national land use policy or tends to countermand the policy.

Secondly, reconciliation of local and state land use plans, metropolitan and regional land use plans, land use plans of intergovernmental agencies, and the land use plans of the many Federal agencies and departments, must be reconciled to avoid future land use conflicts. They must be resolved so that public and private commitments for development can proceed within the framework of policies and plans. To achieve this objective, the agency must act in the name of of the President. Furthermore, the agency or commission members should not be the secretaries of existing departments and agencies. The fundamental reason for this separation is the difference in the outlook of an operating agency which has a relatively short span of 1-2 years for achievement of results, as against a planning agency which would look ahead 1, 2, or several generations. A short range view is clearly the antithesis of a national land use policy or land use plan. There are too many examples at all levels of the government where long range plans have been nullified by short term expediency. The agency should have authority to administer the grant program, have all the powers enumerated in S. 3354, and suggest ways to the President and the Congress to achieve the national land use policy.

Thirdly, the agency should suggest types of legislation which will help achieve the objectives and goals as expressed in the national land use plan. This could also be a major function of the Joint Committee on national land use policy. The agency or committee would be charged with the examination of all legislative proposals from the point of view of their contribution toward a nation land use policy. The Joint Committee could work with functional committees dealing with the subject of lands, water, transportation, housing, urban development, agriculture, resources, recreation and open space, etc. It could have as an important a monitoring function as the Rules or Appropriation Committees.

SUMMARY

A national land use policy is not likely to be meaningful if it is based on a collection of state land use plans. There must be administrative and procedural machinery to reconcile the differences in land use proposals in order to achieve a national land use policy and affect a national land use plan. In addition, Federal legislation should be developed which will achieve the objectives and goals expressed in the national land use plan.

The American Society of Consulting Planners supports the development of a national land use policy and a national land use plan. It would emphasize out of its professional experience, that the processes by which polices and plans are achieved are as important as the policies and plans which emerge. The processes frequently set the stage for future success or failure. Both require wide community participation that starts early, and which continues throughout the formulation of policies and plans. Policies and plans prepared in this manner provide the greatest opportunity for using scarce resources for the maximum benefit of all citizens.

A national land use policy provides a new domestic frontier with all that is implied in the achievement of a full life for all citizens of the nation.

I am delighted that the next witness, representing the Edison Electric Institute, has come in with a national land use policy.

I will compliment you on your statement, excuse you, and look forward to the testimony of Mr. Aymond.

I have been looking forward for a long time to have someone from the Edison Electric Institute come and testify before me.

Is Mr. Aymond present?

I guess he must have known that I was going to be here because, again, I am frustrated by the fact that whenever I am here, the Edison Electric Institute disappears.

Is there any other witness scheduled to testify?

If not, then, the hearing will be recessed, subject to the call of the Chair.

(Subsequent to the hearing the committee received a statement from John E. Martin, executive director, of the Idaho State Commission on Federal Laws:)

STATEMENT OF JOHN E. MARTIN, EXECUTIVE DIRECTOR OF THE IDAHO STATE COMMISSION ON FEDERAL LAND LAWS

Mr. Chairman and members of the committee, I am John E. Martin, executive director of the Idaho State Commission on Federal Land Laws. This commission was established by the Idaho State Legislature and appointed by the Governor of Idaho to represent the State of Idaho in presenting the views of the State to the Public Land Law Review Commission on the studies and subjects considered by that Commission. The Idaho Commission is also directed to obtain and catalogue information on land and water resources and to assemble and present material on pending legislation affecting the land and water resources of the state of Idaho. It is in this latter capacity that I appear today.

The general aims of S. 3354, while broad in scope, are commendable and attainable. Planning grants to assist the states to develop and implement statewide land use plans are highly desirable. If we are to be good stewards of our land and water resources and pass them on to the future generations as good or better than we received them, present and future needs should be determined before we forever close out desirable options. With the increasing demands being placed on our finite land and water areas, we can no longer afford piecemeal development of land and water resources.

Combining of land and water resource use and management planning is a long overdue action. These resources occur in nature together, are used together, and should be planned for present and future use together.

The language of the bill itself quite eloquently states the case for the measure. Therefore, I will not dwell at any length on that aspect of the bill. Rather, I will point out some of the questions the Idaho Commission on Federal Land Laws raised in a discussion on this measure.

While placement of two additional Cabinet members on the Council broadens that group to include additional land management areas, will this assure adequate increase in land management disciplines to the previously water-oriented Council staff?

Would it be possible to designate that the additional members from each state to be appointed to the river basin commissions be specifically designated as one with land management background as contrasted with the present members who have water and water-related land management background?

Would not the states be more cooperative and contribute more to this undertaking if it were so written that they would comply with its provisions because they are assured of its need and value on the merits of the measure rather than seeking state compliance by threatening cuts in other federal grants to the states?

The State of Idaho already recognizes the urgent need for legislation such as this authored by you, Senator Jackson, and being considered by your colleagues on this committee. I would like to illustrate that point by quoting from our report to the Public Land Law Review Commission earlier this year.

"Idaho depends heavily on the public lands for both its economic progress and quality environment so important to the livability of all the areas in the state. In the future, our demands on these public lands will further increase to meet not only current use demands for agricultural crops and forage, big game and sport fish, outdoor recreation, timber water, and minerals, but new growing land use demands for environment and community expansion. The importance of preserving our outstanding environment is becoming an integral part of all planning in Idaho. Environment preservation is thought in terms of clean quality air and water important to general health, esthetics and spacious living for both mental and physical well-being and space for industry, commerce and business important to health, safety and economic well-being. This dedication to good environment will require additional use demands on the public lands not only in the vast expanses of national forest and range lands, but also for use of the public lands near population centers, where quality environment will be needed for both living and working space.

It must be recognized that some uses are incompatible with others and that other new uses for public lands will undoubtedly be recognized in the future. Thus where large withdrawals for single use purposes are demanded in the public interest, other uses will necessarily have to be curtailed. This also points up a need for greater emphasis on multiple use management refinement through research, planning, and public education."

Our Commission recently conducted a survey of an eight-county area approximately 55 miles wide and 75 miles long in southcentral Idaho to determine the

complexity of land and water management among governmental units operating in the area. This survey was cited yesterday by Senator Jordan during the hearing.

No less than 167 units of federal, regional, state and local government have land and water responsibilities, directly or indirectly through financing, in this small area. Those included are units of the Department of Agriculture, Interior, Commerce, Labor, Transportation, and Defense, as well as the Atomic Energy Commission, the Small Business Administration and the Federal Water Pollution Control Administration. Some twelve departments of state government and their various subagencies are involved as well as county and city executive departments and planning and zoning commissions. Completing the list of agencies with land and water management responsibilities in this area are innumerable local highway, water and sewer, canal and flood control districts.

This alone is ample evidence of Idaho's need for assistance to develop a state land use plan as provided in S. 3354. Furthermore, the increasing awareness of achieving the optimum balance to maintain quality environment with preservation of areas for esthetic and recreational use, while at the same time assuring land and water for working and living, makes us aware of the need to participate with all levels of government in land and water use planning. I believe that this public participation at all levels of government should be stressed more strongly in this legislation. This certainly will achieve more desirable programs and better results than can be attained by relying too heavily on harsh compliance measures.

(Whereupon, at 3:02 p.m. the committee recessed, to reconvene subject to call of the Chair.)

APPENDICES

APPENDIX 1

Letters from Senator Henry M. Jackson to State Governors and their replies.

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C., March 3, 1970.

DEAR GOVERNOR: On February 26, 1970, I met with Governor Guy of North Dakota and Governor Sargent of Massachusetts, both members of the Committee on Natural Resources and Environmental Management of the National Governors' Conference. I discussed with them my recently introduced bill (S. 3354) to provide for a national land use policy, and both expressed considerable interest in the proposal.

Enclosed is a copy of the excerpt from the Congressional Record containing the bill and my remarks at the time I introduced it. I would appreciate very much any comments you might care to make about the bill or on the general subject of a national land use policy, especially in view of the critically important role the states must play in this effort.

We expect to begin our first consideration of this measure on March 23 with a public hearing, and your views would be most welcome.

Sincerely yours,

HENRY M. JACKSON,
Chairman.

S. 3354—INTRODUCTION OF THE NATIONAL LAND USE POLICY ACT OF 1970

Mr. JACKSON. Mr. President, I introduce, for appropriate reference, the National Land Use Policy Act of 1970.

The National Environmental Policy Act of 1969 which the Congress enacted in December and which the President signed into law on January 1 goes far toward providing a congressional declaration of national goals and policies to guide Federal actions which have an impact on the quality of man's environment. That act makes a concern for environmental values and amenities a part of the charter of every agency of the Federal Government. It provides a model for State government. It enhances coordination and better planning by establishing new decisionmaking procedures and by creating an overview agency—a Council on Environmental Quality in the Office of the President.

A national land-use policy is, in my judgment, the next logical step in our national effort to provide a quality life in a quality environment for present and future generations of Americans. Intelligent land-use planning and management provides the single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supporting a quality life and providing the material means necessary to improve the national standard of living.

To be effective in giving direction to the shape of future events, a national land-use policy must recognize the potential and the limits of Federal control. It must encourage State government to assume a position of leadership in developing plans and implementing land-use management powers over matters which are of multicounty, regional, State, and National concern.

The measure I introduce today, the National Land Use Policy Act of 1970, proposes a specific plan of Federal and State action for meeting the challenge of the land, the competing demands which are made upon it, and the needs and aspirations of present and future generations.

Meeting the challenge of the land promises to be a difficult task. It will not be resolved by one act in one legislative session. It will require experimentation and the refinement of many programs over a long period of time. It will cost money. It will require hard decisions about what is to be conserved and what is to be lost in the tides of social and technological change which sweep this country. And most important, it will require a national effort based upon a high level of State and Federal cooperation.

The National Land Use Policy Act of 1970 as introduced today does not purport to be a final product or to provide final answers to all of the relevant questions which may be raised. It does, however, provide a starting point for review and for analysis. It furnishes a working draft which Federal, State, and local officials, planners, and representatives of industry, business, and public interest groups may comment upon.

This measure recognizes the direct responsibility which the Federal Government has with respect to the development and administration of national land use policies governing the public lands and federally acquired lands. It also recognizes that at the present time neither the Nation nor the respective States have established a consistent policy with respect to the management of the Nation's land resource base or with respect to the many grant-in-aid programs designed to assist and, often, influence various aspects of land-use planning and management activities at the State, regional, and local levels.

I am hopeful that hearings on this measure will bring to bear the recommendations of the Nation's best experts on national land-use policies. Fortunately, the excellent studies and the final recommendations of the Public Land Law Review Commission will also soon be available to provide data and guidance. I am also hopeful that hearings and additional staff studies will result in useful legislative recommendations for consolidating and avoiding inconsistent requirements between existing Federal grant-in-aid programs in the area of State and local land-use planning and management.

At the Federal level we are already beginning to see and to reap the results of our past failure to have developed a consistent national land-use policy. Increasingly we are finding instances where Federal funds which have been expended to preserve a part of our natural heritage or to create new recreational opportunities are coming into serious and, often, totally unnecessary conflicts with other federally funded programs such as highway and airport construction, communications, national defense facilities, and water resource development.

I am not too concerned that there is occasional conflict between these different Federal programs. The wide range of goals and objectives which the National Government seeks to achieve will, or necessity, involve some competition and conflict over priorities, over funding, and over the use of a specific land resource. Our political system was designed to resolve conflicts of this nature. I am confident that it is capable of doing so in an intelligent manner.

I am, however, very concerned that many of these conflicts which have centered around incompatible uses of the same land resource have been totally unanticipated and unintended. These conflicts have simply been the result of poor planning procedures. They have not placed at issue important questions of national priorities, goals, and objectives. These conflicts have resulted from a lack of coordination; a failure to relate national programs to local aspirations; and an institutional inability to factor in the full range of national and local values as a part of the planning process for specific Federal projects.

It is my view that the need for a more orderly, systematic program of National, State, and local land use planning is clear. The need may be seen in the extensive hearing records the Senate Interior Committee compiled earlier this year on the proposed 800-mile trans-Alaska oil pipeline system and on the Everglades National Park superjet airport and water shortage controversy.

The Nation's land-use planning and management problems may also be seen in the committee's hearing records on virtually every one of the four new national parks; the eight new national recreation areas; the nine new national seashore and lakeshores; and the almost 100 new wilderness areas, national monuments, and historic sites that have been enacted into law since 1960.

Each time a major decision is made concerning the utilization of scarce and valuable lands, competition among uses must be recognized, conflicts resolved, and priorities established. It is time that we faced these issues nationwide. It is time that we establish some basic goals and requirements to improve present planning and, therefore, the world of future generations.

The dramatic land-use conflicts we have faced in recent years—the Grand Canyon Dam controversy, the Everglades situation, the proposed trans-Alaska pipeline, the confrontation between highway builders and parks, the issue of reservoirs versus wild and scenic rivers, open beaches versus private and commercial development, industry versus scenic preservation, and commerce versus wilderness—should not have become public cause celebres.

Individual cases should not have occupied so much of the limited available time of the Congress, of the President, and of Cabinet officers. Questions of National and State land-use policy can be, and should be resolved by prior planning based upon national goals, values, and aspirations. They should not be resolved on an expedient, after the fact, case-by-case basis which requires undoing prior decisions and which result in a waste of money and manpower.

Let me cite one example. In 1934, the Congress established the Everglades National Park. This represented a national land-use decision that the Everglades should be preserved for all time for the enjoyment of all future generations. In 1948, the State of Florida and the Corps of Engineers, pursuant to a congressional authorization, initiated construction of a flood control project. Today this flood control project imposes artificial controls upon the historic flow of water to the park and, to a major extent, threatens the park's very life and existence. In 1968, the Dade County Port Authority, with Department of Transportation funding and assistance, initiated construction of a super jet airport within 6 miles of the park. This jet airport also threatens the life of the park and all of the values for which it was preserved in 1934 by the Congress. If the jet airport were to be constructed as planned it would create a serious noise problem, it would cause grave water pollution problems, and, finally, it would encourage and greatly accelerate residential, commercial, and industrial developments which are in direct conflict and totally incompatible with maintenance of the park as a great national recreation and scientific asset.

There were no villains in this conflict and controversy. There were different groups of public officials, representing different constituencies, seeking to attain and maximize different public goals which had been institutionalized and given legitimacy in a series of authorization and appropriation acts of Federal, State, and local government.

The Congress and the Park Service sought to preserve the Everglades. The Corps of Engineers sought to enhance flood control, to conserve and to make available for municipal, commercial, and recreational uses the water which the wildlife and the ecology the Everglades had for years depended upon. The Dade County Port Authority sought to relieve pressure on the existing Miami International Airport and to develop a transportation facility which would be adequate for local needs for the foreseeable future. The Department of Transportation sought to and did fund a transportation demonstration project involving rapid transit systems and a new concept in airport design—away from the cities, but convenient and accessible. The position of the State of Florida, like that of many States today in the face of Federal programs which bypass State government and treat directly with agencies of local government, was, at best, ambivalent.

The Everglades jet airport controversy is a classic study in the deficiencies of present land use policy at the State and National levels. The extensive hearings by the Senate Interior Committee on this situation revealed the following:

Three Departments of the Federal Government pursuing programs which are in direct conflict.

Three counties of the State of Florida seeking to conduct planning and made decisions which are of statewide and national significance.

A State whose greatest industry is tourism, but which has not exercised the land use planning and management powers to protect one of its greatest tourist attractions.

Important conflicts and breakdowns in communication between State and local government and between the Federal Government and agencies of State government.

One of the most important lessons to be gained from the Everglades controversy, and one of the reasons it is a classic case, is that millions of dollars were authorized by different Committees of the Congress, and spent by different agencies of the Federal Government, and by State and local agencies in the pursuit of separate goals and objectives, totally without any recognition that success, that attainment of the goals sought at the same point in time and place by these

different groups would involve serious and, in many cases, irreconcilable land-use conflicts.

In this case a satisfactory resolution has apparently been achieved if the recently announced intentions of Federal, State, and local government are effectuated. But the victory is a minor one when it is considered against the magnitude, the depth, and the pervasiveness of the Nation's pending and future land use problems.

Look at these other examples of State and National land use planning problems:

Transportation and utility systems which are planned and constructed on a single purpose basis without considering other public values.

The inability of private enterprise to get decisions from State and local government within a reasonable time for the siting and location of heavy industrial activities such as refineries, thermal powerplants, utilities, and factories.

Damage caused to commonly owned assets—estuaries, beaches, and public parks, forest and recreation areas—by unregulated and incompatible developments on the boundaries of these areas.

These are only a few of the problems we presently face. It is clear that these problems will become more serious in the future. Look at these growth projections:

Our population will grow by 100 million people in the next 30 years.

Our gross national product, barring a recession, will double in the next 10 years, going from $942 billion to $1.8 trillion.

Both of these factors, population and economic growth, will bring unprecedented pressures to bear on our Nation's finite land resource base. If a consistent, future oriented national land-use policy is not established, conflicts will multiply, unbalanced development will take place, and irreversible decisons will have been made without proper consideration of alternatives.

Here are some of the problems I see at the Federal level.

At the present time a whole host of agencies are deeply involved in land -use planning. For example, the Bureau of Outdoor Recreation, in conjunction with State government, is currently preparing a nationwide recreation plan. Other agencies of the Federal Government are preparing highway plans, airport plans, water esource plans, and navigation plans. The Department of Housing and urban Development is deeply involved in urban planning. The Department of Commerce is involved in regional planning. Other departments are actively engaged in various aspects of land-use planning related to their areas of program responsibility.

Most of these plans are necessary and desirable. The problem is this however: To date, no one in the Federal Government has ever put these plans together to see if they are consistent, to see if they make sense, and to see if they are compatible with local goals and aspirations.

As a result, there are needless and costly confiicts between agencies and departments of the Federal Government, between State and Federal Government, and between State and local government.

One of the basic problems at the Federal level is that many agencies and departments of the Federal Government are pursuing separate single-purpose missions—highway building, dam construction, urban redevelopment, and others—without adequate land use information, without coordination, without consideting alternatives, and without proper environmental and land-use guidelines.

At the State level a different, and in my view, a more difficult set of land use problems are faced. Under our system of government the States have the basic constitutional authority for land-use management. Federal powers in this area are very circumscribed and, in a real sense, limited to federally owned lands.

Historically the States have delegated their land-use management authority to units of local government—to counties, to cities, to port authorities and to other special purpose units of government. My State, the State of Washington alone has more than 1,600 local governmental entities of which nearly 1,400 have property taxing powers. All of these, and many private groups as well, directly and indirectly, influence land-use doctrine.

This broad delegation of power in local government is in keeping with the sound philosophy of control by the people at the local level. But, it has also created some very important problems.

For example, the proposed superjet airport which, if constructed, would have threatened the existency of the Everglades National Park as planned, financed, and scheduled for construction by a unit of local government, the Dade County Port Authority. This raises the following question: Should decisions such as this which clearly involve the life or death of a great national park owned by all of the 200 million people of this country be left to the decision of the commissioners of a local port authority?

In virtually every community and certainly in every maor city, every State, and every region of the country, similar, if less dramatic, land-use conflicts are being faced daily. The continued growth of the Nation in terms of population, expanding urban areas, proliferating transportation systems, a dynamic economy; the growing number of governmental entities; and the increased size, scale, and impact of private actions, have created a situation in which many, if not most, land-use management decisions are not being rationally made. Instead, land-use planning and management decisions are being made at all levels of goverment on the basis of expediency, tradition, archaic legal principles, short-term economic considerations, and other factors which are often unrelated to what the real concerns of National, State and local land-use management should be.

