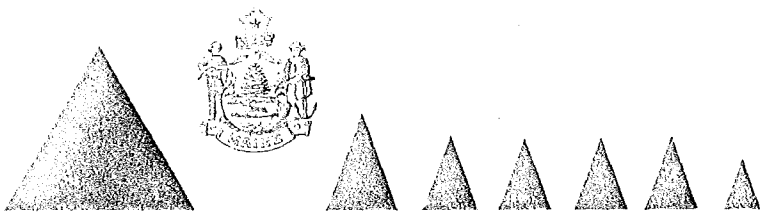


MAINE LAND USE REGULATION COMMISSION

STATE HOUSE, AUGUSTA, MAINE 04330 (207) 289-2631 JAMES HASKELL, JR. EXECUTIVE DIRECTOR

March 20, 1973

TO: John L. Martin, Chairman, Land Use Regulation Commission

FROM: James S. Haskell, Jr., Executive Director, Land Use Regulation Commission

SUBJECT: Review of document entitled "W. S. Brownell, Reorganization--DEP & LURC, Donaldson Koons, Colby College" dated 2/1/73

As per your request, I have reviewed the document entitled "W. S. Brownell, Reorganization--DEP & LURC, Donaldson Koons, Colby College" dated 2/1/73 (a copy of this document is attached as Appendix A).

I have attempted to comment objectively on each of the issues raised by the document, to outline what has evolved to date with regard to reorganization and LURC, and hopefully to more clearly state the staff's and my own recommendations and feelings on the subject.

The following are the major issues, or points of view, expressed in the document:

1. That LURC and DEP were intended to be combined by reorganization and therefore the potential duplication of effort between LURC and DEP's Site Location Law were intentionally created;

2. That LURC is in conflict with other responsibilities and programs of DEP and those of other state agencies, and that developers may, in some instances, be required to receive approval from more than one agency;

3. That the major functions of LURC should be separated and assimilated by the State Planning Office and DEP; and that LURC's regulations, development standards and similar functions should be set by the Legislature, as are DEP's air and water standards.

My comments on these issues are as follows:

ISSUE 1:

That LURC and DEP were intended to be combined by reorganization and therefore the potential duplication of effort between LURC and DEP's Site Location Law were intentionally created.

COMMENTS:

The 105th regular session of the legislature passed L.D. 1831, "An Act to Create the Department of Environmental Protection," which was signed into law by the Governor on June 23, 1971. This law called for the combining of EIC and LURC along with several other boards and commissions into one departmental framework and charged the Joint Select Special Committee of the Legislature on Governmental Reorganization, with the assistance of the interim commissioner, to prepare a plan of reorganization and appropriate legislation for the consideration of the special session of the 105th legislature. (A copy of LD. 1831, An Act to Create a Department of Environmental Protection, is attached as Appendix B.)

During this same regular session, the 105th passed a substantial revision of the LURC statute, which was also signed into law by the Governor on June 23, 1971.

Prior to that time, LURC, for all intents and purposes as an operating agency and viable statute, was non-existent. (A chronological history of LURC is attached as Appendix C.)

In preparing the proposed revision to the LURC statute, the issue of coordinating and complimenting the functions of the EIC's Site Location of Development Law (T38, MRSA, §484) with a similar type function in the LURC Law (T12, MRSA, §685-B), and the problem of potential duplication of effort, were discussed at length by the LURC Commissioners and legal consultants.

To facilitate coordination and to develop a uniform approach, it was decided to incorporate as part of the Land-Use Permit function of the LURC Law a process similar to that of the Site Location Law. Specifically, it was decided to incorporate identical "criteria for approval," so as to provide a uniform approach to the State's programs for the review and approval of development. The criteria for approval are essentially identical in both laws today, with the following important exceptions: (1) that the LURC criteria for approval additionally require that the proposed project be in conformance with LURC's adopted zoning standards and comprehensive plan, and (2) that the LURC Law requires that review and approval be given to all land-use types within its jurisdiction, while the Site Location Law is specifically limited to land-use types of significant magnitude. (A comparison of the LURC and the Site Location Law's Criteria for Approval and types of land uses requiring approval is attached as Appendix D.)