Many small cities or counties all across the Nation do not have land use management plans. They have not inventoried their land resources or taken action to protect them. When major industries move into these areas, they located where it is cheapest and most convenient. And often, this means they locate in areas which, with the benefit of planning and foresight, should have been reserved for other uses such as recreation, parks, or low-density housing.

Industrial development is not, of course, the only problem. A similar situation exists with respect to residential land development, the location of utility and transportation corridors, commercial development, and the siting of public facilities such as thermal power plants.

Most local instances of poor land-use management and planning do not present critical national, regional, or statewide problems. But sometimes, as in the Everglades, they do. It then becomes a problem of broad public concern when a lack of planning or poor planning causes irreparable damage to assets of statewide, regional, or national importance.

The Nation's ocean beaches, for example, are such an asset. The American public has a valid interest in how they are developed and managed. The management of areas adjoining and on the periphery of our national parks, forests, and recreation areas greatly affects the value of large national investments in unique natural assets. Should such areas be developed according to the unilateral decisions of private developers or the lack of decisions of State and local jurisdictions? Or should these decisions be shared with the State?

By the same token, there are many land use decisions made by the Federal Government which require greater participation by State and local government. Often the Federal Government is seeking the use of a local community's most valuable asset; its land and environment. We must guarantee not only that the use of this asset is necessary, but that it is made in accord with the highest and best standards of land use and environmental management.

Mr. President, the National Land Use Policy Act of 1970 is designed to deal with many of the problems to which I have referred.

As introduced today, this measure has three major aspects. First, it would establish a grant-in-aid program to assist State and local government in hiring and training the personnel, and developing the competence necessary to improve land-use planning and management at the State level.

Second, action forcing provisions are included which are designed to encourage every State through an agency to be designated by the State's Governor, to inventory their land resources and develop a statewide environmental, recreational, and industrial land-use plan within 3 years. The States would be encouraged to assume appropriate land-use management powers over those assets and land resources which are of regional, statewide, or national significance. These might include undeveloped ocean beaches; portions of major river systems and lakes; buffer zones around existing State and National parks and recreation areas; areas involving multicounty and interstate environmental problems such as air, water, and noise pollution; transportation and utility corridors; and areas which are compatible for heavy industries such as refineries, major metal processing plants, and thermal powerplants. The legislation would not affect areas located within incorporated cities which have exercised land-use planning and management authority.

Development and implementation of a statewide land-use plan may required the creation of a new governmental agency in some States, and a restructuring of existing institutions in other States. The legislation sets forth certain minimal standards on environmental, recreational, and industrial land-use planning which the statewide land-use plan will have to meet to qualify for continued grant-in-aid eligibility.

Within 4 years of the date of enactment of the act, the statewide land-use planning agency must have the authority to implement the statewide environmen-

tal, recreational, and industrial land-use plan. This would include the authority to acquire land; to control the types of development which may take place in areas subject to the plan; to conduct hearings allowing for full public participation; and to make changes in the statewide plan when required by changed conditions.

The legislation provides that if a State should fail to adopt an acceptable land-use plan within 4 years, the State's entitlement to certain additional Federal assistance programs, which shall be designated by the President, may be reduced at the rate of 20 percent per year until the State has complied with the act. Programs to be designated by the President would be those which tend to create land-use problems unless they are properly planned. These might include Federal highway construction trust funds and other public work programs.

Third, the act will assign to the Land and Water Resources Planning Council—formerly the Water Resources Council—the responsibility of administering the grant-in-aid program, working with State and local government, and reviewing State land-use plans.

In addition, the Council would have important responsibilities for coordinating Federal land-use planning, for improving Federal-State relations in this area, and for maintaining a data and information center on all Federal and federally assisted activities which have land-use planning and management ramifications.

Because the Water Resources Council already administers similar programs concerning the water and related land resources of the Nation, the National Land Use Policy Act of 1970 has been drafted as an amendment to the Water Resources Planning Act of 1965. The experience, the established communications network, the river basin commission system, and staff organization of the Council will provide an excellent base for the development of this broader function.

Mr. President, the hour is late and much has already been lost, but I believe we still have time to meet the challenge of the land. We still have a choice about the shape of America's future. We have a land worthy and capable of preservation and proper development.

Mr. President, I ask unanimous consent that the text of the National Land Use Policy Act of 1970 be printed in the Record.

The PRESIDING OFFICER. The bill will be received and appropriately referred; and, without objection, the bill will be printed in the Record.

The bill (S. 3354), to amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land-use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land-use planning, introduced by Mr. Jackson, was received, read twice by its title, referred to the Committee on Interior and Insular Affairs, and ordered printed in the Record, as follows:

S. 3354. A bill to amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadcasting the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Water Resources Planning Act (79 Stat. 244), as amended (82 Stat. 935), is further amended by adding a new title IV to read as follows:

"TITLE IV—A NATIONAL LAND USE POLICY

"FINDINGS AND DECLARATION OF POLICY

"SEC. 401. (a) The Congress hereby finds that there is a national interest in a more efficient and comprehensive system of national and statewide land use planning and decisionmaking and that the rapid and continued growth of the Nation's population, expanding urban development, proliferating transportation systems, large scale industrial and economic growth, conflicts in emerging patterns of land use, the fragmentation of governmental entities exercising land-use planning powers, and the increased size, scale, and impact of private actions, have created a situation in which land-use management decisions of national, regional, and statewide concern are being made on the basis of expediency, tradition, short term economic considerations, and other factors which are often unrelated to the real concerns of a sound national land-use policy.

"(b) The Congress further finds that all across the Nation a failure to conduct competent, ecologically sound land use planning has required public and private enterprise to delay, litigate, and cancel proposed public utility and industrial

and commercial developments because of unresolved land questions, thereby causing an unnecessary waste of human and economic resources and a threat to public services and often resulting in decisions to locate utilities and industrial and commercial activities in the area of least public and political resistance, but without regard to relevant ecological and environmental land use considerations.

"(c) The Congress further finds that many Federal agencies are deeply involved in national, regional, and State land-use planning and management activities which because of the lack of a consistent policy often result in needless, undesirable, and costly conflicts between agencies of Federal, State, and local government; that existing Federal land-use planning programs have a significant effect upon the location of population, economic growth, and on the character of industrial, urban, and rural development; that the purposes of such programs are frequently in conflict, thereby subsidizing undesirable and costly patterns of land-use development; and that a concerted effort is necessary to interrelate and coordinate existing and future Federal, State, and private decisionmaking within a system of planned development and established priorities that is in accordance with a national land-use policy.

"(d) The Congress further finds that while the primary responsibility and constitutional authority for land use planning and management of non-Federal lands rests with State and local government under our system of government, it is increasingly evident that the manner in which this responsibility is exercised has a tremendous influence upon the utility, the value, and the future of the public domain lands, the national parks, forests, seashores, lakeshores, recreation and wilderness areas and other Federal lands; that the interest of the public in State and local decisions affecting these areas extends to the citizens of all States; and that the failure to plan and, in some cases, poor land-use planning at the State and local level pose serious problems of broad national, regional, and public concern and often result in irreparable damage to commonly owned assets of great national importance such as estuaries, ocean beaches, and other areas in public ownership.

"(e) The Congress further finds that the land use decisions of the Federal government often have a tremendous impact upon the ecology, the environment and the patterns of development in local communities; that the substance and the nature of a national land use policy ought to be formulated upon an expression of the needs and interests of State, regional, and local governments as well as those of the Federal Government, private groups and individuals; and that Federal land use decisions require greater participation by State and local government to insure that they are in accord with the highest and best standards of land-use management and the desires and aspirations of State and local government.

"(f) In order to promote the general welfare and to provide full and wise application of the resources of the Federal government in strengthening the environmental, recreational, economic and social well-being of the people of the United States, the Congress declares that it is a continuing responsibility of the Federal Government, consistent with the responsibiliy of State and local government for land-use planning and management, to undertake the development of a national policy, to be known as the national land-use policy, which shall incorporate ecological, environmental, csthetic, economic, social and other appropriate factors. Such policy shall serve as a guide in making specific decisions at the national level which affect the pattern of environmental, recreational and industrial growth, and development on the Federal lands, and shall provide a framework for development of interstate, State, and local land-use policy.

"(g) The Congress further declares that the national land-use policy should—

"(1) favor patterns of land-use planning, management and development which are in accord with sound ecological principles and which offer a range of alternative locations for specific activities and encourage the wise and balanced use of the Nation's land and water resources:

"(2) foster the continued economic growth of all States and regions of the United States;

"(3) favorably influence patterns of population distribution in a manner such that a wide range of scenic, enuvironmental, and cultural amenities are available to the American people;

"(4) contribute to carrying out the Federal responsibility for revitalizing existing rural communities and encourage, where appropriate, new communities which offer diverse opportunities and a diversity of living styles;

"(5) assist State government to assume responsibility for major land-use planning and management decisions which are of regional, interstate, and national concern;

"(6) facilitate increased coordination in the administration of Federal programs so as to encourage desirable patterns of environmental, recreational, and industrial land-use planning; and

"(7) systematize methods for the exchange of land-use, environmental and ecological information in order to assist all levels of government in the development and implementation of the national land-use policy.

"(h) The Congress further declares that intelligent land-use planning and management provides the single most important institutional device for preserving and enhancing the environment, for ecologically sound development, and for maintaining conditions capable of supportig a quality life and providing the material means necessary to improve the national standard of living.

"PURPOSE

"SEC. 402. It is the purpose of this title—

"(a) to establish a national policy to encourage and assist the several States to more effectively exercise their constitutional responsibilities for the planning management, and administration of the Nation's land resources through the development and implementation of comprehensive 'Statewide Environmental, Recreational and Industrial Land Use Plans' (hereinafter referred to as 'Statewide Land Use Plans') and management programs designed to achieve an ecologically and environmentally sound use of the Nation's land resources;

"(b) to establish a grant-in-aid program to assist State and local government to hire and train the personnel, and gain the competence necessary to develop, implement, and administer a Statewide Land Use Plan which meets Federal guidelines and which will be responsive and effective in dealing with the growing pressures of conflicting demands on finite land resource base;

"(c) to establish reasonable and flexible Federal requirements to give individual States guidance in the development of State-wide Land Use Plans and to condition the distribution of certain Federal funds on the establshment of an adequate Statewide Land Use Plan;

"(d) to enlarge the responsibilities of the Land and Water Resources Planning Council (formerly the Water Resources Council) to include the administration of the Federal grant-in-aid program, the review of Statewide Land Use Plans for conformity to the provisions of this title, and the issuance of a biennial report on national land use policies, trends, projections and problems; and

"(e) to exercise the Federal Government's responsibility to maintain, develop, and refine a coherent national land use policy with respect to the planning, management and administration of all federally owned lands.

"STATEWIDE ENVIRONMENTAL, RECREATIONAL AND INDUSTRIAL LAND USE, PLANNING GRANTS

"SEC. 403. (a) In order to carry out the purposes of section 402, the Land and Water Resources Planning Council (herein referred to as the 'Council') is authorized to make land use planning grants to—

"(1) an appropriate single State agency, designated by the Governor of the State, which has statewide land use planning responsibilities and which meets the criteria and guidelines set out in section 406 of this title; and,

"(2) any interstate agency which is authorized by Federal law or interstate compact to plan and regulate land use development.

"(b) The Council is authorized to make land use planning grants in accordance with provisions of this title to assist and enable eligible State and interstate agencies—

"(1) to prepare an inventory of the State's land and related resources;

"(2) to collect and analyse information and data related to—

"(A) population characteristics, migration, trends and densities;

"(B) economic trends, location patterns, and projections;

"(C) directions and extent of urban and rural growth and changes;

"(D) public works, public capital improvements, land acquisitions, and economic development programs, projects, and associated activities;

"(E) ecological, environmental, geological, and physical conditions which are of relevance to decisions concerning the location of new communities, commercial

development, heavy industries, transportation and utility corridors, and other land uses;

"(F) the projected land use requirements of the State for recreation, urban growth, commerce, transportation, the generation of energy, and other important uses for at least the next fifty years;

"(G) governmental organization and financial resources available for land use planning and management within the State and the political subdivisions thereof; and

"(H) other information necessary to conduct statewide land use planning in accord with the provisions of this title.

"(3) to provide technical assistance and training programs for appropriate personnel on the development, implementation and management of statewide land use planning programs;

"(4) to develop, use, and encourage common information and data bases for Federal, State, regional, and local land use planning;

"(5) to establish arrangements for the exchange of land use planning information among State agencies, and among the various governments within each State and their agencies, between the governments of neighboring States as appropriate; and with interstate compact agencies, river basin commissions and regional commissions established pursuant to Federal law;

"(6) to establish arrangements for the exchange of information with the Federal Government for use by the Council in discharging its responsibilities under this Act; and

"(7) to conduct other related planning and coordination functions as may be approved by the Council.

"PROPOSALS FOR GRANTS

"SEC. 404. (a) To receive a State land use planning grant a State shall submit to the Council a proposal in such form and in accordance with such procedures as the Council may specify, indicating the program of State land use planning it proposes to undertake, the planning assistance that it wil require, the period during which such activities will be conducted, and their estimated costs, and designating those functions which qualify for Federal assistance pursuant to this title.

"(b) From the sum appropriated pursuant to section 410 the Council is authorized to make State land use planning grants to agencies whose proposals are approved, in an amount not to exceed two-thirds of the estimtaed cost of the planning for the three fiscal years after the date of enactment of this title. Thereafter, grants may be made in an amount not to exceed one-half of the new planning costs and one-fourth of the State agencies operating costs.

"(c) Planning grants shall be allocated to the States with approved programs based on regulations of the Council which shall take into account the amount and nature of the State's land resource base, population, pressures resulting from growth, and other relevant factors.

"(d) Any grant made for the purpose of this title shall increase, and not replace State funds presently available for State land use planning activities. Any grant made pursuant to this title shall be in addition to and may be used jointly with grants or other funds available for land use planning surveys, studies, and investigations under other federally assisted programs.

"DUTIES OF THE COUNCIL

"SEC. 405. (a) The Council shall promulgate rules and regulations to administer the provisions of this title, including the detailed terms and conditions under which State land use planning grants may be made.

"(b) In order to carry out the provisions of this title, the Council—

"(1) is authorized to make advance, progress, or other payments pursuant to any State land use planning grant made under this title without regard to the provisions of section 3648 of the Revised Statutes, as amended (31 U.S.C. 529);

"(2) is authorized to provide technical assistance to any eligible State or interstate agency and to River Basin Commissions as specified in sections 403 and 404;

"(3) is authorized, by contract or otherwise, to make studies and publish information on problems related to State and National land use planning;

"(4) shall consult with other officials of the Federal Government responsible for the administration of Federal land use planning assistance programs to States,

their political subdivisions, and other eligible agencies in order to enhance coordination; and

"(5) is required to periodically review provisions of the Statewide Land Use Plans for conformity to the provisions of this Act.

"FEDERAL GUIDELINES AND REQUIREMENTS

"SEC. 406. (a) A State agency specified in section 403 (a) must meet or be able to give assurances that it will meet the following requirements in the development of the Statewide Land Use Plan to be eligible for statewide land use planning grants under this title—

"(1) a single State agency, designated by the Governor, shall have primary authority and responsibility for the development and administration of the Statewide Land Use Plan and other appropriate State agencies will assist, where appropriate, in the development of the plan;

"(2) a competent and adequate interdisciplinary professional and technical staff as well as special consultants, will be available to the State agency to develop the Statewide Land Use Plan;

"(3) to the maximum extent feasible, pertinent State and Federal plans, studies, information, and data on land use planning already available, shall be utilized in order to avoid unnecessary repetition of effort and expense; and

"(4) such records shall be kept and made available and such reports and evaluations shall be made as the Council may require regarding the status and application of Federal funds made available under the provisions of this title.

"(b) During the three fiscal year period following the date of enactment of this title. State Land Use Plans must, as a condition of continued grant eligibility, meet or be designed to meet, as additional information is developed, the following guidelines and requirements—

"(1) identification of the boundaries of the portions of the State subject to the Statewide Land Use Plan;

"(2) identification of the areas of the State which are not subject to the Statewide Land Use Plan: Such areas shall include—

"(A) lands which are located within the boundaries of any incorporated city which has exercised land use planning and authority, and

"(B) such other lands as the Council may specify pursuant to section 405;

"(3) identification of those areas of the State—

"(A) where ecological environmental, geological and physical conditions dictate that certain types of land use activities are incompatible and undesirable.

"(B) whose highest and best use, based upon projected State and National needs, on the Statewide Outdoor Recreation Plan required under the Land and Water Conservation Fund Act, and upon other studies, is recreational oriented use.

"(C) which are best suited for natural resource, heavy industrial and commercial development.

"(D) where transportation and utility corridors are or should, in the future, be located, and

"(E) which furnish the amenities and the basic essentials to the development of new towns and the revitalization of existing communities;

"(4) appropriate provisions designed to insure that regional requirements for material goods, natural resources, energy, recreation and environmental amenities given consideration;

"(5) provisions and procedures designed to insure that the plan is consistent with local, State, regional, and Federal standards relating to the maintenance and enhancement of the quality of the environment and the conservation of public resources;

"(6) provisions to insure that transportation and utility corridors do not damage Federal lands dedicated to the maximization of declared public values, and are established in compliance with regional and State needs, State policies, and policies and goals set forth in other Federal legislation;

"(7) measures such as buffer zones, scenic easements, prohibitions against nonconforming uses, and aesthetic standards to insure that federally designated, financed, and/or acquired areas including, but not limited to elements of the national park system, wilderness areas, and game and wildlife refuges are not damaged or degraded as a result of inconsistent or incompatible land use patterns in the same immediate geographical region.

"(c) To retain eligibility for statewide land use planning grants after the end of three fiscal years from the beginning of the first fiscal year after the date

of enactment of this title, the State land use planning agency designated by the Governor pursuant to section 403(a)(1) must meet the following Federal guidelines and requirements—

"(1) the agency must have the authority necessary to implement the Statewide Environmental, Recreational and Industrial Land Use Plan;

"(2) the agency's authority shall include but need not be limited to—

"(A) authority to acquire interests in real property if deemed to be necessary under the Statewide Land Use Plan;

"(B) authority, under the State police powers, to place restrictions on the type of land use activities which may take place in areas designated for a special use under the Statewide Land Use Plan; and

"(C) authority to conduct public hearings, allowing full public participation and granting the right of appeal to aggrieved parties, in connection with the dedication of any area of the State as an area subject to restricted or special uses under the Statewide Land Use Plan;

"(3) the agency must have procedures for modification and change in the State Land Use Plan, including public notice and hearing, to meet changed future conditions and requirements.

"(d) The Council shall have authority to terminate any financial assistance extended under this title if, after the State has been given notice of a proposed termination and an opportunity to present relevant evidence, the Council finds that:

"(1) the State agency has failed to adhere to the guidelines and requirements of this title in the development of the land use plan; or

"(2) the State has not enacted State legislation which meets the requirements of section 406(c).

"OTHER GRANT-IN-AID PROGRAMS

"SEC. 407. Any State whose entitlement to statewide land use planning funds under the provisions of this title has been terminated pursuant to section 406(d), or who fails to develop an acceptable Statewide Land Use Plan by the beginning of the fourth fiscal year after the date of enactment of this title, shall—

"(1) have its entitlement to certain additional Federal assistance programs, which shall be designated by the President, reduced at the rate of 20 per centum per year until such time as the provisions of this title are complied with; and

"(2) be denied the issuance of any right-of-way permits or other permits available under the public land laws and other Federal laws to use or to cross the public domain or other Federal lands until such time as the provisions of this title are complied with.

"STATE-FEDERAL COORDINATION

"SEC. 408. (a) The Council shall not approve the land use plan submitted by a State agency until it has solicited the view of the Federal agencies principally affected by such plans or has evidence that such views were provided the State agency in the development of the plan.