To resolve the problem of potential duplication of effort resulting from the fact that jurisdiction of the Site Location Law applied statewide (organized and unorganized areas) and the LURC Law applied only to the unorganized areas, it was decided by the LURC Commissioners to meet with EIC and to seek a mutually acceptable solution. On April 14, 1971, a meeting to discuss the matter took place at the request of LURC. (A copy of the correspondence and minutes of LURC meeting relating to EIC-LURC meeting on April 14, 1971 is attached as Appendix E.)

At this meeting LURC's initial proposal was that the Site Location Law be amended to apply only to those lands not under LURC's jurisdiction, i.e., the organized areas of the State. This was totally unacceptable to EIC, because if the proposed LURC amendments failed to pass, then the State would not have control over major development in

unorganized areas. As a compromise, it was agreed that the problem of a developer potentially having to receive approval from both agencies could be resolved by inserting language into the LURC Law to the effect that an applicant under the Site Location Law would not have to apply to LURC unless required to do so by EIC and that LURC approval would be prima facie evidence of Site Location approval unless in conflict with more restrictive EIC regulations.

The agreed-upon language was inserted into the proposed revision of the LURC Law with the understanding that a better solution would be found if the revised LURC Law was passed by the Legislature, or that the problem would be resolved when and if LURC and EIC were combined by reorganization. The revised LURC Law was passed by the 105th regular session at the same time as L.D. 1831, which called for the combining of LURC and EIC in the reorganization.

Prior to the convening of the Special Session of the 105th Legislature, the Joint Select Special Committee on Governmental Reorganization began its deliberation on the proposed Department of Environmental Protection. In November 1971, LURC came into possession of a memo to the Joint Committee from its legal counsel, M. T. Healy. (A copy of the memo from M. T. Healy to the Joint Committee, is attached as Appendix F.)

In response to the issue raised in this memo, as to whether or not the EIC could handle the work load and functions of LURC, I was requested by the LURC Chairman, Senator Violette, to prepare a paper outlining my ideas, as a professional planner, as to how LURC should be handled in the reorganization effort. (A copy of this paper entitled, Reorganization and the Opportunity for Comprehensive Land Use Planning, is attached as Appendix G.)

This paper was subsequently revised and expanded, by request of the LURC Commissioners, to a discussion of alternatives. (A copy of this revised paper, entitled Reorganization of State Government--The Function of State Level Land Use Planning and Regulation: A Discussion of Alternatives, is attached as Appendix H.)

A draft of this second paper was discussed by the LURC Commissioners at a regular business meeting on December 1, 1971 and the Commission unanimously concluded that LURC should be placed under the umbrella of the proposed DEP, and that the functions of the LURC Law and the Commission, as its decision-making body, should be kept intact. The Commission further recommended that several similar land-use type laws such as the Site Location Law should be combined with the LURC Law. This position was transmitted to the Chairman of the Joint Committee by the Chairman of LURC. (A copy of the letter to Senator Johnson, Chairman, Joint Committee on Reorganization from Senator Elmer Violette, Chairman, LURC, is attached as Appendix I.)

At that same Commission meeting, I was requested to prepare a proposed organizational structure delineating the position taken by the LURC Commissioners. (A copy of the proposed organizational structure in the form of a memo to Senator Violette, Chairman, LURC, from myself, is attached as Appendix J.)

On January 4, 1972 a meeting, moderated by Senator Johnson of the Joint Committee, took place between EIC and LURC. At this meeting LURC was requested to present its position on its proposed organizational structure. (A copy of the presentation entitled An Alternative Organizational Structuring of the Proposed Department of Environmental Protection, which was presented at this meeting, is attached as Appendix K.)

At this meeting EIC totally rejected LURC's proposed alternative and no progress was made towards a compromise in the two opposing positions. (A copy of EIC's proposed organization of the Department of Environmental Protection, presented at this meeting, is attached as Appendix L.)

Shortly after the meeting it came to LURC's attention that the Joint Committee had decided to leave LURC out of the Proposed Department of Environmental Protection. In response to this, LURC again reiterated its position to the Committee. (A copy of this position in the form of a letter to Senator Johnson, Chairman, Joint Committee on Governmental Reorganization from Senator Violette, Chairman, LURC, is attached as Appendix M.)

The Joint Committee did, in fact, opt to leave LURC out and drafted legislation to that effect which was passed by the Special Session of the 105th Legislature.

During the months of discussion as to how LURC should be placed in the proposed Department of Environmental Protection, the debate became very heated and some egos were bruised. It was during those months that I lost the friendship and respect of a former mentor and employer--Dr. Koons--over a difference in ideas and approach.

The failure of the Joint Committee to effectively arbitrate the disparity in approaches to structuring the proposed Department of Environmental Protection, and include LURC one way or the other within the proposed Department, left the problem of potential duplication of effort between the LURC Law and the Site Location Law unresolved.

In an effort to resolve this problem LURC requested and received from DEP during the late summer of 1972, a memo of understanding which seeks to minimize the duplication of effort between the LURC statute and DEP's Site Location Law, Great Ponds Act and Mining Act. (A copy of this memo of understanding in the form of a request from John L. Martin, Chairman, LURC to W. R. Adams, Commissioner, DEP and reply is attached as Appendix N.)

Although this memo of understanding is certainly a step in the right direction, it is far from a satisfactory solution. It is my personal opinion that a more appropriate solution would be statutory amendments to DEP's Site Location Law, Great Ponds Act, Wetland Control Law, Shoreland Zoning and Mining Law (i.e., land-use type functions) to give LURC sole jurisdiction over these statutes in the unorganized areas, if not statewide, or the creation of a separate Department of Land Use.

ISSUE 2:

<u>That LURC is in conflict with the programs and responsibilities of DEP and other State agencies and that developers may in some instances be required to receive approval from more than one agency.</u>

COMMENTS:

As a way of placing this issue in perspective, let me state that it is my opinion that it is neither necessary nor desirable for each and every program or responsibility within State government to exist independently isolated in its own separate unrelated niche. The very nature of government and the effective delivery of its goods and

services make all programs interrelated one way or another.

It seems to me that the real concern here is to minimize existing or potential conflicts and to avoid unnecessary duplication of effort.

With regard to LURC, I know that we have made and are making serious attempts to minimize and avoid duplication with the programs and responsibilities of other agencies in State government.

We pride ourselves on the excellent working relationships and rapport we have been able to develop. As a matter of fact, if it weren't for the excellent participation and cooperation we have received and are receiving from such agencies as the Department of Inland Fisheries and Game, the Soil and Water Conservation Commission and the Division of Health Engineering of the Department of Health and Welfare, the LURC statute could not have been implemented as well as it has been to date.

In our effort to establish appropriate relationships with other related programs in State government, we have developed an interdepartmental review procedure in our handling of LURC applications for approval in order to secure direct input from other appropriate agencies in the review of the applications and in our decision-making process.

Parenthetically, I would add that this interdepartmental review procedure is a procedure which I initiated and developed as a consultant to EIC in 1970, while I was developing the administrative handling procedures for the then new Site Location Law, and which has been further refined here at LURC.

As an example of how this interdepartmental review procedure works, assume that LURC has received an application for the approval of a subdivision which abuts on a State Highway, which has frontage on a water body having a significant fishery, and which contemplates the use of individual septic tanks as the method of sewage disposal.

In such a situation, we would send a copy of the application to the Soil and Water Conservation Commission for their input and expertise as to the suitability of the area's soils for the proposed subdivision, to the Department of Transportation for their input and expertise as to the appropriateness of the internal transportation design and the vehicular entrances onto the public highway, to the Division of Health Engineering of the Department of Health and Welfare for their input and expertise as to the appropriateness of the proposed method of sewage disposal, and to the Department of Inland Fisheries and Game for their input and expertise as to the potential impact of the proposed subdivision on the adjacent fisheries.

Each agency reviews the application and responds to LURC with a letter of review outlining its findings and suggestions. These reviews are then included in the LURC staff report to the Commissioners and thus the agencies' input becomes an integral part of LURC's decision-making process. (A copy of the list of review agencies and the review form letter, is attached as Appendix O.)