"(b) All Federal agencies conducting or supporting public works activities in an area subject to a State Land Use Plan shall make such activities, unless there are overriding considerations of national policy which require departures from the plan, consistent with the approved plan for the area. State and local governments submitting applications for Federal assistance for activities in areas subject to State Land Use Plans shall indicate the views of the State land use agency as to the relationship of such activities to the aprpoved plan for the area. Federal agencies shall not approve proposed projects that are inconsistent with the plan.

"FEDERAL PLANNING INFORMATION CENTER

"SEC. 409. (a) The Land and Water Resources Planning Council or such other appropriate agency as the President may designate, shall—

"(1) develop and maintain an information and data center which has on file, on both a geographical and a functional basis, an up-to-date set of all federally initiated and federally assisted plans for activities which involve any use of lands under State or Federal jurisdiction, which are of more than local significance;

"(2) seek cooperation in placing on file the plans of State and local government and, where appropriate, private enterprise, which have more than local significance for land use planning; and

"(3) develop and maintain statistical data and information on past, present and projected land use patterns which are of national significance.

"(b) All Federal agencies are required, as a part of their planning procedures on projects involving a major land use activity, to consult with the agency designated pursuant to section 409(a) for the purpose of determining whether the proposed activity would conflict in any way with the plans of other Federal, State, and local agencies.

"SEC. 410. There are hereby authorized to be appropriated such funds as may be necessary to carry out the purposes of this title."

SEC. 2. (a) Section 1 of the Water Resources Planning Act, as amended, is further amended to read as follows:

"SECTION 1. This Act may be cited as the 'Land and Water Resources Planning Act'."

(b) Section 2 is amended as follows:

"SEC. 2. In order to meet the Nation's rapidly expanding demands for water resources and in order to insure that the Nation's limited land resources base is properly planned and managed, it is hereby declared to be the policy of the Congress to encourage the conservation, development, and utilization of the water and land resources of the United States on a comprehensive and coordinated basis by the Federal Government, States, localities, and private enterprise with the cooperation of all affected Federal agencies, States, local governments, individuals, corporations, business enterprises, and others concerned."

EFFECT OF EXISTING LAWS

(c) In subsection 3(b), delete the last phrase "water and related land resources projects;" and insert instead the following: "projects for the development of land and water resources."

TITLE I—LAND AND WATER RESOURCES PLANNING COUNCIL

SEC. 3. (a) Amend section 101 to read as follows:

"There is hereby established a Land and Water Resources Planning Council (hereinafter to be referred to as the 'Council') which shall be composed of the Secretaries of the Interior; Agriculture; the Army; Health, Education, and Welfare; Transportation; and Housing and Urban Development; the Chairman of the Federal Power Commission. The Chairman of the Council shall request the heads of other Federal agencies to participate wtih the Council when matters affecting their responsibilities are considered by the Council. The Chairman of the Council shall be designated by the President."

(b) Amend section 102(a) by deleting the phrase "or at such less frequent intervals as the Council may determine,".

(c) Amend section 102 by adding the following new subsections:

"(c) Maintain a continuing study and prepare an inventory of the land resources of the United States, and issue biennially a report on land resources and uses, projections of development and uses of land, and analyses of current and emerging problems of land use.

"(d) Maintain a continuing study of the adequacy of administrative and statutory means for the coordination of Federal programs which have an impact upon land use and of the compatibility of such programs with State and local land-use planning and management activities; it shall appraise the adequacy of existing and proposed Federal policies and programs which effect land use; and it shall make recommendations to the President with respect to such policies and programs."

(d) Amend subsection 104(1) by deleting the word "related".

(e) Amend subsection 201(a) by deleting the word "related" before the phrase "land resources commission".

TITLE II—RIVER BASINS COMMISSIONS

SEC. 4. (a) Amend subsection 201(b)(1) by deleting the word "related".

(b) Amend subsection 201(b) by inserting a new clause (3) as follows:

"(3) prepare and keep up to date, to the extent practicable, a comprehensive coordinated joint plan for Federal, State, interstate, local, and nongovernmental plans which significantly involve land use or have significant impacts upon land-use patterns; zoning or other land-use regulation; and, to the extent possible, nongovernmental land-use plans. It should specifically indicate the relation of

planned or proposed Federal projects to land-use development in the region.

(c) Renumber clause (3) of subsection 201(b) to become clause (4).

(d) Delete clause (4) of subsection 201(b) and insert instead a new clause (5) as follows:

"(5) foster and undertake such studies of water resources and land-use problems in its area, river basin, or group of river basins as are necessary in the preparation of the plans described in clauses (2) and (3) of this subsection."

(e) Amend section 201 by adding a new subsection (c) as follows:

"(c) River Basin Commissions which have been established under the provisions of the Water Resources Planning Act (79 Stat. 244) prior to the date of enactment of this amendment may extend their jurisdiction to encompass the land-use planning provisions of this Act, (1) by the request of the Council or, (2) by written request addressed to the Council by the Governor a participating State: *Provided*, That the request is concurred in writing by not less than one-half of the participating States.

(f) Amend the first phrase of subsection 202(c) to read as follows:

"(c) Two members from each State * * *"

(g) Amend subsection 202(d) by inserting after the phrase "* * * and whose jurisdiction extends to the waters" the words "or lands."

(h) Amend clause (3) of subsection 204 by deleting the final word "and."

(i) Amend subsection 204 by deleting clause (4) and by inserting a new clause (4) as follows:

"(4) submit to the Council for transmission to the President and by him to the Congress, and the Governors and the legislatures of the participating States a comprehensive, coordinated, joint plan, or any major portion thereof or necessary revisions thereof, for land-use planning in the area, river basin, or group of river basins for which such commission was established. Before the commission submits such a plan or major portion thereof or revision thereof to the Council, it shall transmit the proposed plan or revision to the head of each Federal department or agency, the Governor of each State, and each interstate agency, from which a member of the commission has been appointed. Each such department and agency head, Governor, and interstate agency shall have ninety days from the date of the receipt of the proposed plan, portion, or revision to report its views, comments, and recommendations to the commission. The commission may modify the plan, portion, or revision after considering the report so submitted. The views, comments, and recommendations submitted by each Federal department or agency head, Governor, interstate agency, and United States section of an international commission shall be transmitted to the Council with the plan, portion, or revision; and"

(j) Amend subsection 204 by adding a new clause (5) as follows:

"(5) submit to the Council at the time of submitting the plans called for in clauses (3) and (4) of this subsection any recommendations it may have for continuing the functions of the commission and for implementing the plans, including means of keeping the plans up to date."

TITLE V—MISCELLANEOUS

SEC. 5. (a) Redesignate "TITLE IV" as "TITLE V".

(b) Amend section 401 to become a new section 501 as follows:

"SEC. 501. There are authorized to be appropriated to carry out the provisions of this Act—

"(a) $3,000,000 annually for the administration of this Act; and

"(b) not to exceed $8,000,000 annually to carry out the provisions of title II: *Provided*, That not more than $1,000,000 annually shall be available for any single river basin commission."

STATE OF ALABAMA,
GOVERNOR'S OFFICE,
Montgomery, Ala., March 19, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: I received your recent letter and enclosure relative to your bill (S. 3354) which proposes a national land use policy. I appreciate the opportunity to comment.

The tenor of the bill as it relates to the elimination of conflicting and competing activities by Federal agencies is certainly meritorious. Similarly, the pro-

visions which lodge in the states and their Governors the prime responsibilities are desirable, as this appears to me to be a recognition that the several states have or will have a variety of problems in this area requiring locally oriented solutions. Further, those aspects of the bill providing Federal grants-in-aid lend to it a financial source of assistance which otherwise might not be adequate solely from state sources.

The above constitute my major comments at this time; however, further study by my staff may reveal other items of interest and if so, I will be happy to forward them to you.

Sincerely,

ALBERT P. BREWER, *Governor.*

STATE OF ALASKA,
OFFICE OF THE GOVERNOR,
Juneau, Alaska, March 16, 1970.

Re: Proposed National Land Use Policy.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: I have studied with extreme interest the proposed bill, S. 3354, that you introduced to provide a national land use policy. We regard this proposed legislation as a very suitable method to extend the cooperation of the Federal Government and the states in their planning efforts. The aid proposed for the states in their land-use planning is a closely related and vital function of the presently active program under the Water Resources Council Title III grants. In a state such as Alaska where the land use and water utilization is so closely related, it is impractical to continue planning for the use of our water resources without taking into account the accompanying land use. We appreciate and support your attempt to establish a national land use policy and to bring together the many varied functions spread throughout a great number of agencies in this field.

Because of the many problems that will arise in or State subsequent to the settlement of the Native Land Claims and the lifting of the present "land freeze," we have urged the extension of the Bureau of Land Management's authority to classify land for study purposes. This instrument as used by Bureau of Land Management in Alaska has given us a breather for land-use study which we feel should not be terminated at its expiration date. The preparation of a comprehensive land-use plan through the cooperation with the Federal Government and the State agencies will be helped immeasurably by the Bureau of Land Management studies. However, since theirs will not be a comprehensive study of both Federal and State lands, we would prefer a national land use act which would be a cooperative effort between the Federal and State Governments.

Best personal regards.

Sincerely yours,

KEITH H. MILLER, *Governor.*

STATE OF ARKANSAS,
OFFICE OF THE GOVERNOR,
Little Rock, Ark., April 8, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: Thank you for sending me the excerpt from the Congressional Record on your bill S. 3354 and your solicitation for my comments.

In the process of reviewing the legislation my Special Assistant, Glen Jermstad, received an interesting memorandum from our State Planning Coordinator. It brings to light some statements that your staff might desire to refute. I have taken the liberty of enclosing these comments for your review.

With all good wishes,

Sincerely,

WINTHROP ROCKEFELLER, *Governor.*

Enclosure.

ARKANSAS PLANNING COMMISSION,
Little Rock, Ark., March 27, 1970.

To: Glen Jermstad.
From: Bert Wakeley, State Planning Coordinator.
Subject: National Land Use Policy Bill S. 3354.

GLEN: It has taken the traditional small town planner thirty years to discover that land-use planning is insufficient to base sound policy decision upon. Senator Jackson's bill appears to have been written for the Federal Water Resources Board, with little consideration given to the states or to other realities on the federal level:

(1) The President's reorganization plan for his office, which would put strong management capability in the B.O.B., allowing it to do planning coordination.

(2) HUD, U.S.P.A. and Commerce have been in the planning game too long to allow this bill to pass as is.

(3) While Arkansas isn't in a River Basin Commission, as Title III of the act stands, if we were to join, we'd lose the right to do our own land-use planning.

The three points above are minor, however, when you look at what this bill does to the states—

(1) The cost for this planning program described in Section 406 would be (for the first three years) a minimum of $3.5 million and would take a tremendous staff. This is not to say that the study would not be worth it. In fact, it would be an excellent undertaking.

(2) Once the plan is completed, however, administration and enforcement are tremendous problems. The fact that Section 407 administers penalties for nonenforcement may help the legislature decide to provide funds for enforcement.

(3) The federal share of the program is ⅔—⅓ for the first three years after enactment, thereafter, ½ of new planning costs and ¼ agency administration costs.

The bill itself is not bad, it just isn't sufficient. There are too many other bills before Congress that would be of much more assistance to planning in Arkansas. These include:

S. 2479, Intergovernmental Cooperation Act of 1969.
S. 3228, "Balanced Urbanization and Policy Planning Act."
H.R. 14517, Joint Funding Simplification Act of 1969.
S. 2035, Grant Consolidation Act of 1969.
S. 2483, Intergovernmental Revenue Act.
S. 1, Uniform Relocation Assistance and Land Acquisition Policies Act of 1969.

Land-Use by itself is too restrictive. The above bills will give states funding and authority to do a broad range of planning activities. I do not believe the Governor should support Jackson's Bill.

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, Calif., March 11, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

MY DEAR SENATOR: I have received your letter of March 3 concerning your bill S. 3354. Thank you for enclosing the excerpt from the Congressional Record.

I have taken the liberty of forwarding this communication to my Secretary for Resources, Norman Livermore, asking him to contact you after his evaluation. His expertise as a top environmentalist in our state will be most helpful in this area.

Thank you for keeping us informed in these matters.

Sincerely,

RONALD REAGAN, *Governor.*

THE STATE OF COLORADO,
EXECUTIVE CHAMBERS,
Denver, Colo., April 6, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: Thank you so much for your letter of March 3 enclosing a copy of the Congressional Record reporting of your bill on a National Land Use Policy. I am sorry I have been delayed in responding, but want you to know that I am very much interested in legislative activity in this area.

I caused to be introduced in our recent session of the Colorado Legislature, a bill calling for statewide land use, but did not receive full legislative support for the concept.

With this in mind, our Senior Senator, Gordon Allott, has thought perhaps it might be helpful if it could be arranged that I appear to testify before your Committee. Therefore, rather than commenting in detail now, subject to your approval, I will delay any comment until such time as it is determined whether, indeed, I will be a witness or not.

Again, thank you for your consideration.

Sincerely,

JOHN A. LOVE, *Governor.*

STATE OF CONNECTICUT,
EXECUTIVE CHAMBERS,
Hartford, Conn., March 19, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

Dear SENATOR JACKSON: Your recently introduced bill concerning a national land use policy is an interesting and timely proposal to help control the use of our irreplaceable land base. I am particularly pleased by its perspective which seeks to balance the needs to preserve and to develop and by the fact that prime responsibility will remain with the States.

We in Connecticut are much aware of the problem and have had an inter-agency State planning effort for almost ten years to help coordinate planning at the regional and local levels while aiming for the same land use objectives described in your bill. Many of these proposals appear in State planning reports prepared through this inter-agency cooperation. For your use I am enclosing a set of these reports which should be of interest. Specifically I refer you to "The Green Land" and "Urban Development", which deal directly with the land use opportunities and problems of Connecticut.

Recently I have appointed an Enviornmental Policy Committee to act as a Task Force to investigate the challenges facing us and to suggest actions needed to ensure a quality environment for Connecticut. A published report is expected later this year and I will be happy to provide one or more copies for your information. I am also enclosing a draft proposal on "Goals, Policies, and Needed Actions" recently prepared by our Department of Agriculture and Natural Resources for the Environmental Policy Committee.

I do question the applicability of S. 3354 to New England however. As you know, most or all of the area of our states is included in incorporated municipalities. In Connecticut, most of these towns have planning or zoning or both, which would seem to place them outside the jurisdiction of this bill.

As existence of a Planning and Zoning Commission does not necessarily guarantee quality land use, a question might be raised as to impact of S. 3354 in protecting valuable environmental features in such towns.

Sincerely,

JOHN DEMPSEY, *Governor.*

STATE OF GEORGIA,
EXECUTIVE DEPARTMENT,
Atlanta, Ga., March 27, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: Your letter dated March 3, 1970, in reference to the S. 3354 has been received.

I sincerely appreciate your keeping me posted on this matter. I would also

appreciate members of your staff keeping Mr. H. Oliver Welch, State Planning Officer and a member of my staff, posted on the developments of this bill.

If there is any way I can be of assistance to you, please let me know.

With kindest personal regards, I am

Sincerely,

LESTER MADDOX, *Governor.*

STATE OF HAWAII,
EXECUTIVE CHAMBERS,
Honolulu, April 27, 1970.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: Thank you for your letter of March 3, 1970, regarding your S. 3354, a Bill to Establish a National Land Use Policy. You have given considerable study and thought to those problems of our Nation which can be rationally resolved with adequate forethought as to allocation of our land resources. The pressures on the land and how it is to be used to accommodate a rapidly growing national population are critical problems which need solution soon. In general, the bill appears to be good and it sets forth a logical course of action. There are several comments which we respectfully wish to offer for your consideration. You may wish to review these in the light of other comments and recommendations presented at hearings on the bill.

We have been so accustomed to most federal programs dealing with land use planning being located in the Department of Housing and Urban Development that a question has been raised about the location of the functions proposed in your bill. No doubt, being more familiar with the Federal Government structure than we are, you have considered several possible locations for this agency. If you feel it is best attached to and fully integrated with the Water Resources Planning Council, we respect your recommendation. However, we would suggest that some strong working relations be established with HUD to prevent confusion or duplication in these planning efforts. We note that the Secretary of HUD would be a member of the Council. Perhaps this will allow for the implementation of the necessary administrative machinery to prevent overlap. You are probably aware there is now a Federal task force working on the matter of overlapping planning requirements in Federal programs. The same relationship will be necessary with the Department of Interior, HEW, and Transportation because of programs they have which have a direct involvement with land use.

The time schedules set forth in the bill seem adequate. Most states should be able to develop a comprehensive statewide land use plan in three years. Exceptions might occur in those states with many local jurisdictions such as California or New York.

This would not be a problem in Hawaii as we have previously prepared statewide land use plans, we have statewide zoning authority under our Land Use Law, and we have active implementation by our State Land Use Commission and the County Planning Commissions.

One paragraph of Section 403 (b) specifies that the land use plan must project land use requirements for at least 50 years. We believe this may be a little too long range. Normally, land use plans are deemed appropriate to cover a 20-year time span with comprehensive updating every five years. A 30-year span should offer sufficient lead time, but you may want to include a requirement for periodic mandatory updating.

The difficulty with most land use plans is that they are not updated on a comprehensive basis at regular intervals. Our experience indicates that a five- or six-year interval is desirable. This could be related to the length of financial planning in each state. Hawaii has a mandatory five-year land use boundary review requirement and a six-year capital improvements program updated each year.

Other provisions of the bill are good. No doubt you will be receiving comments from organizations such as the Council of State Governments, American Institute of Planners, and the American Society of Planning Officials which may offer additional recommendations. We do want to follow the progress of the bill and would thus appreciate being informed of any substantive changes. Perhaps all states could be kept informed on the bill through the Council of State Governments' Washington office.

Thank you for the opportunity to comment on your bill.

Warm personal regards. May the Almighty be with you and yours always.

Sincerely,

JOHN A. BURNS.

STATE OF IDAHO,
OFFICE OF THE GOVERNOR,
Boise, April 27, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: I am enclosing some materials and policy positions covering Senate Bill 3354, which you have sponsored, providing for a national land use policy.

It is my thinking on this bill that it is highly desirable that Congress set forth a national land use policy which will give guidance to Federal agencies on this important subject and provide better uniformity and consistency in policy, enabling the states to plan and work with a consistent national land use policy.

The materials I am enclosing for your information and the information of your committee considering this legislation covers a statement by the Idaho Commission on Federal Land Laws with respect to Senate Bill 3354, and a summary and analysis prepared by the University of Idaho which I feel is worthy of consideration and may contain some information and comments of interest to you and your committee.

I appreciate the opportunity to provide you with comments and positions from the State of Idaho on the important subject of a national land use policy.

Sincerely,

DON SAMUELSON, *Governor.*

Enclosure.

IDAHO COMMISSION ON FEDERAL LAND LAWS,
CAPITOL BUILDING,
Boise, April 22, 1970.

Hon. DON SAMUELSON,
Governor of Idaho, Statehouse.

DEAR GOVERNOR: Senate Bill 3354 introduced by Senator Henry Jackson of Washington providing for the amendment of the Water Resource Planning Act of 1965 was discussed by the Idaho Commission on Federal Land Laws at its meeting in Boise today.

I was directed by the Commission to report to you that it was the consensus of the members that while such legislation undoubtedly has many merits, any position on the bill should perhaps be delayed until the report of the Public Land Law Review Commission is filed with the Congress on June 30.

There were two minor criticisms of the bill voiced during the discussion. First, it was felt that seeking compliance of the measure by threatening benefits of other federal programs as outlined in Section 407, subsection d, paragraphs 1 and 2, was not in the best interests of long range land and water management planning. It was also pointed out that while provision is made to take land planning matters into the Council, that there was apparently no thought given to changing or expanding the Council and river basin commissions to assure more expertise from the strictly land management function areas.

The Commission will keep the bill under advisement and has instructed me to assemble all pertinent information on the measure to the end that should further hearings be held on the bill, we might be able to offer constructive suggestions. I am enclosing a Summary prepared at the University of Idaho which I felt was worth consideration.

Sincerely,

JOHN E. MARTIN,
Executive Director.

Enclosures.

SUMMARY—NATIONAL LAND POLICY ACT OF 1970—S. 3354

The National Land Policy Act of 1970 was introduced in the Senate, as Senate Bill 3354, on January 29, 1970 by Mr. Henry Jackson and eighteen (other) members of the Committee on Interior and Insular Affairs.

The bill provides for the amendment of the Water Resources Planning Act of 1965 (P.L. .89-80, 42 U.S.C.A. §§ 1962 et al) by adding thereto "Title IV A National Land Use Policy" which provides for:

(1) A broad statement of national policy to encourage and assist the several states in the development and implementation of comprehensive statewide en-

vironmental, recreational and industrial land use plans and management programs designed to achieve an ecologically and environmentally sound use of the Nation's land resources.

(2) The establishment of statewide grant-in-aid program for environmental, recreational and industrial land use planning under rules and regulations promulgated by the Council to:

(a) An appropriate single agency designated by the Governor of the state which has statewide land use planning responsibilities and is otherwise qualified to meet the guidelines and criteria established by the Act, and

(b) Any interstate agency which is authorized under Federal law or interstate compact to plan and regulate land use development.

(3) State-Federal cooperation in the submission of statewide land use programs.

(4) The creation of a Federal Planning Information Center for the collection and dissemination of information and data.

(5) The conversion of the present "Water Resources Council" into a "Land and Water Resources Planning Council" with its duties and authority broadened to meet the needs of the act.

(6) The enlargement of the responsibilities and duties of the several River Basin Commissions by amendment to Title II of the Water Resources Planning Act of 1965.

(7) The changing of the title of the Water Resources Planning Act of 1965 to read the "Land and Water Resources Planning Act."

(8) The following appropriations are made (suggested) for carrying out the provisions of the Act.

(a) $3,000,000 annually for the administration of the Act.

(b) Not to exceed $8,000,000 annually to carry out the provisions of Title II: (duties of River Basin Commissions) provided that not more than $1,000,000 annually shall be available for any single river basin commission.

COMMENT

How much money will be made available to the states for land use planning is problematical under the Act as now drafted. No appropriation was made per se for grants-in-aid to states for land use planning in the 1970 Act. In contrast Title III of the Act as amended contains a $5,000,000 grant to the states for water and related land resource planning. This section was continued unaltered into the 1970 Act.

The 1970 Act provides for an appropriation of $3,000,000 to the Council for administration of the Act and $8,000,000 to the several River Basin Commissions with a $1,000,000 limitation to any one river basin area. Perhaps the Council may allocate some of its funds to the states for land-use planning.

It would appear advisable, however, to formulate plans now to take advantage of the funds when they do become available and in the meantime amend the Act to make more definite and certain the source and amount of funds available.

Senator Jackson in sponsoring the act said in Congress that the bill had three major aspects:

(1) Establish a grant-in-aid program to assist States and local government in hiring and training personnel, and developing competence necessary to improve land use planning and management at the State level.

(2) Provide federal leglisation, guidelines and regulations designed to encourage every state through an agency to be designated by the Governor thereof to inventory their land resources and develop a statewide environmental, recreational, and industrial land-use plan within 3 years. In addition the states would be encouraged to assume appropriate land-use management powers over those assets and land resources which are of regional, statewide and national significance. Such legislation shall not apply to areas within incorporated cities which have exercised land-use planning and management authority.

The creation of a new or restructuring of an old agency may be required to develop and manage a statewide land-use policy. The act sets forth certain minimal standards on environmental, recreational, and industrial land use planning which the statewide land-use plan must meet to qualify for continued grant-in-aid eligibility.

Within four years of the date of the enactment of this act, the state legislature must grant authority to implement the statewide environmental, recreational, and industrial land-use plan. This would include the authority

to acquire land; to control the types of development which may take place in the areas subject to the plan; to conduct public hearings; and to make changes in the statewide plan when required by changed conditions.

(3) The act will assign to the Land and Water Resources Planning Council—formerly the Water Resources Council—the responsibility of administering the grant in aid program, working with state and local government and reviewing state land-use plans.

In addition, the Council would have the added duty and responsibility for coordinating federal land use planning, for improving federal-state relations in this area, and for maintaining data on federally assisted activities which have land-use planning and management ramifications.

The 1970 Act itself will become Title IV of the Land and Water Resources Act as amended. The act is based upon expressed findings of Congress:

(1) That there is a national interest to be served by a more efficient and comprehensive system of national and state-wide land-use planning and decision making.

The need for a national land-use policy has been occasioned by the rapid and continued growth of the Nation's population, expanding urban development, proliferation of transportation systems, large scale industrial and economic growth, conflicts in emerging land-use patterns, fragmentation of governmental entities exercising land-use planning powers, and the increased size, scale and impact of private action, which have created a situation in which land-use management decisions of national, regional and statewide concern are being made on the basis of expediency, tradition, short term economic consideration, and other factors which are often unrelated to the real concerns of a sound national land-use policy.

(2) The need to provide competent and ecologically sound land-use planning for industrial site location has resulted in unnecessary delay, litigation and cancellation of many proposed public utility, industrial and commercial developments because of unresolved land-use questions.

(3) That there is a need to coordinate federal, state and local governmental land-use planning and management practices is apparent in the failure to establish priorities and guidelines consistent with a national policy of development and management of land-uses.

(4) There is a need to upgrade and coordinate both federal and state land-use planning by incorporating therein ecological, environmental, esthetic, economic, social and other appropriate factors, so as to support a quality life and provide the material means necessary to improve the national standard of living.

In the words of President Nixon in his State of the Union Message, 22 January, 1970:

"Our land, this land is our together, is a great and good land and also an unfinished land. The challenge of perfecting it is the summons of the seventies . . ."

"In the future, decisions as to where to build highways, locate airports, acquire land or sell land should be made with a clear objective of aiding a balanced growth."

STATE OF KANSAS,
OFFICE OF THE GOVERNOR,
Topeka, Kans., April 17, 1970.

HON. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: Thank you for your letter.

I appreciate receiving a copy of Senate Bill 3354, and your speech to the Senate in support of the bill. While I have not fully considered all of the implications of your proposal, I am prepared to urge support of the bill. It is surely true that several agencies of government work at close purposes, and it is time we moved to eliminate these contradictions in public policies.

With every good wish.

Your sincerely,

ROBERT DOCKING,
Governor of Kansas.

STATE OF LOUISIANA,
EXECUTIVE DEPARTMENT,
Baton Rouge, La., March 20, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: This will acknowledge and thank you for your letter and enclosure from the Congressional Record. After I have an opportunity to review it, I will let you know of any comments I may have.

With every good wish, I am
Sincerely yours,

JOHN J. MCKEITHEN, *Governor.*

STATE OF MAINE,
OFFICE OF THE GOVERNOR,
Augusta, Maine, March 16, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: Thank you for your recent letter and a copy of your proposed bill (S. 3354) to provide for a national land use policy. Along with Governors Guy and Sargent, I am also very interested in this proposal. Above all, it does recognize the obvious and glaring fact that at the present time this nation has not established a consistent, coherent and coordinated policy on either national land use or urban and rural development.

This lack of policy creates much confusion at the federal level where federal funds are being wasted in conflicting and contradictory programs. The new State Planning Office in Maine, for example, in its efforts to coordinate state, regional and local planning efforts, has found that conflicting aid programs and planning assistance activities are the single greatest obstacle in developing integrated policy at the state level.

The planning assistance programs administered by federal departments and agencies have developed outside of any consistent policy or administrative framework. These programs have been established in piecemeal fasion at various times to satisfy particular interest groups or current crisis conditions. Most of these programs are directly linked with a particular functional concern or interest so that each separate program encourages its own narrow consistency at the state, regional and local levels. This situation fosters duplication, conflict in goals and the resulting wasteful expenditure of public monies. Given this situation at the federal level it is difficult, if not impossible, for the states to direct planning efforts toward the solution of related problems or to even piece them together to provide effective mutual support for broad state objectives.

I hope that your legislation can provide a framework for the basis of continuous comprehensive plan processes at every governmental level so that we may interrelate the different types of planning and realize common opportunities. I will, therefore, give firm support to any legislation which aims to improve the existing situation.

Sincerely,

KENNETH M. CURTIS, *Governor.*

STATE OF MARYLAND,
EXECUTIVE DEPARTMENT,
Annapolis, March 16, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: Thank you for your letter of March 3, 1970, calling attention to Senate Bill 3354 entitled "A National Land Use Policy Act." The State of Maryland is definitely interested in your proposal to provide for a National Land Use Policy. I certainly agree with you that the states play a vital role in this effort, and we shall continue to do so in the future.

The need for a more orderly and systematic program of local, state and national land use planning is urgent. Each level of government must further develop skills and abilities in order to provide a quality life in a quality environment. As we proceed toward this objective we must at all times remember that local, state and federal governments should be afforded the opportunity to exer-

cise their responsibilities by providing them with the necessary authority. The success of a National Land Use Policy depends, not upon an excessive exercise of control at the federal level, but rather upon a coordinated partnership which fully recognizes the contributions that can be best made at each level of government.

During the past decade the states, at an increasingly accelerated pace, have been restructuring government to provide comprehensive and coordinated planning and programming. The State of Maryland is completing the restructuring of its Executive Department. As a further step, planning and programming is emphasized, not only at the functional department level, but also drawn together into one comprehensive planning and programming effort through the Department of State Planning. I believe that the success of a National Land Use Policy hinges upon the creation at the federal level of such an overview agency. The states are restructuring and establishing strong central planning coordination to service the chief executive and legislature. The Federal Government must now fully recognize this organizational need and follow the lead of the states.

In many instances the states are progressing in their comprehensive planning efforts in spite of the federal example. Increasingly the confusion and conflicts among the several federal departments and their programs hinder state and local abilities to effectively and efficiently establish policy, plan, solve problems, and attain a quality environment. The development and furtherance of a National Land Use Policy call for coordination of all planning activities at the federal level. This can only be accomplished through a Planning Coordination Office (not the Budget Office) attached to the Office of the President.

In attaining the objectives of this Act, the states should not be bypassed in this respect. Interstate agencies which are authorized by federal law, or interstate compact, should receive assistance through the states. (Section 403(a)).

A statewide land use plan which should in effect be a generalized land use plan should be just exactly that. I fail to see the wisdom in excluding from the state plan any lands located within the boundaries of incorporated cities. (Section 406(b)(2)(A)).

I fully agree with you that the single state agency designated by the Governor should have statewide comprehensive land use planning responsibilities. Definitely, it should not be a line or functional department where their administrative or regulatory interests might cloud an objective approach. State planning should be a staff arm of the Governor authorized to cross agency or department lines, and recommend plans and policies to the Governor and to the General Assembly. (Section 403(a)(1) and Section 406 (a)).

Sections 405(c)(2)(A) and (B) require that the agency designated by the Governor have authority to acquire interests in real property and authority under the state police power to place restrictions on land and exercise land use controls. I believe that this power is necessary, but the delegation of this authority should be left to the discretion of the Governor and the State Legislature.

I appreciate the opportunity to comment at this time, and agree that the need for a National Land Use Policy is urgent and will greatly assist the states to attain the environmental qualities that we all see.

If there is anything further I can do to assist in this or any other respect, please be free to call on me.

Sincerely,

MARVIN MANDEL, *Governor.*

STATE OF MINNESOTA,
OFFICE OF THE GOVERNOR,
St. Paul, April 14, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate,
Washington, D.C.

DEAR SENATOR JACKSON: Thank you for your letter and the excerpt from the Congressional Record concerning a national land use policy and Senate File 3354.

We, in Minnesota, are vitally interested in sound land use planning and are currently working on a statewide land use inventory which is basic to any future planning efforts. As you pointed out in your introductory remarks, the States do have the basic constitutional authority for land use management.

With respect to the proposed bill, I am somewhat concerned about the concept of the River Basin Commissions as an organization to implement the National Land Use Policy Act. I believe that the States themselves would be the best

overall coordinator of a National Policy. For example, Minnesota's land area lies in four different river basins, two of which now have operating commissions. I believe that the selection of River Basin Commissions would result in a gragmented approach to land use planning and quite possibly one which did not coincide with the policy of the state.

In a similar vain, the entire appropriation to carry out the provisions of the proposed bill is to be allocated to the River Basin Commissions with none going directly to the states. Moreover, there is no provision made for any involvement by state legislatures. I believe the success of any type of program set forth in the proposed bill would depend entirely on the amount of contribution made to the planning process by state agencies and state legislatures. This appears to be totally lacking in the proposed bill.

I agree with you that there is a need for the formulation of a national lana use policy. Unfortunately, however, I cannot give my support to the proposed bill as it presently stands unless what I consider to be its deficiencies are remedied.

I would appreciate being advised of the progress of this bill in Congress.

Sincerely,

HAROLD LEVANDER,
Governor.

STATE OF NEBRASKA,
Lincoln, March 19, 1970.

Hon. HENRY JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: I appreciated receiving your recent letter transmitting excerpts from the *Congressional Record* containing the text of your recently introduced bill (S. 3354). It appears from our brief review of the bill that it has considerable merit. We are well aware of many of the problems which you have pointed to in your comments accompanying the bill although we have not experienced them to the degree that our sister states in the more populated areas have. We here in Nebraska are, in fact, deeply involved at the present time trying to coordinate planning between the several functional agencies to achieve the type of result which your bill indicates is desired.

I certainly recognize that where the need for regulation results in added expense of development and a reduction of windfall opportunities for private interests, federal regulation is necessary to prevent "whipsawing" between states seeking development. Therefore, I am sympathetic to some type of federal action in this area. I might point out, however, that the three-year period allowed for development of the land use plan and provision of the tools of implementation by the legislature represents an extremely short compliance period for a state like Nebraska that lacks annual sessions of the Legislature. It would also seem important that federal guidelines be thought out extremely well and promulgated prior to the time of beginning pressure for state planning to avoid the somewhat confusing situation which has developed with regard to water quality criteria and implementation.

This office and the Nebraska Soil and Water Conservation Commission have dealt with the Water Resources Council over a period of several years in the development of our State Water Plan and have the utmost regard for the ability of this Council to guide such a program and to achieve results.

We would take exception, however, in the development of regulations if the cost-sharing formula eventually developed for land use parallels that developed for water resources development. I have particular reference to the fact that state total area is used in the computation of fund sharing under the Water Resources Planning Act rather than land area for which the state is actually responsible. I suggest that federal land for which federal planning is required be specifically excluded from the fund allocation procedure.

It would seem appropriate for the bill to specify that the Council give direction to the federal agencies in developing prototype land use policies and plans for use on federal lands, reservations, etc. as examples of what can be accomplished. This would allow a trial of policies and procedures and develop a leadership capability at the federal level.

The Federal Water Resources Planning Act has resulted in a tremendous upgrading of the states' various planning staffs and has caused considerable competition for personnel between agencies and states. It would seem that the implementation of this bill and the accompanying funding might very well do the same thing in the area of land use planning. It would seem appropriate,

therefore, that the bill contain some provision for training and education to assure that adequate staff personnel will be available to the states as they undertake such planning at the behest of the Federal Government.

I hope these few brief comments will be of value to you in your consideration of this bill.

Sincerely yours,

NORBERT T. TIEMANN, *Governor.*

THE STATE OF NEVADA,
EXECUTIVE CHAMBER,
Carson City, March 13, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: I have read with interest S. 3354. The proposed legislation is a comprehensive version of many of the suggestions made by the Nevada State Committee on Federal Land Laws to the Public Land Law Review Commission as an approach to resolve the confusion and inequities in local, state and Federal land use planning. I generally concur with the approach in that it provides for an input by local and state government without which successful national land use planning cannot be achieved.

As a member of the Public Land Law Review Commission, you are undoubtedly aware of their program on this subject and it would be helpful if their recommendations supported in principle the intent of your legislation.

I am referring the bill to the Director of the Nevada Department of Conservation and Natural Resources for further review. Additional comments will be forthcoming as soon as he has had an opportunity to review the proposed legislation with the entities in our State who will be affected.

Thank you for the opportunity to comment on this worthwhile piece of legislation.

Sincerely,

PAUL LAXALT, *Governor.*

STATE OF NORTH CAROLINA,
GOVERNOR'S OFFICE,
Raleigh, May 20, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: I would like to comment on several aspects of a bill which you introduced in the Senate on January 29, 1970. This bill, S. 3354, would amend the Water Resources Planning Act by adding Title IV to create a National Land Use Policy. I have long been concerned with the wise and proper use of land and recognize the need for both short- and long-run land use planning activities.

North Carolina has not experienced the rapid and drastic shifts in land use patterns that have occurred in many parts of our nation. Likewise, we have not encountered the serious problems which often result from such developments.

I am convinced that we in North Carolina can, with proper planning, prevent many problems and achieve full development and use of our land and water resources. I have moved in this direction by recently establishing an Advisory Committee on Economics and Environment to include representatives of State agencies, universities, private industry, students, and the General Assembly.

This committee will meet regularly to review and advise me on major projects affecting the State's economy and environment. In addition, I am formulating plans for a Council on State Goals and Policy that will include some of our best minds and statesmen to look down the road and advise us on "where we want to go" and "how do we get there." The advice and leadership of this Council will help us develop the full thrust of State government towards the task of creating the good life for our citizens. Your bill will help us in many ways.

There are several ideas that I would like to suggest for your consideration. The legislation should provide that administrative procedures, regulations, plan-

ning standards and criteria, and the Federal and State financial sharing be developed on a regional or state basis. The States should participate in the determination of these issues. For too long, Federal grant programs have been developed with little regard to regional differences and especially for the financial capabilities of the States.

I believe the States should have a stronger say in establishing the actual standards and administrative procedures of the Federal guidelines. We have seen the beneficial results of this type Federal-State partnership in both the Appalachian Regional Commission and Coastal Plains Regional Commission programs.

Flexible, negotiable guidelines might remove the need for the threat of terminating other Federal planning funds if a state fails to develop acceptable statewide land use plans.

I seriously question the appropriateness of land use planning on the basis of river basins. I urge that legislation provide that planning activities be carried out on a regional basis by utilizing the multi-county planning regions established by the States. Interstate land use planning should be done through the mechanism of the regional planning agencies such as the Appalachian Regional Commission and the Coastal Plains Regional Commission.

Let me say that I fully support the need for a national land use policy. Statewide land use plans are an important ingredient of this policy. I am concerned that these planning efforts be tied into overall state planning efforts. In that respect I question whether the Water Resources Council and the river basin commissions are the appropriate places for the statewide land use planning activities. The States must have flexibility in handling these activities in order to prevent overlap and duplication.

I commend you on your efforts and hope you will consider my suggestions as this legislation is deliberated in committee.

Cordially,

ROBERT W. SCOTT.

STATE OF OREGON,
OFFICE OF THE GOVERNOR,
Salem, Oreg., March 20, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: I greatly appreciated having your letter with a copy of your remarks at the introduction of S. 3354. I am in full agreement with the concepts of the National Land Use Policy Act and for a number of years I've been supporting the principle that the single most important action we can take to achieve the environmental excellence we want is land-use planning.

Because of this basic truth, Oregon's Interim Committee on Agriculture following the 1967 Session studied the entire problem, and introduced Senate Bill 10 in the 1969 Session which was passed and which calls for each county to do its land-use planning and zoning by the end of 1971 or the responsibility for this is placed in the Governor's office. I am pleased to report that all of our 36 counties now have planning commissions and we are moving ahead. Our concepts and actions would fit splendidly with the National Land Use Policy proposals.