In the case of an applicant requiring a DEP license such as an air or water discharge license, we would include DEP as a review agency and would require as part of LURC's approval that the applicant secure the necessary license and comply with DEP's standards and procedures. Applicants requiring approval under the Site Location Law, Mining Law or Great Ponds Act from DEP would be handled consistent with the administrative agreement outlined in the comments in Issue 1 and in Appendix N.

Rather than duplicate the programs and responsibilities of other agencies, I feel we are making a strong effort towards complementing them. As an example of this, when a person applies for a LURC building permit, we mail to him as part of the LURC application package a copy of the application for a plumbing permit from the Division of Health Engineering of the Department of Health and Welfare, a copy of an entrance permit application from the Department of Transportation, and the applicable forms from other appropriate agencies. We do this as a courtesy to the responsible agencies and as a courtesy to the applicant.

As another example of this, we have just recently developed a set of proposed sewerage disposal regulations for dwelling units in the unorganized areas. These regulations were prepared jointly with the staff of the Division of Health Engineering of the Department of Health and Welfare and the staff of the Soil and Water Conservation Commission, and were openly endorsed by these and other agencies at our public hearing. By melding together the requirements of all three programs we overcame some of the problems each program faced independently with regard to the handling of private sewerage disposal.

Wherever LURC is placed--in DEP, in a Department of Conservation or in a new Department of Land Use, which I have proposed, or even if LURC is left alone--the problem of the developer having to secure review and approval from several different agencies will continue, unless certain similar laws and programs such as the Site Location Law, the LURC Law, the Shoreland Zoning Law, the Wetlands Control Law, the Great Ponds Act, etc., are combined into one administrative system. If this is done the developer may still have to secure some permits from other agencies but the majority of the land-use type permits could at least be handled and secured at one administrative point. And I submit that it is the fact that this has not been done with these types of permits that is the concern and frustration of the majority of the developers in this State.

ISSUE 3.

That the major functions of LURC should be separated and assimilated by the State Planning Office and DEP; and that LURC's regulations, development standards, and similar functions should be set by the Legislature, as are DEP's air and water standards.

COMMENTS:

It is my personal and professional opinion that the functions of state-level planning, zoning and their enforcement are an integrated legal and administrative process, the fragmentation of which makes very little sense and would create more problems than it purportedly seeks to solve. (A copy of a recent LURC research paper entitled "LURC as an Integrated Planning, Zoning and Land Use Review Process," is attached as Appendix P.)

In my opinion, the placing of the Land-use Planning function of LURC within the State Planning Office is inconsistent with the State Planning Office's advisory and coordinating roles as outlined in its enabling legislation.

The State Planning Office is an advisory agency to the Executive Branch of Government (Governor's Office), which has as its major function the coordination of the

programs of various state agencies. As an executive-level planning agency, its primary role is coordinating the implementation of the adopted policies and priorities of the Executive Department and the Legislature.

Pursuant to statutory responsibility it is required to prepare the state's "Comprehensive Development Plan" and in the process to coordinate and guide the various planning efforts assigned to the line agencies, i.e., the Transportation Plan, the Recreation Plan, the Air and Water Pollution Abatement, the Health Plan, the Education Plan, the Land-use Regulation Plan, etc. (A copy of 5 MRSA, C.311, the Maine State Planning Act, is attached as Appendix Q.)

The State Planning Office should be a policy-oriented agency and not an operational agency. To place operational responsibilities within the Governor's office would limit the flexibility that is needed to administer state government.

It is my opinion that the functions of Land Use Planning and Regulation should be under the aegis of, but not directly in, the office of the Governor. These functions should be assigned to a line agency.

With regard to placing the functions of developing and enforcing land-use regulations within the Department of Environmental Protection, this fragmentation of the integral process of planning, zoning and land use review also makes very little sense and, in my opinion, would create more problems than it purportedly seeks to solve.

Part of the problem with traditional land-use planning and regulation stems from the fragmentation of the responsibility for developing and enforcing regulations. It may have been workable at first, but it has evolved into an expensive and time consuming labyrinth through which applicants must grope their way.

In the past the planning commission adopted the land use plan, someone else granted amendments to it, someone else implemented it, someone else enforced the implementation, and someone else granted variances to the implementation. This well may be why so many plans of the past are sitting on shelves gathering dust with their goals, objectives and recommendations not implemented. This may also be why the implementation of Land Use Planning (zoning) has been so abused and why the public is so suspicious of the planning, zoning, and land use review process.