I am also encouraged with your comments in regard to the excellent studies and final recommendations forthcoming from the Public Land Law Review Commission this summer. Because of the importance of this, and because your state and mine and the west are so dominated by public lands, I have set up the first national forum for consideration of the findings and recommendations of the Public Land Law Review Commission in the field of our public forest lands. This Conference is scheduled for September 16–18 in Portland and I hope that you will find it possible to schedule this on your calendar.

There is no question in my mind but what land-use planning is vital to achieving the balanced development and growth we want with protection to the livability of Oregon and the nation. The total national coordinated effort is long overdue. Your proposal may well be the instrument to do this.

Sincerely,

TOM MCCALL, *Governor.*

STATE OF TEXAS,
March 19, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: Your invitation to offer comments on your recently introduced bill (S. 3354) to provide a national land use policy is appreciated sincerely. It is self-evident that our country needs such a policy.

In our judgment, this legislation should recognize both the limitations and the potential of federal government in creation and implementation of a viable national policy.

A national land-use policy should enable the states to exercise some flexibility of action and still be in a position to design, administer and implement their own land-use policies and plans in accordance with a national policy. Eligibility of state and local government to benefit from any grant-in-aid program established by authority of S. 3354 should not be endangered in instances when implementation of state policy may differ as to administrative detail yet not in basic state philosophy from national policy, or from policies of neighboring states.

Because of its vast land area, Texas must naturally face up to problems and conditions wholly unlike those of the states of small land area or of sparse statewide population distribution. There are widely differing economic bases and cultures in the state's major geographical regions. There are built-in conflicts of interest among the different areas; for example, the great agricultural industry of the Texas Panhandle and the Texas Gulf Coast, where the world's largest concentration of petrochemical and allied industries has developed and continues to burgeon. Cities along the upper reaches of the major river basins must fight to hold onto adequate water supply against the tremendously great needs and demands of the more populous downstream cities. These are only a few illustrations that seem to us to make imperative a degree of freedom of action for states as they arrange their laws and administrative policies to contribute to and conform with national land-use policy.

This legislation will be worthwhile if it initiates a movement toward elimination of the multiplicity of federal agencies and programs affecting various aspects of land-use.

Problems and controversies between conflicting interests caused by the federal agencies' galaxy of guidelines, rules, regulations, directives and orders dealing with land-use matters are some of the most complex and time-consuming problems of the Executive Department of this state. This may be attributed to the numerous single-purpose federal programs bearing upon some phase of land-use. So long as there is no really comprehensive national policy, this conditon may be expected to worsen and become even more harmful to the public.

State government should be encouraged to exert leadership in implementing land-use management powers. However, state leadership and state power as to implementation of policy should not be wholly equated .

The State of Texas has historically delegated its land-use management authority to local government. We think that local government should continue such freedom of action. We hasten to add, however, that this state has already integrated regional action with state and local activity. This has been done in recognition of both the scale and complexity of land-use programs caused by urbanization, industrialization and population growth.

A statewide system of regional planing has been made possible by delineation of Texas' 254 counties in tweny-one planning regions. In twenty of those regions, county, city and special district governing bodies have formed Reginal Planning Commissions or Councils of Governments. They are political subdivisions of the state. In response to my recommendations, the Legislature approved appropriation of $1,300,000. That is being allotted to the regional organizations as planning grant funds for the regional commissions and councils. The organizations are conducting vigorous planning programs.

This regional arrangement is recognition that strictly local level planning and implementation create some important problems and needs beyond municipal and county jurisdictions in a rapidly developing state.

Scores of Texas cities have completed total community planning or are in various stages of such an effort. Plans made by then are coordinated with those of the regional planning agencies whose planning is in turn woven into state plans in various areas of governmental activity and service.

Planning overview agencies of the Executive Department are the Division of Planning Coordination and the Office of Local Planning Assistance.

In view of the planning system developed in this state, we believe that your committee will recognize that it is fully equipped at state, regional and local levels to design a state land-use plan as prerequisite to adoption of state policy.

When a national land-use policy has been adopted, Texas will be in a position to tailor its own policy and plan to harmonize with national policy to the extent necessary or feasible. Actually, lack of national policy now hampers Texas' efforts to some degree. Better progress could be made were a national policy in force.

It is a pleasure to make these comments. We hope that they will contribute to a greater awareness in the Congress of the real and present need for this legislation.

Sincerely,

PRESTON SMITH, *Governor of Texas.*

COMMONWEALTH OF VIRGINIA,
GOVERNOR'S OFFICE,
Richmond, March 20, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: I appreciate your giving me the opportunity to comment on the bill (S. 3354) you recently introduced to provide for a national land use policy.

Your statement of the need for better coordination among the various agencies and levels of government is very persuasive. I heartily agree that there must be better coordination among the Federal agencies and among the state agencies. I am also convinced that there must be better communication between the Federal, state and local levels of government regarding our environmental matters and planning for the use of our lands and waters. However, I would hope that an acceptable degree of coordination and communication might be achieved without the necessity of establishing a new program of grants-in-aid for planning.

In Virginia we have established a Division of State Planning and Community Affairs which is already deeply involved in the types of activities contemplated under your proposed legislation. Our Division of State Planning and Community Affairs has taken the lead in organizing regional planning districts that embrace all areas of the Commonwealth. Many of Virginia's localities will be encouraged to initiate or accelerate their planning activities as participants in the regional planning programs. It would appear, therefore, that we have the machinery in being or in prospect through which to achieve the proper coordination and communication among the localities of Virginia and between the localities and the State Government. Through the Division of State Planning and Community Affairs, the Commonwealth will be in a position to speak effectively to the Federal agencies with respect to the environmental and land use matters with which you are concerned.

In the near future, I expect to establish a council at the State level to be concerned exclusively with environmental matters. This council will strengthen the usefulness of the Division of State Planning and Community Affairs in its role as a coordinating and planning agency.

I assure you of my concern with the solution to problems which are so ably outlined in the remarks you made in introducing S. 3354, but from the standpoint of our position in Virginia I believe your objectives can be attained without the establishment of the planning assistance program.

Cordially,

LINWOOD HOLTON, *Governor.*

STATE OF WEST VIRGINIA,
OFFICE OF THE GOVERNOR,
Charleston, April 27, 1970.

Hon. HENRY M. JACKSON,
United States Senate,
Washington, D.C.

DEAR SENATOR JACKSON: I am pleased to have the opportunity of reviewing the land use policy bill (S–354) which you have introduced in the Congress.

In my opinion, there is no issue of more pressing significance facing West Virginia and our Nation than finding ways and means of protecting the quality

of our natural environment. We need to move decisively if we are to save our outdoor beauty, together with the life-support systems undergirding our technological society and the varieties of wildlife in and around it. Your bill is, without question, an important move in this direction, inasmuch as it attempts to reduce the wasteful and dangerous land-use conflicts arising between different levels of governmental, private and public interests.

An example, which might be cited here in West Virginia is the current controversy over the even-aged management practices of the United States Forest Service in the Monongahela National Forest. At issue are long-range recreational, biological, industrial and aesthetic considerations. On the basis of a preliminary study, I believe S. 3354 might go far toward helping to forestall such conflicts in the future. We would be interested in discussing the implications of Section 408 in this regard, particularly as to the meaning of the term "public works activity" in sub-section (b) and the method of determining "overriding considerations of national policy".

I am also concerned by the matter of grants-in-aid to states for the purpose of carrying out statewide environmental recreational and industrial land use plans. Guidelines set forth in Section 404 (c) appear to militate against states such as West Virginia which have relatively small population pressures at this time but which, by reason of their geographic location, expect to receive a sizeable influx of people in the near future. I believe the bill should be drafted so as to include a compensatory formula protecting West Virginia from the necessity of shouldering a disproportionate financial burden for planning which will ultimately benefit great numbers of new West Virginians from neighboring states.

The State of West Virginia would welcome further clarification of these and other questions. However, I would like to reiterate my general endorsement of your bill and the philosophy it incorporates.

Sincerely,

ARCH A. MOORE, Jr.,
Governor.

THE STATE OF WISCONSIN,
EXECUTIVE OFFICE,
Madison, March 24, 1970.

Hon. HENRY M. JACKSON,
Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: It was most thoughtful of you to send me a copy of your recently introduced bill (S. 3354), to provide for a national land-use policy.

I share your interest and concern in this matter and have assigned a high priority during my administration to the protection and restoration of a quality environment in our state based on comprehensive land-use planning. Much progress has been made but much remains to be accomplished.

Wisconsin citizens have long been aware of the importance of their lands, water and associated resources and have responded positively on many occasions to preserve and protect this heritage through a coordinated approach to planned land use.

We have a state Planning Bureau with continuing responsibility for statewide planning functions. I have designated this agency as the clearing house for all plans and projects having federal involvement. The need for a similar overview is appropriate for federal agencies with respect to the many grant-in-aid programs they administer that influence state and regional land-use planning and management activities.

We in Wisconsin have the administrative machinery established and functioning to implement what you proposed in S. 3354. I welcome the opportunity and the challenge this bill affords the states in assuming the leadership to enhance the quality of the environment on a state and national level in accord with a national land-use policy.

Sincerely,

WARREN P. KNOWLES, *Governor.*

STATE OF WYOMING,
EXECUTIVE DEPARTMENT,
Cheyenne, March 13, 1970.

Hon. HENRY M. JACKSON,
U.S. Senate, Washington, D.C.

DEAR SENATOR JACKSON: I appreciate the opportunity you extended me to review a bill that you recently introduced (S. 3354) providing for a national land use policy formula and commission. Reviewing this bill, particularly as relates to Section 401A spelling out declaration of policy and Section 402 relating the purpose, I am struck with the notion of the bill's premature nature. By this I mean that Congress has not yet had the opportunity to review and implement the forthcoming recommendations of the Public Land Law Review Commission.

It is my personal belief as Governor of one of the states deeply involved with the Public Land Law Review Commission's efforts that a bill such as S. 3354 would unduly confuse, lend to duplication, and possibly frustrate the efforts of the Public Land Law Review Commission. I feel that once Congress has had an opportunity to review the recommendations of the Commission and, obviously, has had an opportunity to vote on specific Congressional enactments implementing the Commission's policy, a bill such as S. 3354 will not be needed. Most certainly I concur with your purpose of attempting to solidify the planning activities of all levels of government as relates to planning, management, and administration of this nation's land resources. It is my hope that after four years of study, the Commission will make recommendations that will meet these challenges and afford equitable relief for all states and citizens residing therein.

Sincerely yours,

STANLEY K. HATHAWAY, *Governor.*

APPENDIX 2

Letter from Michael L. Telson to Senator Henry M. Jackson, concerning Massachusetts Institute of Technology land use policy project.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

Cambridge, Mass, April 8, 1970.

Hon. HENRY M. JACKSON,
Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR MR. JACKSON: Speaking for myself as well as for the participants in the M.I.T. National Land Use Policy Project, I wish to thank you for the opportunity to work with your committee on, and to contribute to discussion of, the National Land Use Policy bill you submitted on January 29, 1970.

We are gratified that the Committee on Interior and Insular Affairs is actively pursuing legislation to protect our environment through rationalization of land use management. Improper land use is at the heart of many of our environmental problems, and it seems to us that proper land use management probably is one of the stronger tools with which to enhance it. In fact, it seems that even a declaration of national intent and goals with respect to proper land use management would serve to clarify many of the problems facing our federal, state and local governmental bodies with respect to land use disposition.

We would like to enclose for the record a copy of your letter to us and a brief project status report. We look forward to reporting our results to you in June and discussing them with you soon thereafter.

Cordially yours,

MICHAEL TELSON.

MEMORANDUM FROM MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS., APRIL 8, 1970

To: Hon. Henry M. Jackson.
From: Michael L. Telson.
Subject: M.I.T. National Land Use Policy Project Status Report.

This report identifies the principal project participating groups and the broad subject areas they are researching. We have found the following four questions to be a helpful framework for analysis for our research:

1. What are the needs for a national land use policy?
2. What are proper objectives of such a policy?
3. What are useful objective-correlated criteria for analyzing desirability of specific land uses?
4. How should such policies be implemented at the local, state and federal levels of government?

We have eight major student faculty groups working on selected problems in a national land use policy within this framework:

1. *Watershed management problems and their influence on land usage and vice versa.*—Professor John Schaake, a water resources engineer, and Professor David Major, a water resources economist, both of the M.I.T. civil engineering department are leading a team of students who are researching this area.

2. *Estuarine, waterway and coastal land use management from an ecological viewpoint.*—Professor John Teal, a marine biologist and ecologist with the Woods Hole Oceanographic Institution, and some of his students are researching some of these problems such as the effects of improper marshland usage on marina fauna.

3. *Transportation network construction and its effects on land use.*—Professor John Clarkeson, of the M.I.T. civil engineering department and formerly a Federal Highway Program Administrator, is leading his students in research to identify effective and environmentally desirable ways in which to channel

the massive public investment in transportation facilities. They will also try to formulate criteria for such investment programs.

4. *Population growth and migration patterns.*—Professor Paul Gross of the M.I.T. biology department and Dr. Jerry Barney of the Center for Advanced Engineering Studies are researching the pressures that will be brought to bear on land uses as a consequence of population distribution and concentration.

5. *Land use and waste disposal.*—Mr. Ora Smith and Professor David Wilson of the M.I.T. mechanical engineering department are researching the kinds of considerations that could enter into a land use policy with respect to landfill uses of wastes. According to a recent article in the New York Times, New York City will exhaust its last land fill location by 1975, producing solid wastes at a rate of 24,000 tons a day.

6. *An identification of the pressures on land and its uses as exemplified in the New England region.*—Professor William Seifert of M.I.T.'s civil and electrical engineering departments is leading a team of students who are looking into some of these issues.

7. *Regional and state-local governmental and legal arrangements.*—Professor William Ryckman of Boston University Law School and three of his students as well as several of Seifert's students are researching some of the problems involved in regional governmental cooperation as well as in state-local cooperation. They are also examining some of the constitutional issues involved in the formulation of such a policy.

8. *Institutional planning problems and land use management.*—Mr. Larry Susskind and Professor Lloyd Rodwin of the M.I.T. urban studies and planning department are researching questions such as: a) procedures to ensure that sound planning considerations are incorporated into local land use decisions; b) what criteria should be established for site selection for large scale planned development in order to maximize regional economic and environmental potentials; c) what kinds of new institutional arrangements at the state level, such as development corporations, might help implementation of land use policies.

APPENDIX 3

"A View From Capitol Hill"

(Address by Senator Henry M. Jackson to the Princeton University Conference, Princeton, N.J., March 9, 1970)

It is a great pleasure to be with you for this the 100th meeting of the Princeton University Conference. It is appropriate that this centennial meeting should be devoted to "Ecology and Politics in America's Environmental Crisis."

There is a crisis and it very much involves politics, because dealing with America's "Environmental Crisis" will require some fundamental changes in the actions of government and enterprise—and in the relationship of the individual citizen to both.

Fairfield Osborn, to whose memory this conference is dedicated, recognized this at a time when the words "environment" and "ecology" were seldom heard. In 1953 in *The Limits of the Earth* he said:

"The tide of the earth's population is rising, the reservoirs of the earth's living resources is falling. Technologists may outdo themselves in the creation of artificial substitutes for natural subsistence * * *."

The issue Fairfield Osborn dealt with was the control and management of "change." This is the major issue today.

The "industrial revolution" and now, the "technological revolution," have raised the country's Gross National Product from $55.6 billion in 1933 to $952 billion in the fourth quarter of last year. In less than 18 months, barring a recession, we will reach and cross the trillion dollar mark. By 1978—in less than 10 years—we will have doubled our present Gross National Product to 1 trillion 800 billion dollars.

When our Federal Constitution was written, there were 4 million people in America. Today there are over 200 million and 300 million are projected for the year 2000, a short 30 years away. Population growth is not the whole story, however. The impact of the technological revolution on our society is far more dramatic. While our population was increasing by 70 per cent since 1945—

The horsepower of our machinery increased by 350%;

Aviation fuel consumption increased by 700%;

News print consumption increased by 170%.

New industries propelled by new technology have been created and have become vital sectors of our economy.

Seventy five years ago the first automobile was invented. Today we are producing nearly 10 million passenger cars each year.

Fifteen years ago there were only 200 computers operating in the United States. In another 5 years, ⅓ of all spending on new plant and equipment will go for data processing equipment.

All of these—population increase, economic growth, technological change—have brought overwhelming pressures to bear on our natural resource base. Everywhere, we are experiencing intensified conflicts between alternative and sometimes incompatible uses of the environment.

The question we face is can we live with the changes we have brought about and the changes which are projected for the future?

Winston Churchill recognized better than most that man must be able to live with the consequences of his actions. In his words, "We shape our buildings and then they shape us."

This lesson of the interrelationship between man and his surroundings is written large in the landscape of the 20th Century America. It is only recently, however, that many people have read it with understanding.

Churchill's point was that there *are* alternatives. Man has the capacity of choice, of shaping his future, and of preserving those values which a free society deems important. He recognized that the quality of life and surroundings which we enjoy is a function of how well we design our social institutions, how wisely we write and administer our laws, and how we order our national priorities. In

short, the quality of life for present and future generations is a product of past choices and, more important, the choices to be made in the days ahead.

In my view from Capitol Hill, I must report that I am not optimistic that the choices we are making today are going to lead to a quality environment and a better life for Americans. I am not sure that the commitments to expend effort and resources on enviornmental programs will be sustained, and I fear that the expenditure will be directed toward treating symptoms rather than the underlying causes.

The history of conservation and environmental concern has been a history of specific, isolated confrontations—a history of focusing on the issue of crises of the moment, be it forest management, wilderness preservation, an oil spill or air pollution. A comprehensive management approach to environmental administration has not been achieved. Our institutions and procedures still condition us to fight brush fires.

Fortunately, we are now making some progress towards the development of intelligent long-range environmental policies, most recently in connection with the enactment of the "National Environmental Policy Act."

Many of the environmental aspirations and desires of the American people were written into law in the Environmental Policy Act which the President signed as his first official act of 1970. This measure provides a congressional declaration of national goals and policies to guide *all* Federal actions which have an impact on the quality of man's environment. The act makes a concern for environmental values and amenities a part of the charter of every agency of the Federal government. It establishes a high level overview agency—the Council on Environmental Quality patterned after the Council of Economic Advisors—in the executive office of the President. The Council's mandate is to identify the basic policy issues and alternatives for environmental administration. Finally, the Act calls for an annual report on the quality of the environment. This report will provide, for the first time, periodic baseline information on the state of the Nation's environment.

The most important feature of the Act, however, and, I might add, the least recognized, is that it establishes new decision-making procedures for all agencies of the Federal government. Some of these procedures are designed to establish checks and balances to insure that potential environmental problems will be identified and dealt with early in the decision-making process and not after irrevocable commitments have been made.

Full implementation of the goals and policies declared by the Act will require additional specific Acts of Congress.

A National Land Use Policy is, in my view, a next logical step in our effort to maintain a quality environment.

Land use planning is an essential tool of environmental management for the future. Most existing problems of population density, pollution, and congestion are directly or indirectly attributable to past shortcomings of land use management—to poor selections among alternative uses of land.

Regulation and control of the land in the larger public interest is essential if real progress is to be made in achieving a quality environment. It is essential because the land is the key to insuring that *all* future development is in harmony with sound ecological principles and environmental guidelines. The problems of the present look relatively insignificant when they are compared with the problems we will have in 10, 20, 30 years *if* we accept supinely the ultimate consequences of some current projections of future requirements.

Listen to these statistics which are thrown at us by government prognosticators:

By 1975 our park and recreation areas, many of which are already overcrowded, will receive twice as many visits as today, perhaps 10 times as many by the year 2000;

We must construct 26 million new housing units by 1978. This is equivalent to building 2½ cities the size of the San Francisco-Oakland metropolitan area every year;

Each decade, new urban growth will absorb 5 million acres, an area equivalent to the state of New Jersey;

Demands for electrical energy double every 10 years; by 1990 demands will increase by 284%.

In the face of these and similar projections the Federal government has done little to plan for and deal with the problem of accommodating future growth in a manner that is compatible with a quality environment. We have instead created conditons which encourage haphazard growth and compound environmental problems. These are some of the problems I see:

Public administration is oriented to an annual budget cycle which distorts resource allocation decisions in favor of short term considerations.

Where long-range planning is undertaken, it is most often intended to meet the problems posed by projected trends. It is seldom directed toward achieving desirable goals.

Public policies are too often defined and carried out in fragmented, narrow scope programs by mission-oriented agencies.

Because of these and other deficiencies in public administration, the alternatives available are narrowly limited when crisis become immediate. Largely they consist of efforts to reclaim a small portion of what is being lost in the growing tides of environmental change.

The pressures upon our finite land resource can not be accommodated without better planning and more effective control. Our land resources must be inventoried and classified. The Nation's needs must be catalogued, and the alternatives must be evaluated in a systematic manner.

These and other concerns can only be met if governmental institutions have the power, the resources and the will to enter into effective land use planning, if plans at all levels of government are coordinated, and if public decisions on land use are backed up with effective controls in the form of zoning and taxing policies.

I have introduced legislation in the Senate to establish a "National Land Use Policy." While this measure does not purport to be the final answer, it does provide a focal point for analysis and for consideration of alternatives. As introduced, the bill has three major provisions. *First*, it establishes a grant-in-aid program to assist State and local governments in improving their land use planning and management capability. *Second*, States are encouraged to exercise "States rights" and develop and implement a State-wide "Environmental, Recreational and Industrial Land Use Plan." *Third*, the Federal government's responsibility for coordinating Federal land use planning activities, for improving Federal-State relations, and for developing data on land use trends and projections is enlarged and centralized.

The Land Use Policy bill I have proposed carries with it a big stick, because a big stick is needed. The bill would authorize the President to reduce, at a rate of 20% a year, Federal grant-in-aid programs which have potentially adverse environmental impacts *if* a State should fail to comply with the requirements of the bill.

The programs I have in mind are Federal Highway Trust Funds, water resource projects, funds for airports and other public works oriented projects. It is my view that it is grossly irresponsible for the Federal government to pay 90% of the cost of a State transportation system unless the States have—

(1) inventoried their land resource base;

(2) identified areas for development and preservation;

(3) related transportation plans to an overall design for the future;

(4) implemented land use controls to protect lakes, ocean beaches, and units of the National Park and Forest system.

One of the recurring and most complex problems of land use decision-making today is that existing legal and institutional arrangements are in many respects archaic. They weren't designed to deal with contemporary problems. Industry, for example, is unable to get effective decisions on plant siting and location without, in some cases, running an interminable gauntlet of local zoning hearings, injunctions, and legal appeals. In other cases, industry is welcomed into areas which should be dedicated to other uses under the banner of "broadening the tax base." Often this really means higher taxes, fewer amenities and more problems.

The land use policy bill I have proposed would require the establishment of industrial, conservation, and recreational sanctuaries. These sanctuaries would be established in advance of their need and on the basis of projected demands. Industrial sites would be located so that transportation and environmental problems would be minimized

Another essential element of the bill is the planning and development of new towns. In the next decade, population growth will cause the growth of new communities all over the country. Whether this growth is haphazard and ill-planned or organized and directed depends on our willingness to act decisively now to formulate a new towns policy. The planned location and development of new towns can relieve pressures on existing cities and avert potential environmental degradation in new areas before it occurs.

As chairman of the Senate Interior Committee, I am particularly interested in the potential of the public lands for new town development and the Committee will be exploring this subject during the present Congress. I was delighted to learn that the session of the Princeton University Conference in May will be devoted to this subject. It is a logical extension of today's discussion.

Public interest in the environmental crisis has in recent months gathered remarkable momentum, producing an abundance of good intentions. I would remind you, however, as Princeton's Professor Marion Levy, is fond of saying, that "good intentions randomize behavior."

To give physical expression to the manifest concern of legislators, students, conservation groups, lawyers and millions of citizens, an adequate level of national investment in a coordinated, systematic and long-range program of environmental administration is needed. We must be prepared to pay for those best things in life that used to be free, including the land, air and water that sustain life itself.

It is far easier to gain a consensus that we must pay for environmental quality than to reach agreement on the proper sources of funds. State and local governments, taxpayers and corporate executives, like Uncle Sam, frequently have arms too short to reach their pocketbooks.

Industry's contribution to the "effluent" society has been so important that many feel it must be forced to pay the costs associated with new and higher standards of environmental protection. Unfortunately, many of the industries whose contribution to the deterioration of our environment is greatest are also industries furnishing necessities with a highly inelastic demand; fuels, power of all sorts, transportation and agriculture. In these cases the costs will be passed on to the consumer in a way that may be just as regressive as, say, the general sales tax.

User taxes give the appearance of a kind of rough hewn justice that is often deceptive. If they are carefully designed to exclude necessities, is may be possible at least partially, to avoid the regressive aspects of some taxes and some programs forcing consumer borne industry price increases. This method, unfortunately, provides little incentive for innovative controls by industry aimed at stopping pollution as opposed to costly remedial programs to cope with it when it becomes manifest.

The difficulty of arriving at fair and proper methods for generating the considerable capital resources that environmental quality will require is inherent in a society with millions of poor people and, more generally, an uneven distribution of income.

It is all very well for affluent middle class Americans—public officials, college students, politicians, even corporate officers—to demand that the factories be shut down, that a "no-growth" policy be adopted, that we adopt a new national life style which rejects the materialistic consumptive philosophy we have held dear for so long. But I would add a word of caution. The 26 million people in this country classified as being below the poverty line don't share this view. Poor people, black and white, do not espouse it. They want jobs. They want material goods. They want to be able to send their children to college. They don't want to be the first to suffer under a State backed program of spartan rigor. Their attitude is that they neither created the environmental mess nor profited from the exploitation of common resources. I must say I find myself in sympathy with their point of view. A real commitment to restoring the quality of the environment means new priorities; this in turn means that housing, poverty, education and other programs must compete with environment for the tax dollar.

A parallel consideration that is often lost amid the welcome enthusiasm to restore the quality of our surroundings is the uneven access to the environment we are hoping to improve. Many of the programs on which it is relatively easy to gain agreement involve the restoration of areas that are enjoyed by middle and upper income groups, but have little present relevance to the life in the ghettos. Programs that bridge this gap—such as the Youth Conservation Corps I have proposed—are an essential corrective if we are not to exacerbate the disparities among income groups. It would be ironic indeed if regressive taxation were to become the instrument by which those least able to pay were to find themselves financing facilities they are least able to enjoy.

Dealing with the environmental problems we face will require some basic value judgments about the quality of life we desire and how it is to be attained. They must resist the temptation to build elaborate theoretical models or retreat

from methods to improve the environment to proliferating methodologies for studying it.

The universities are the nation's first and foremost centers for the advancement of learning and thought. President Goheen has noted that the university is distinguished from other institutions by its commitment to thought: "It does not seek victories; it does not work for profits; its production is not measurable. Its truest goals are not precise targets, but high ideals—the enrichment of the minds and lives of its students, the advancement of knowledge, the increase of understanding among men and the unending search for truth."

The commitment of the University is gravely needed in the task which lies ahead.

APPENDIX 4

List of selected bills introduced in the 91st Congress pertinent to the subject of land use planning.

Introduction

The 91st Congress has shown broad interest in the problems of guiding the future use and development of land resources in large regions, States, and the country as a whole. The principal objective of much of the diverse legislation in this field is to accommodate new growth, required by population increases and economic expansion, without doing irreparable damage to our natural environment or causing serious conflicts on various levels of government and between competing land uses (e.g., airports and national parks; power plants and amenity preservation; urban growth and the protection of the best of our agricultural land.)

The following list of selected bills indicates that twelve committees of both Houses of Congress are handling legislation on this subject. Some of the bills deal with the inventorying or setting aside of sites and resources for industrial and public uses. Others stress the improved coordination of land planning activities on an intergovernmental basis. Still others propose expanded research relating to land management, the laying down of proper environmental criteria or guidelines, and the establishment of new funding arrangements to influence future land use trends.

Senate

Committee on Interior and Insular Affairs

S. 3354 (Mr. Jackson). Enables the States and the Federal agencies involved in land use activities to establish machinery for comprehensive land use planning which would incorporate environmental as well as economic considerations. Provides for grants-in-aid to the States to develop and implement statewide land use plans. Directs the President to reduce Federal grant-in-aid funds with respect to States which do not develop, implement or maintain statewide land use plans. Expands the present Water Resources Council into a Land and Water Resources Council to administer the Federal program.

S. 3044 (Mr. Yarborough). Declare a public interest in the open beaches of the Nation. Provides for the protection of such interest and for the acquisition of easements pertaining to such seaward beaches and for the orderly management and control thereof.

S. 3351 (Messrs. Murphy and Cranston). Provides for the termination of mineral leases in the area of the Outer Continental Shelf seaward of the Santa Barbara State oil drilling sanctuary in the State of California.

S. 1708 (Mr. Jackson et al.). Enables States or their political subdivisions to acquire Federal surplus real property at little or no cost.

S. 3468 (Mr. Scott et al.). Authorizes the Administrator of General Services, at his discretion, to assign to the Secretary of the Interior for disposal, such surplus real property as is recommended by the Secretary of the Interior as needed for use as a public park or recreation area.

S. 3390 (Mr. Jackson). Provides that the Secretary of the Interior shall develop and promulgate regulations containing criteria by which he will determine which of the public lands shall be: (*a*) disposed of because they are (1) required for the orderly growth and development of a community; or (2) are chiefly valuable for residential, commercial, agricultural (exclusive of lands chiefly valuable for grazing and raising forage crops), industrial, or public uses or development; or (*b*) retained, at least during this period, in Federal ownership and managed for (1) domestic livestock grazing; (2) fish and wildlife development and utilization; (3) industrial development; (4) mineral production; (5) occupancy; (6) outdoor recreation; (7) timber production;

(8) watershed protection; (9) wilderness preservation; or (10) preservation of public values that would be lost if the land passed from Federal ownership.

S. 524 (Mr. Jackson). Provides for the cooperation between the Secretary of the Interior and the States with respect to the future regulation of surface mining.

S. 719 (Mr. Allott et al.). Establishes a national mining and minerals policy to promote the wise and efficient use of mineral resources. Gives the Secretary of the Interior the duty to implement the mining and minerals policy.

S. 3093 (Mr. Cranston et al.). Creates marine sanctuaries from leasing pursuant to the Outer Continental Shelf Lands Act in areas off the coast of California adjacent to State owned submerged lands when such State suspends leasing of such submerged lands for mineral purposes.

S. 1830 (Mr. Jackson et al.). Provides for the settlement of native land claims in Alaska.

S. 3444 (Mr. Nelson). To preserve, protect, develop, restore and make accessible the lake areas of the Nation by establishing a national lakes area system and authorizing a program of lake and lake areas research.

S. 3491 (Mr. Nelson). Provides for the regulation of present and future surface and strip mining and reclamation of surface and strip mined areas.

S. 3389 (Mr. Jackson). Provides for the protection, development and enhancement of the public recreation values of the public lands.

S. 1075 (P.L. 91–190) (Mr. Jackson et al.). Provides a declaration of national environmental policy which set national goals for environmental management and established supplementary operating procedures for all Federal agencies to follow in planning and decision making which have an impact on man's environment. Authorizes environmental research and data gathering. Establishes a three-member Council of Environmental Quality Advisers in the Executive Office of the President. Provides for the preparation of an Annual Environmental Quality Report which, among other things, will document changes in the natural environment and define the adequacy of natural resources for fulfilling human and economic requirements of the Nation in the light of population increases.

COMMITTEE ON PUBLIC WORKS

S. 3181 (Mr. Proxmire et al.). Encourages the formation of permanent regional water management associations which are responsible for the preparation and development of comprehensive pollution control plans for all or part of a river basin or parts thereof that is consistent with or part of a comprehensive river basin water and related use plan for the area.

S. 1072 (Mr. Randolph et al.). Extends the Appalachian regional development program for two additional years. Extends for two years Title V of the Public Works and Economic Development Act of 1965 pursuant to which five regional commissions have been established: the Ozarks region, the Upper Great Lakes, the New England region, the Coastal Plains region, and the Four Corners region in the Southwest.

S. 1442 (Mr. Moss). Authorizes the Secretary of Transportation to enter into agreements with the States for the purpose of carrying out one or more pilot programs to determine the best means of accomplishing the control of outdoor advertising along Federal-aid highways.

S. 2005 (Mr. Boggs et al.). Title of proposed amendment would be cited as the National Materials Policy Act of 1969. Enhances environmental quality and conserves materials through utilization of resources and technology more efficiently, anticipation of future materials requirements of the Nation and the world, and making recommendations on the supply, use, recovery and disposal of materials. Establishes a 7-member commission on materials policy which would be charged with a full study of a possible national materials policy.

S. 3042 (Mr. Gravel et al.). Establishes a 15-member Commission to undertake a comprehensive investigation and study of the use of underground energy.

S. 3183 (Mr. Boggs et al.). Establishes a national policy for the effective management and protection of the coastal zone. Provides for a cooperative program between the Federal and coastal state governments. Authorizes the Secretary of the Interior to make grants to the coastal states for developing a comprehensive management program for the coastal zone. Upon approval by the Secretary of a coastal zone's management program, provides that operational grants may be made to the coastal state on a matching basis for the purpose of implementing the program.

S. 3293 (Mr. Randolph). Authorizes the Secretary of Transportation to permit urban areas of more than 50,000 population to use highway funds in the operation of public transportation facilities. Provides that the Governor of any State may make such requests to the Secretary only on the recommendation of the mayor and city council and such recommendation shall only be made after a public hearing at which all of the economic, social and environmental factors of the area have been fully considered.

COMMITTEE ON COMMERCE

S. 914 (Mr. Pell). Encourages the preservation and development of a modern and efficient passenger rail transportation service in the northeastern seaboard area by granting the consent and approval of Congress to the States of Massachusetts, Rhode Island, Connecticut and New York to negotiate and enter into a compact to create their own Northeast Rail Authority, and by guaranteeing certain loans and other credit to such authority.

S. 924 (Mr. Pell). Encourages the development and preservation of a modern and efficient intercity passenger rail transportation service in the United States by granting the consent and approval of Congress to the States to negotiate and enter into compacts to create their own regional intercity rail passenger service authorities, and by guaranteeing certain loans and other credit to such authorities.

S. 1071 (Mr. Kennedy et al.). Amends the Federal Power Act to further promote the reliability, abundance, economy and efficiency of bulk electric power supplies through regional and interregional coordination. Encourages the installation and use of improved extra-high-voltage facilities to preserve the environment and conserve natural resources. Establishes the National Council on the Environment.

S. 1592 (Mr. Brooke et al.). Authorizes the Secretary of the Interior to study the most feasible and desirable means of establishing certain portions of the tidelands, Outer Continental Shelf, seaward areas, and Great Lakes of the United States as marine sanctuaries.

S. 1916 (Mr. Magnuson). Amends the Federal Power Act to further promote the provision of reliable, abundant, and economical electric power supply by intergovernmental cooperation and strengthening existing mechanisms for coordination of electric utility systems. Encourages the installation and use of the products of advancing technology with due regard for the preservation and enhancement of the environment and conservation of scenic, historic, recreational and other natural resources.

S. 1925 (Mr. Magnuson et al.). Amends the Marine Resources and Engineering Development Act of 1966 to continue the National Council on Marine Resources and Engineering Development.

S. 2054 (Messrs. Tower and Hatfield) (related bill: S. 2204). Establishes the National Oceanographic Agency.

S. 2393 (Mr. Muskie et al.). Authorizes the Secretary of the Interior to study the most feasible and desirable means of protecting certain portions of the tidelands, Outer Continental Shelf, seaward areas, Great Lakes of the United States, and the adjoining shorelines thereof as marine preserves.

S. 2425 (Mr. Magnuson et al.). Authorizes the Secretary of Transportation to provide for a long range program of comprehensive regional planning for, and coordination of, transportation including therein the undertaking of research and development and the conducting of demonstrations.

S. 2437 (Messrs. Magnuson and Cotton). Provides for the expansion and improvement of the Nation's airport and airway system.

S. 2651 (Mr. Randolph). Amends the Federal Airport Act to provide additional federal assistance in connection with the construction, alteration or improvement of airports, airport terminals, and related facilities.

S. 2713 (Mr. Randolph). Provides for the expansion and improvement of the Federal Airway system.

S. 2802 (Mr. Magnuson et al.). Declares a national policy on coastal zone management and encourages State comprehensive planning for the development of the coastal zone. Authorizes the National Council on Marine Resources and Engineering Development to make grants to duly established coastal authorities for the preparation of long-range master plans and guarantees certain loans and agreements for the purpose of land acquisition and restoration projects.

S. 3460 (Mr. Tydings et al.). Declares that planning and development of the coastal zone should be carried out on the principle of multipurpose use and preservation of the natural environment. Authorizes the National Council on Marine Resources and Engineering Development to make grants to coastal authorities for assistance in developing master coastal plans and for implementation of such plans. Provides for the establishment of estuarine sanctuaries.

COMMITTEE ON BANKING AND CURRENCY

S. 3640 (Messrs. Sparkman and Muskie). Provides for the development of a national urbanization policy to encourage and support more rational, orderly, efficient, and economic growth and development of our States, metropolitan areas, cities and towns with emphasis upon the development of new communities and upon inner city development. Establishes a Council on Urban Growth to develop a national urbanization policy. Requires the submission to Congress and to the President of a biennial Report on Urban Growth. Creates a Community Development Corporation within the Department of Housing and Urban Development to promote and sponsor new community and more orderly urban development. Encourages State and regional planning for growth and stabilization.

S. 1474 (Mr. Proxmire et al.). Amends the Housing and Urban Development Act of 1968 to provide Federal guarantees for financing the development of land for recreational uses in order to contribute to the orderly development of underdeveloped areas and regions of the United States.

S. 3025 (Mr. Javits et al.). Provides for assistance to the States and their localities in utilizing land resources more effectively and in providing more housing to meet present and future needs.

COMMITTEE ON GOVERNMENT OPERATIONS

S. 2701 (P.L. 91-213) (Messrs. Mundt and McClellan). Establishes a Commission on Population Growth and the American Future which has the responsibility, among other things, of determining the effects of population on natural resources and the environment.

S. 2752 (Mr. Muskie). Promotes intergovernmental cooperation in the control of site selection and construction of bulk power facilities for environmental and coordination purposes.

S. 3228 (Mr. Muskie). Provides for balanced urban development and growth of the United States by providing greater coordination in the administration of Federal grants. Provides assistance to States and localities for developing comprehensive coordination and planning agencies. Consolidates comprehensive planning requirements for grant programs and systematizes other planning requirements.

S.J. Res. 60 (Mr. Mundt et al.). Establishes a Commission composed of twenty members to be appointed by the President to be known as the Commission on Balanced Economic Development. Directs the Commission to make a thorough study and analysis of current geographic trends, in the economic development of the Nation, the causative factors influencing the same, the implication thereof in terms of distribution of population, the effects of governmental action in the shaping of such trends, and the factors, private and public, influencing the geographic location of industry and commerce as an aid in the formulation of policy at all levels of government.

S.J. Res. 160 (Mr. Nelson et al.). Creates a Joint Congressional Committee to review and recommend changes in national priorities and resources allocations.

HOUSE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

H.R. 16670 (Mr. Morton). Amending the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning.

H.R. 6656 (Mr. Eckhardt) (related bills: H.R. 11016, H.R. 15714). Declaring a public interest in the open beaches of the Nation. Providing for the protection of such interest, for the acquisition of easements pertaining to such seaward beaches and for the orderly management and control thereof.

H.R. 15783 (Mr. McClure). Declares it to be the policy of Congress that immediate action should be undertaken toward developing and implementing new programs to control and prevent the pollution and other destruction of our land, waters, atmosphere and scenic heritage. Directs the Public Land Law Review Commission to formulate legislative recommendations to protect the environment and to submit a report not later than December 31, 1974.

H.R. 11650 (Mr. Wold et al.) (related bills: H.R. 15916, H.R. 11788, and others). Provides that in lieu of the disposal, under the Federal Property and Administrative Services Act of 1949, of surplus real property and related personal property that the Secretary of the Interior certifies is needed and suitable for public park or recreation uses, such property shall be transferred by the Administrator of General Services to the Secretary of the Interior, on request of the Secretary.

H.R. 16593 (Mr. Foley). Amending the Land and Water Conservation Fund Act.

H.R. 10193 (Mr. Pollock) (related bills: H.R. 13142, H.R. 14212). Settlement of land claims of Alaska Natives.

H.R. 14618 (Mr. Teague) (related bills: H.R. 14666, H.R. 14754, and others). Directs the Secretary of the Interior to suspend further leasing under the Outer Continental Shelf Lands Act for the exploration or extraction of oil, gas, or any other mineral in the portion of the Outer Continental Shelf seaward of such State area, in accordance with the passage of any California law, which would prohibit the issuance of leases for mineral exploration. California Marine Sanctuary Act.

H.R. 3120 (Mr. Teague) (related bills: H.R. 7074, H.R. 9420, and others). Prohibits mineral exploration and development under the Outer Continental Shelf Lands Act within a buffer zone adjacent to the Santa Barbara oil sanctuary established by the State of California.

H.R. 659 (Mr. Saylor). Provides for the cooperation between the Secretary of the Interior and the States with respect to the future regulation of surface mining operations.

H.R. 14406 (Mr. Cohelan et al.) (related bill: H.R. 14533). Amends the Land and Water Conservation Fund Act of 1965 to provide that authority to enter into certain mineral leases with respect to the Outer Continental Shelf shall be suspended during any period when amounts in the land and water conservation fund are impounded or otherwise withheld from expenditure.

H.R. 1337 (Mr. Reinecke). Provides for an announcement by the President setting forth various procedures, rules, and regulations which will assure that the Federal Government will not own, in the aggregate, more public domain and acquired land value than that owned by the United States on the effective date of this Act. Makes it the policy of Congress that land be acquired and disposed of in the same real estate taxing jurisdiction in order to insure equitable treatment under this Act.

H.R. 11979 (Mr. Dingell). Provides for the compilation by the Secretary of the Interior of a national land and water inventory. Directs the Secretary to classify all lands and waters within each State according to (1) the present use being made of such lands and waters; and (2) the future use or alternative uses of such lands and waters which would best serve the needs of the Nation, particularly with respect to the need to conserve areas of great historic, scientific, scenic, and recreational importance and to preserve areas in the more densely populated sections of the Nation from development. Provides for the publication of this inventory three years after enactment of this Act and for its revision every 2 years. Authorizes the Secretary to make direct grants to the States or political subdivisions for the acquisition of interests in land if the acquisition is for purposes which are consonant with the use specified in the inventory.

H.R. 10787 (Messrs. Baring and Burton). Requires that any action by the Secretary of the Interior which classifies for disposition or retention more than 5000 acres of land shall be subject to approval by Congress.

COMMITTEE ON PUBLIC WORKS

H.R. 14845 (Mr. Fallon et al.). Establishes a national policy to encourage and assist the coastal States to exercise effectively their responsibilities over the Nation's estuarine and coastal zones through development and management programs to achieve effective use of the coastal zone through a balance between development and protection of the natural environment.

H.R. 15025 (Mr. Farbstein) (related bill: H.R. 15044). Encourages the formation of permanent regional water management associations which are responsible for the preparation and development of comprehensive pollution control plans for all or part of a river basin or parts thereof that is consistent with or part of a comprehensive river basin water and related land use plan for the area.

H.R. 11314 (Mr. Burton). Authorizes the Secretary of Commerce to enter into agreements with one or more States for the purpose of carrying out pilot programs, relating to the control of outdoor advertising.

H.R. 16599 (Mr. Ashley). To preserve, protect, develop, restore and make accessible the lake areas of the Nation by establishing a National Lakes Areas System and authorizing programs of lake and lake areas research.

H.R. 4018 (Mr. Fallon et al.) (related bills: H.R. 7600, H.R. 7709, and others). Provides for the renewal and extension of certain sections of the Appalachian Regional Development Act of 1965 and Title V of the Public Works and Economic Development Act of 1965, as amended.

COMMITTEE ON MERCHANT MARINE AND FISHERIES

H.R. 145 (Mr. Boland) (related bills: H.R. 727, H.R. 1151, H.R. 5824, H.R. 5955, and others). Authorizes the Secretary of the Interior to study the most feasible and desirable means of establishing certain portions of the tidelands, Outer Continental Shelf, seaward areas and Great Lakes of the United States as marine sanctuaries.

H.R. 3848 (Mr. Wilson) (related bills: H.R. 4838, H.R. 11240, H.R. 13247, and others). Establishes the National Oceanographic Agency.

H.R. 5829 (Mr. Lennon) (related bills: H.R. 7895, H.R. 8794). Extends the life of the National Council on Marine Resources and Engineering Development for a period of 1 year.

H.R. 12549 (Mr. Dingell et al.) (clean bill for H.R. 6750 and others) (P.L. 91–190). Established as national policy that federal, state and local governments shall act to protect the environment. Directed agencies of the Federal Government to include environmental factors in decision-making. Directed that federal agencies include in every recommendation or report on proposals for legislation and other major federal actions affecting the environment a statement on the environmental impact of the proposed action and alternatives to the proposed action. Directed all federal agencies to determine by July 1, 1971, whether their policies were in compliance with the purposes of the Act. Established in the Office of the President a three-member Council on Environmental Quality to assist the President in the preparation of an annual report on the environment, to review federal activities affecting natural resources and to conduct studies on the environment. The members would be subject to Senate confirmation. Authorized expenditures for the Council of up to $300,000 for fiscal year 1970, $700,000 for fiscal year 1971, and $1 million for each year thereafter. Directed that beginning July 1, 1970, the President submit an annual Environmental Quality Report to Congress, describing the state of the environment, current and foreseeable trends in the management of the environment, and environmental programs of the Federal Government.

H.R. 13247 (Mr. Lennon) (related bills: H.R. 14089, H.R. 14418, and others). Amends the Marine Resources and Engineering Development Act of 1966 to establish a comprehensive and long-range national program of research, development, technical services exploration and utilization with respect to our marine and atmospheric environment.

H.R. 14730 (Messrs. Lennon and Mosher) (related bills: H.R. 14731, H.R. 15099, H.R.16155). Declares the policy of Congress to foster effective utilization of coastal and estuarine zones through assistance to coastal States in their management. Authorizes the Administrator of the National Oceanic and Atmospheric Agency to make grants to any coastal authority for the purpose of defraying the operating expenses of such authority.

H.R. 14731 (Messrs. Lennon and Mosher) (related bill: H.R. 16155). Establishes a national policy to encourage and assist the coastal States to exercise effectively their responsibilities over the coastal zone through development and implementation of comprehensive management programs to achieve the best use of resources through a balance between multipurpose development and preservation of the natural environment. Authorize the Secretary of the Interior to make grants to any coastal States for the purpose of assisting in the

development of a comprehensive management program. Provides for general studies and investigations of various coastal and estuary problems.

H.R. 16427 (Mr. Murphy) (related bill: H.R. 16609). Requiring the establishment of marine sanctuaries and prohibiting the deposit of harmful materials therein.

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

H.R. 2506 (Mr. Saylor) (related bills: H.R. 15727, H.R. 15955). Directs the Federal Power Commission to conduct a national study and prepare a comprehensive national siting plan of the optimum locations for large electric power generating facilities of all types to: (1) insure availability of an abundant, low cost, and reliable supply of electricity from such facilities, and (2) protect environmental assets of the country. Sets out additional related duties for the Federal Power Commission to perform while carrying out the above duties. Requires the Federal Power Commission to start the study within ninety days after enactment of this Act and to submit its national powerplant siting plan to Congress within two years after that date. Sets limitations on the Atomic Energy Commission's issuance of licenses for the utilization of nuclear energy for theproduction of electric power.

H.J. Res. 49 (Mr. Long) (related bill: H.Res. 163). Provides for a study of the impact of overhead electric transmission lines and towers upon scenic assets, zoning and community planning.

H.R. 487 (Mr. Long) (related bill: H.R. 500). Authorizes a program of research and development to encourage the use of underground transmission of electrical power and to undertake projects to evaluate and demonstrate the economical and technical feasibility of such transmission.

H.R. 488 (Mr. Long) (related bill: H.R. 501). Authorizes a program of research to determine the effect of overhead electric transmission lines upon the health and welfare of citizens, community planning and zoning, real estate values and tax revenues and the natural beauty of our country.

H.J. Res. 168 (Mr. Ruppe) (related bills: H.J. Res. 863). Creates a Commission on Balanced Economic Development.

H. Res. 52 (Mr. Moss). Provides for the preparation and submission to the Congress of a master ground transportation plan for the United States.

H.R. 13529 (Mr. Evans). Authorizes the Secretary of Transportation to provide for a long-range program of comprehensive regional planning for, and coordination of, transportation, including therein the undertaking of research and development and the conducting of demonstrations. Establishes major transportation regions within the United States.

H.R. 9429 (Mr. Friedel). Amends the Federal Power Act to further promote the provision of reliable, abundant, and economical electric power supply by intergovernmental cooperation and strengthening existing mechanisms for coordination of electric utility systems. Encourages the installation and use of the products of advancing technology with due regard for the preservation and enhancement of the environment and conservation of scenic, historic, recreational and other resources.

H.R. 12585 (Mr. MacDonald). Directs the Federal Power Commission to secure bulk power supplies adequate to satisfy the mounting demands of the people of the United States, consistent with environmental projection. Establishes an Advisory Panel on the Environment to assist the State commissions and regional councils in dealing with environmental matters.

H.R. 7016 (Mr. Moss et al.) (related bills: H.R. 7052, H.R. 7186, H.R. 9557, and others). Amends the Federal Power Act to further promote the reliability, abundance, economy, and efficiency of bulk electric power supplies through regional and interregional coordination. Encourages the installation and use of improved extra-high-voltage facilities. Establishes the National Council on the Environment.

H.R. 1362 (Mr. Slack) (related bills: H.R. 3668, H.R. 4119, and others). Provides additional assistance in connection with the construction, alteration, or improvement of air carrier and general purpose airports, airport terminals, and related facilities.

H.R. 12374 (Mr. Staggers) (related bills: H.R. 12824, H.R. 12862, and others). Provides for the expansion and improvement of the Nation's airport and airway system.

COMMITTEE ON BANKING AND CURRENCY

H.R. 16647 (Mr. Ashley). Provides for the development of a national urban growth policy to encourage the support the rational, orderly efficient and economic growth and development of our States, metropolitan areas, cities, counties and towns with emphasis upon the development of new communities and upon inner city development.

H.R. 3084 (Mr. Farbstein). Authorizes Federal grants under the open space land program for the development and redevelopment of existing open space land and the acquisition of outdoor and indoor recreational buildings, centers, facilities and equipment.

H.R. 7006 (Mr. Koch et al.) (related bills: H.R. 8915, H.R. 9661, and others). Establishes an urban mass transportation trust fund.

COMMITTEE ON GOVERNMENT OPERATIONS

H.R. 15900 (Messrs. Wyatt and Foley) (related bill: H.R. 15954) (P.L. 91–213). Creates a Commission on Population Growth and the American Future. Directs the Commission to conduct an inquiry into the following aspect of population growth in the United States: (1) the probable course of population growth, internal migration, and related demographic developments between now and the year 2000; (2) the resources in the public sector of the economy that will be required to deal with the anticipated growth in population; (3) the ways in which population growth may affect the activities of Federal, State, and local government; (4) the impact of population growth on environmental pollution and on the depletion of natural resources; and (5) the various means appropriate to the ethnical values and principles of this society by which our Nation can achieve a population level properly suited for its environmental, natural resources, and other needs.

H.R. 13217 (Mrs. Dwyer and Mr. Fountain). Provides for balanced urban development and growth of the United States.

H.R. 15870 (Mr. Bennett) (related bill: H.R. 16109). Authorizes the Administrator of General Services in his discretion, to assign to the Secretary of the Interior for disposal, such surplus real property, including buildings, fistures, and equipment situated thereon, as is recommended by the Secretary of the Interior as needed for use as a public park or recreation area.

COMMITTEE ON RULES

H.J. Res. 949 (Mr. Eckhardt et al.) (related resolution: H.J. Res. 950). Creates a Joint Congressional Committee to be known as the Joint Committee on National Priorities to be composed of 14 Members. Authorizes the Committee to suggest national objectives and national priorities and to recommend the allocation of resources disposed of by the Federal Government to such national priorities. Also to recommend courses of action, based on its findings and investigations, in the national interest to departments and agencies in the executive branch, to the States and political subdivisions thereof, and to regional agencies.

APPENDIX 5

Selected Articles on Land Use From Recent Legal Periodicals

1. *UCLA Law Review*, Vol. 12, page 707 (1965) "Land Planning and the Law: Emerging Policies and Techniques—A Symposium." "This issue . . . attempts to acquaint the reader with some of the ambitious projects which land planners have set for themselves. Secondarily, it points up the unique and influential role that law and lawyers can play in achieving rational land-use goals." None of the authors whose diverse viewpoints are found here feel satisfied with the status quo, and all suggest ways of bettering the situation. Includes:

"Foreword: The Coming Search for Quality"—Jesse Dukeminier, Jr.

"National Land Policies—Historic and Emergent"—Robert C. Weaver.

"Controlling Land Values in Areas of Rapid Urban Expansion"—Daniel R. Mandelker.

"The Single Tax and Land-Use Planning: Henry George Updated"—Donald G. Hagman.

"Some Observations on the Role of Speculators and Speculation in Land Development"—C. E. Elias, Jr., and James Gillies.

"Transportation Problems of the Megalopolitan."—M. L. Gunzburg.

"Creation and Maintenance of Open Space in Subdivisions: Another Approach"—Richard S. Volpert.

"The Legal Role in Urban Development"—Bernard J. Frieden.

"About Tomorrow's Urban America"—Werner Z. Hirsch.

2. *Iowa Law Review*, Vol. 50, page 243 (1965) "Land Use Symposium." Includes:

"Changing Concepts in the Law of Land Use"—John E. Cribbet.

"Allocation of Rights in Land: Preliminary Considerations"—Richard G. Huber.

"Federal Programs for the Direction of Land Use"—Raleigh Barlowe.

"Land-Use Control—The State and Local Programs"—Roger A. Cunningham.

"Trends in the Use of Public Controls Affecting Agricultural Landownership in Europe and Great Britain"—Fred L. Mann (notes).

"Agrarian Reform as a Means of Economic and Social Development in Peru."

"Flood Plain Zoning for Flood Loss Control."

"The Regional Approach to Planning."

"Taxation Affecting Agricultural Land Use."

3. Broesche. "Land-use regulation for the protection of public parks and recreational areas," 45 Tex. L. Rev. 96 (1966). 36 p.

The author suggests that in Texas "the soundest approach to implementations would be through statewide regulation promulgated by a state agency.

4. Cooley. "State land policy in Alaska: progress and prospects," 4 Natural Resources J. 455 (1965). 13 p.

The author argues for a balanced cautious approach between economic development and conservation.

5. McCloskey. "Landscape policy for public lands," 45 Denver L. J. 149 (1968). 18 p.

The author "charges the federal agencies who administer federal lands with the failure to develop coordinated policies for classification and protection of scenic resources despite existing statutory authority."

6. Netherton. "Implementation of land use policy: police power vs. eminent domain," 3 Land & Water L. Rev. 33 (1968). 25 p.

An analysis "of these powers and the principles that control their use suggesting that a new rationale be used to determine the appropriate criteria to guide future policy."

APPENDIX 6

Letter from Senator Jackson to Department of the Interior, Agriculture, Commerce, Health, Education and Welfare, Housing and Urban Development, Defense, and Transportation, Atomic Energy Commission, Water Resources Council, and replies received as of July 10, 1970.

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C., June 4, 1970.

MY DEAR MR. SECRETARY: On January 29, 1970, I introduced S. 3354, to establish a National Land Use Policy. A copy of the bill was forwarded to you on February 10, 1970.

Hearings on the bill were held on March 24, April 28, and April 29, 1970. Russell Train, Chairman of the Council on Environmental Quality, testified on behalf of the Administration at the hearing on April 28. Chairman Train explained the Administration's policy and addressed the bill in general terms. I am seeking now to supplement his testimony with technical information, with suggested amendments, with the identification of existing information resources, and other comments from each of the departments and agencies that might be affected by the bill. This information is solicited to obtain data, comments, and recommendations conducive to the production of sound legislation. Therefore, the widest possible dissemination of this letter within the Department of Transportation is requested.

The following questions are offered as a guide to the kind of information the Committee desires. They are illustrative and by no means exhaustive.

a. What kinds of data and analyses of resources and patterns pertaining to land use does the Department of Transportation now collect or have on hand that might be useful in a Federal land use planning information center such as would be established by Section 409 (a) of the bill?

b. What kinds of systems or practices functioning within the Department of Transportation would be particularly useful in the implementation of a national land use policy?

c. What activities or programs now administered by the Department of Transportation might be subject to land use conflicts such as are contemplated in Sections 408 and 409 of the bill?

d. Do you have any suggestions concerning the inter-agency cooperation ramifications of the bill?

e. Are there any other activities or programs administered by the Department of Transportation that should be specifically considered in the processing or implementation of this legislation?

f. Can you suggest any amendatory language that would enable the policy aims of the bill to be carried out more effectively?

g. Can you suggest any other ways in which the Committee might improve upon the bill as it now exists, particularly with respect to its impact upon the Department of Transportation?

This information is requested in lieu of oral testimony from each of the interested departments and agencies of the Federal Government. Nevertheless, if you would care to include in addition to the information requested above, a general statement of the Department of Transportation's views on the bill, it will be gratefully received and made a part of the hearing record. The Committee is interested in obtaining as much input pertinent to this legislation as possible in the interest of implementing its policy aims in a manner consistent with sound governmental administration. Your cooperation in this effort is earnestly solicited.

Ten copies of S. 3354 in Committee print form are enclosed for your use in complying with this request. In order for the Committee to maintain its schedule with respect to S. 3354, the above information will be needed by Friday, June 19, 1970. If any members of your staff have any questions with respect to this matter, please tell them to feel free to discuss them with members of the Committee staff at Government Code telephone number 180–2856.

Sincerely yours,

HENRY M. JACKSON, *Chairman.*

U.S. ATOMIC ENERGY COMMISSION,
Washington, D.C., July 2, 1970.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate.

DEAR SENATOR JACKSON: Thank you for your letter of June 3, 1970 enclosing copies of Committee Print No. 2 of S. 3354, bill "To amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning." As you noted, a copy of the bill as introduced by you on January 29, 1970 was forwarded to the Atomic Energy Commission on February 10, 1970. The overall thrust of the bill is to encourage and assist the states to exercise more effectively their existing responsibilities for the planning, management, and administration of the Nation's land resources.

The following respond to the questions offered in your June 3, 1970 letter:

a. What kinds of data and analyses of resources and patterns pertaining to land use does the Atomic Energy Commission now collect or have on hand that might be useful in a Federal land use planning information center such as would be established by Section 409(a) of the bill?

The Atomic Energy Commission (AEC) collects or has available information of the following types:

1. Classification of improvements on land under AEC control as to whether the primary use is for administrative, industrial, or research and development purposes;

2. Maps of certain AEC installations identifying areas which have been designated for such purposes as ecology and forest management;

3. Hydrological, geological, meteorological, and other environmental information and data for certain areas of the United States (obtained in many instances through cooperative programs with other Federal agencies and state bodies);

4. AEC operational activities for which environmental statements are made pursuant to Section 102(2)(C) of the National Environmental Policy Act of 1969;

5. Under the Atomic Energy Act of 1954, as amended, the Atomic Energy Commission has regulatory authority over the construction and operation of nuclear power plants and fuel reprocessing plants. The siting of nuclear power plants and fuel reprocessing plants involves problems of land use planning that would have "more than local significance" (Section 409(a)(2). The "detailed statements" prepared by the AEC in accordance with the National Environmental Policy Act of 1969 could be useful in any land use program. These "detailed statements" are prepared in connection with the licensing of nuclear power plants and fuel reprocessing plants and discuss a broad range of environmental effects.

b. What kinds of systems or practices functioning within the Atomic Energy Commission would be particularly useful in the implementation of a national land use policy?

1. Cooperative ventures with other Federal, state and local agencies in examining the effects of AEC plant operation on river quality and land use in the immediate area surrounding the plants, and a similar group to study the impact of waste management practices;

2. Diversification efforts at Richland, Washington, and cooperation at other sites leading toward industrial development;

3. Reforestation programs such as those at AEC's Savannah River and Oak Ridge installations.

c. What activities or programs now administered by the Atomic Energy Commission might be subject to land use conflicts such as are contemplated in Sections 408 and 409 of the bill?

1. Sections 408 and 409 of the bill would place restrictions upon certain public works activities conducted or supported by Federal agencies and certain projects involving Federal assistance (Section 408(b)), and require consultation with the Land and Water Resources Planning Council (or such other appropriate agency as the President may designate) in connection with Federal projects involving a major land use activity (Section 409(b)). While we do not construe these requirements as applying to the AEC in the exercise of its regulatory authorities and responsibility, we would point out that the Commission, in order to implement the National Environmental Policy Act of 1969, has recently amended its regulations so as to provide that licenses and construction permits for nuclear power plants and fuel reprocessing plants will contain a condition to the effect that the licensee shall observe such standards and requirements for the protection of the environment as are validly imposed pursuant to authority established under Federal and state law and as are determined by the Commission to be applicable to the facility involved. While the condition does not apply to radiological effects, since such effects are dealt with in other provisions of the licenses or permits, or to matters of water quality covered by Section 21(b) of the Federal Water Pollution Control Act, it could cover appropriate requirements imposed by a state land use planning agency pursuant to a statewide Land Use Plan.

2. Certain operations and activities of the AEC are conducted within the confines of extensive, relatively isolated land reservations which were selected in part because of geological, hydrological, and meteorological characteristics making them peculiarly suitable, from an environmental and public safety standpoint, for the use to which AEC has put the land. Foremost among such AEC operations is the Hanford, Washington, Site where the continued use of the reservation for reactor and radioactive waste management and processing activities could be adversely affected by lack of appropriate recognition in the land-use planning of other agencies (state or Federal). Similar problems might also arise relative to land use for other AEC activities and programs such as underground nuclear explosions for both military and peaceful purposes, the space-nuclear program, and radioactive waste burial.

d, e, f, and g: The AEC is not in a position to respond specifically to these questions regarding the bill. The Administration still has questions of land use planning under review.

Cordially,

GLENN T. SEABORG, *Chairman.*

GENERAL COUNSEL OF THE DEPARTMENT OF COMMERCE,
Washington, D.C., June 26, 1970.

HON. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your request of June 3, 1970 for the views of this Department concerning Committee Print No. 2 of S. 3354, a bill to amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning.

The Administration is continuing to review the complex issues associated with the development of policies on the use of the Nation's public and private lands. Accordingly, we believe it would be premature to comment at this time on the provisions of Committee Print No. 2 of S. 3354.

You have also requested our answers on a number of questions designed to solicit information concerning data, comments, and recommendations conducive to the production of sound legislation in the area of land use policy. Our answers to the questions are provided in an enclosure of this letter.

Sincerely,

JAMES T. LYNN, *General Counsel.*

Enclosure

ANSWERS TO QUESTIONS CONTAINED IN SENATOR JACKSON'S LETTER OF JUNE 3, 1970

a. Kinds of data available in the Department of Commerce for use in land use planning

The Department's Economic Development Administration (EDA) does not maintain files of land use data specifically. It does, however, have an extensive data bank containing many economic and population characteristics for counties and cities. This computerized system is known as "Quick Query" and permits rapid retrieval and manipulation of data. Also, the Regional Commissions established under Title V of the Public Works and Economic Development Act submit comprehensive regional plans for the five multi-state regions. Some of this information is relevant to land use planning.

The Department's Office of Business Economics and Bureau of the Census collect and publish data and projections on population, income, migration, and other socio-economic variables as necessary bases to land use planning. These are presently being used by the Water Resources Council in their planning projects.

We are planning to conduct a survey of water use by manufacturers in the United States from which a National Industrial Water Data System would be developed. The data will be coded geographically and used for long-range projections of industrial water requirements for river basin and national planning purposes. This is another one of the inputs of the Department of Commerce to the activities of the Water Resources Council.

b. Systems or practices functioning within the Department of Commerce which would be particularly useful in the implementation of a national land use policy

EDA has a policy of attempting to direct public investment into identified growth centers capable of absorbing public investment to the benefit of residents of outlying "redevelopment areas". This concept undoubtedly will be of considerable assistance in planning and implementing a national land use policy. Also, the Title V Regional Commission Program with multi-state jurisdiction, Federal-State partnership organization, and comprehensive planning experience is one type of system which could be useful in implementing a national land use policy.

c. Activities or programs of the Department of Commerce which might be subject to land use conflicts such as are contemplated in sections 408 and 409 of S. 3354

Public works projects financed by EDA grants and loans could conceivably be subject to land use conflicts contemplated in sections 408 and 409 of the bill. In addition, EDA business loan projects, planning grants and, possibly, technical assistance would be subject to section 408. Also Title V Regional Commissions, might be subject to land use conflict situations.

d. Suggestions concerning the inter-agency cooperation ramifications of the bill

We have no suggestions.

e. Other activities or programs administered by the Department of Commerce that should be considered in the processing or implementation of this legislation

All relevant programs are discussed above.

f. Suggestions for amendatory language that would enable the policy aims of the bill to be carried out more effectively

We have no suggestions.

g. Suggestions for other ways in which the Committee might improve upon the bill, particularly with respect to its impact upon the Department of Commerce

We have no suggestions.

DEPARTMENT OF THE ARMY,
OFFICE OF THE SECRETARY OF THE ARMY,
Washington, D.C., June 24, 1970.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate,
Washington, D.C.

DEAR MR. CHAIRMAN: This is in reply to your letter of June 4, 1970, requesting the views of the Department of Defense on certain matters pertaining to S. 3354, 91st Congress, a bill "To amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning." The Department of the Army has been assigned responsibility within the Department of Defense for preparation of a reply. Our response is, of necessity, of a general nature in view of the limited time available for response. We trust, however, that it will meet your purposes.

The Department of Defense is involved in land acquisition, use, and planning in the prosecution of its military functions and also the civil functions of the Department of the Army, exercised through the Corps of Engineers. A considerable amount of data concerning land use and planning is gathered and compiled in the prosecution of these functions. This information, of course, relates almost entirely to lands included in military installations and water resources projects. Additional land use information also often becomes available as a result of special studies carried out by the Corps of Engineers. Examples are the recent studies relating to streambank erosion and removal of drift and debris from harbors, and the national shoreline study presently being conducted. The information derived from all of these sources would be available for all purposes of comprehensive land use planning.

With regard to the implementation of a national land use policy, probably the most significant function within the Department of Defense is the civil works program of the Department of the Army, because of its planning capabilities and operational experience in the field of water and related land resources planning and development. The land use and planning activities of the other various elements of the Department of Defense also are of substantial significance in connection with a national land use policy. The comprehensive river basin and regional studies of water and related land resources carried out under the sponsorship of the Water Resources Council and by a variety of more intensive surveys of smaller areas carried out by the Corps of Engineers, provide data and projections pertaining to specific localities and river basins which should prove very useful in developing and updating a national land use policy and statewide land use plans.

In connection with the land use conflicts within the contemplation of Sections 408 and 409 of the bill, it is of course not possible at this time to make a definitive assessment of the types of activities that might be subject to such conflicts. The general areas in which conflicts might arise, however, are clear. These would be in the construction and use of military installations, the use of other lands for military or national defense purposes, and the planning, construction, and operation of water resources development projects.

We have no comments on the interagency coordination aspects of the bill. We also have no suggestions at this time as to how the bill might be amended to better carry out its policy aims. We do believe, however, that there should be a continuing discussion of the complex issues related to the development of policies on the use of public and private lands in this country.

Sincerely,

J. R. BROWNELL, Jr.,
Colonel, GS,
Deputy Chief of Legislative Liaison.
(For William A. Becker, Major General, GS, Chief of Legislative Liaison).

APPENDIX 7

Subsequent to the hearings, these communications were received for the record.

EDISON ELECTRIC INSTITUTE,
New York, May 21, 1970.

HON. HENRY M. JACKSON,
Chairman, Senate Interior and Insular Affairs Committee,
New Senate Office Building,
Washington, D.C.

DEAR SENATOR JACKSON: Attached are comments by the Edison Electric Institute on S. 3354, amending the Water Resources Planning Act to provide for a National Land Use Policy. We hope that these comments will be of help to the Committee on Interior & Insular Affairs as it considers S. 3354.

Sincerely,

W. DONHAM CRAWFORD,
Managing Director.

EDISON ELECTRIC INSTITUTE COMMENTS ON S. 3354

The Edison Electric Institute is the national trade association of investor-owned electric light and power companies of this nation. It includes 181 member companies which collectively service over 97 percent of all customers of investor-owned electric power companies and 77 percent of all electric power customers in the United States. The members of the Institute represent enterprises in every part of the nation, serving urban, suburban and rural areas.

In commenting on S. 3354, the National Land Use Policy Amendment to the Water Resources Planning Act, we want to emphasize our belief that sound land use planning should be an important goal in our society. While some aspects of S. 3354 may contribute to the achievement of this goal, others, based on our experience, do not. Our comments are confined to those areas on which we can draw directly from the experience of the electric utility industry, with the thought that this would be most helpful to those considering the proposed legislation.

The proposed bill suggests "findings," some of which do not fit our experience. It is suggested that failure to conduct sound land use planning has resulted in delay and cancellations of utility development, and in the location of some utility facilities without regard to relevant environmental considerations. There are many factors which affect construction of electric power facilities and which, in recent years, have resulted in delays. Most important among them are construction labor problems, delays in delivery of equipment, lengthening regulatory and approval proceedings, and other factors that would be unaffected by this legislation.

The location of major power facilities is dictated by a combination of requirements: physical and engineering, economic, and environmental. All are important, and all are given consideration. Extensive environmental studies are made in the siting of electric power plants and other major facilities and, normally, a number of governmental approvals are required before a facility is built. Location of a power plant can never be, in modern times at least, a unilateral action. A variety of interests and requirements must be balanced, including land use requirements.

From our experience, of all the major areas of environmental concern—air quality, water quality, and land use—land use is the most difficult to approach at any but a local, state or regional level. Conditions vary so greatly from area to area that it is difficult to conceive of a meaningful "national land use policy" as proposed in this bill. One difficulty appears to lie in the lack of generally agreed upon standards that might serve as a basis for land use planning. Con-

siderable conflict of opinion exists on this subject among those most closely involved in land use planning, and the proposed bill provides no guidance in this regard.

We believe that electric utilities must provide an abundant, reliable and economic supply of electricity with minimum adverse effects upon the environment. Where conflicts arise, they should be resolved in a way that will achieve a proper balance among the environmental and other competing considerations. All the interests involved, governmental and non-governmental, should be considered. Frequently, accommodations can be reached informally and without time-consuming administrative or regulatory procedures. Where accommodations cannot be reached informally, it is helpful to have some forum to resolve conflicts responsibly.

In the final analysis, it seems essential to us that the body resolving the utility siting issues should be one which has responsibility for electric utility rates. In most states this is the public service commission. At the Federal level it is the Federal Power Commission, and the National Environmental Policy Act of 1969 requires that the FPC consider the environmental impact of a proposed facility requiring a license or permit. This requirement is also made of the Atomic Energy Commission. At the state level, recommendations concerned with questions of land use could be an important part of the commission's decision making process, just as are assurance of compliance with air and water quality standards. In any event, we see no need for a state agency concerned with land use planning to require authority to acquire interests in real property. Ownership is not a necessary component of the planning function.

We would also point out that the difficulties in identifying future location of utility corridors should not be underestimated. Changing population patterns, changing electrical load patterns, and the changing capabilities of the utilities growing out of continuing advances in technology make hard and fast location of corridors difficult and undesirable. There needs to be a flexibility of planning, in our experience, in order to best provide for the public interest.

In summary, we agree with the need for sound land use planning and with the attempt being made in this bill to locate that function at the state level. We do not agree with other aspects of the bill which end to centralize control of land planning at the Federal level, or with the assumption that current delays in utility construction will be affected in any important way by passage of S–3354, in fact, it is our opinion that the procedures suggested could well add to the already lengthy approval process required for utilities and that this would work against one of the stated purposes of the legislation.

UNITED STATES INDEPENDENT TELEPHONE ASSOCIATION,
Washington, D.C., June 2, 1970.

Hon. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SCOOP: For the record, the United States Independent Telephone Association would like to submit the following comments on S. 3354, a bill to amend the Water Resources Planning Act, concerning which hearings have been held by the Committee on Interior and Insular Affairs.

The United States Independent Telephone Association (USITA) is a trade organization which represents the Independent (non-Bell) segment of the telephone industry. Our members operate more than half the geographical area of the lower 48 states and in addition provide the telephone service in the states of Alaska and Hawaii and the Commonwealth of Puerto Rico. Numerically they serve only one-sixth of the nation's telephones. They are principally in the rural and suburban areas as contrasted with the Bell System which serves the metropolitan areas. Land use as covered in S. 3354 has a very definite application to our members and their customers.

A public utility has the obligation of providing service to all who apply as long as they are located in the utility's area. To a rural serving telephone company land use is a day-to-day matter as well as an economic one. Our member companies need state and federal cooperation in the matter of land use and, in turn, are responsible to those agencies for ecological and economical use of any public rights of way facilities granted them.

Without question our members share your interest in national and statewide land use planning. Our comments on S. 3354 concern a relatively small matter of clarification; namely, the use of the word "facilities" in lieu of the word

"corridors" where it has application to transportation and utility facilities. The present wording of "transportation and utility corridors" implies that telephone and other utilities use extended strips of land. Although this may have been true in many instances in the past, there are instances, and increasingly so, of land use other than what one would term a "corridor". For example, one of the major developments in communications since World War II is microwave radio. This type of communication requires line of sight radio towers located principally on high points of ground. The term "facilities" would apply to such an installation whereas the term "corridor" would not be descriptive.

Of greater importance in the future will be domestic satellite transmissions. The location of ground stations is critical. For example, the recent Alaskan installation is miles away from the center of communications, Anchorage. These ground stations and their microwave radio links could not be located in "corridors" whereas the term "facilities" would be applicable. Additional justification could be furnished for further clarification but the preceding examples should be enough to illustrate that the term "corridors" is outmoded.

Our Association is grateful that your bill recognizes the fact that land use requires consideration of utility services. Utility services should always be a part of land use plans. When your legislation is enacted, you may be sure our members will work with the responsible agencies to the mutual benefit of the public and the government.

Enclosed is a listing of the sections of the bill which contain the word "corridors". We certainly appreciate your consideration of our request.

Sincerely yours,

WILLIAM C. MOTT,
Executive Vice President.

Enclosure.

REFERENCES TO "CORRIDORS" IN S. 3354

SEC. 403 (B)

"The (Land and Water Resources Planning) Council is authorized to make land use planning grants . . . to assist and enable eligible State and interstate agencies—. . .

(2) to collect and analyze information and data related to—. . .

(E) ecological, environmental, geological, and physical conditions which are of relevance to decisions concerning the location . . . *transportation and utility corridors*, and other land uses; . . ."

SEC. 406 (B)

". . . State Land Use Plans must, . . . meet or be designed to meet, as additional information is developed, the following guidelines and requirements— . . .

(3) identification of those areas of the State— . . .

(D) where *transportation and utility corridors* are or should, in the future, be located, . . .

(6) provisions to insure that *transportation and utility corridors* do not damage Federal lands dedicated to the maximization of declared public values, and are established in compliance with regional and State needs, State policies, and policies and goals set forth in other Federal legislation; . . ."

WILDLIFE MANAGEMENT INSTITUTE,
Washington, D.C., April 28, 1970.

HON. HENRY M. JACKSON,
Chairman, Committee on Interior and Insular Affairs, Senate Office Building, Washington, D.C.

DEAR SENATOR JACKSON: It is regretted that the Institute will not be able to accept the invitation to appear before the Committee during its consideration of S. 3354. As you know, we are keenly interested in the subject of that proposal.

The Institute endorses the objectives of S. 3354. It is believed that the adoption of a policy statement on land use is imperative and that the Federal Government has both a responsibility and a logical role to encourage and assist the states and local units of government in initiating and carrying through with this necessary work. Additionally, there must be better coordination between federal and state interests in those states where the bulk of federal lands are situated.

We have an open mind on how all this might be accomplished and are greatly interested in reviewing the suggestions that will be received by the committee. Our main apprehension at this time is that the Congress not settle for less than what the situation requires for its resolution. We believe that Congress should not be reluctant to act boldly in this time of sincere national concern about the environment.

In order to facilitate the objectives of S. 3354, which we endorse, it is suggested that the organizational framework of the existing Water Resources Council offers opportunity for broader advancement than is contemplated in the bill. Without attempting to comment in detail, it appears to us that the responsibilities of the Water Resources Council should be expanded to cover all environmental matters at the federal agency operating level. Statewide land use planning, plus consideration of state and federal objectives in the public land states, would be included as a specific responsibility of the reconstituted Council. Certainly, the objectives of S. 3354 fall within the definition of matters pertaining to the environment. In fact, many environmental problems have their origin in inadequate land-use planning.

At the present time, there is no effective mechanism for bringing together the many federal agencies having programs, activities, and responsibilities involving the environment. The Council on Environmental Quality and its support group, the Office of Environmental Quality, operate on the presidential level. There also is a Cabinet-level group, but past if experience is any guide, those busy men will not be able to give the continuous attention this complex subject warrants.

The need for an expansion of the role of the Water Resources Council is demonstrated in the daily requests that the President's Council on Environmental Quality take up specific problems that more properly should be considered by the federal agency or agencies most closely associated with them. The Council should remain free for the discussion and formulation of policy on the many issues that this problem involves.

In expanding the role of the Water Resources Council in this manner suggested, we also recommend that the chairman of the Council be appointed by the President and subject to the confirmation of the Senate. The difficulty with making a Cabinet officer the permanent chairman of the Council is that the responsibility soon gets shifted to an Assistant Secretary. A second difficulty is the fact that one Cabinet officer is not going to be successful in coordinating the actions of other Cabinet departments.

Appointment of a chairman in the manner suggested would free him from conventional restraints and enable him to operate in an atmosphere where federal agencies can meet as equals to discuss problems, policies, and opportunities.

I would appreciate having this letter made a part of the hearing record.

Sincerely,

DANIEL A. POOLE, *President.*

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