I am convinced that reorganization can help solve these traditional problems and can make state government more effective if the responsibility for preparing and administering the functions of land use planning and regulation are placed in a single body. A search of the professional literature on this subject supports this, as does the review of current judicial, legislative, and national trends.

DEP's primary functions in the areas of Solid Waste Management, Air and Water Pollution Abatement, and Oil Pollution Control are specific, single-purpose functions and involve the detection, control, prevention and licensing of specific environmental and health problems. Land-use Planning, Zoning and Development Review are broader, multiple-purpose legal and administrative functions.

The people of Maine have a fundamental interest in an effective program for the orderly development of the State, consistent with an effective program for the protection of the air and water. Both programs are monumental administrative tasks requiring specialized staff, equipment and decision-making bodies.

There is an interrelationship between these two programs to be sure, as there is an interrelationship between all the programs in State Government. The maintenance of the integrity of these programs and their interrelationships and the avoidance of duplication of effort is the role of the State Planning Office (i.e., overall program planning and coordination), and is not accomplished by fragmentation.

From a Federal perspective the differences in these two programs are quite evident.

The functions of the U.S. Environmental Protection Agency, which is the primary source of DEP's monies and program direction, are: air pollution, water pollution, solid waste management, pesticides, radiation, and noise control. (A copy of the programs of the U.S. Environmental Protection Agency, is attached as Appendix R.)

The administration's proposed Land Use Policy and Planning Assistance Act of 1973, presently before Congress and anticipated to be passed this session, will be the primary source of monies and direction for state-level Land Use Planning and Regulatory Programs.

This Act, to be administered by the U.S. Department of Interior, requires that each state: (1) set up a state-level Land Use Planning and Regulation Agency; (2) develop a program and process, focusing on the planning and regulation of area of critical environmental concern (i.e., wetlands, flood plains, shorelands, areas of unstable soils, significant agricultural and forest lands, scenic and historic sites, etc.); areas impacted by key facilities (i.e., major airports, highway interchanges, transmission lines, major recreational lands and facilities, etc.), and large scale development areas (i.e., major subdivisions, second home and four season recreational developments, industrial parks, etc.); and (3) develop a state administrative review process with power to approve or disapprove development proposals in such areas. (A copy of the administration's proposed Land Use Policy and Planning Assistance Act of 1972 and accompanying papers, is attached as Appendix S.)

In light of the federal activity in the areas of Land Use Planning and Regulation, the appropriate handling of LURC in the reorganization of State Government becomes increasingly urgent and imperative. Consequently, the LURC staff prepared a position paper on the matter in December 1972. (A copy of this position paper entitled "Reorganization of State Government: Establishment of a State Land Use Agency--Reasons For, primarily from a National Perspective," is attached as Appendix T.)

With regard to the issue that the legislature should be required to review and adopt LURC's zoning regulations, zoning maps and comprehensive land use plan, I feel that this also could create more problems than it purportedly seeks to solve.

Zoning regulations and the related zoning maps are by legal design flexible and are subject to constant revision and amendment over time. The preparation and maintenance of a Comprehensive Land-use Plan is likewise a flexible process of continual updating, resulting from new information generated from ongoing studies and research, or from changes in public policy, economics and/or technology.

In my opinion it is neither necessary nor desirable to require that each amendment to LURC's zoning regulations, zoning maps, and each revision of LURC's Comprehensive Land Use Plan be adopted by the Legislature, which meets only periodically, nor to subject them to legislative debate and the length of a legislative session before they could be adopted or implemented.

I feel that the necessary checks and balances on LURC's authority already exist in its statute because (1) the Legislature specifies and can revise the statutory standards or guidelines by which LURC's zoning regulations and zoning maps are prepared, amended and maintained; and (2) the provisions which exist in the LURC Law for preparation and maintenance of the Comprehensive Land Use Plan require extensive input from agencies other than LURC and from the public, and finally by the Governor.

I am not sure why DEP's water and air standards can only be set by the Legislature--whether this is due to political reasons, habit or because of some federal requirements. It is conceivable that DEP could be delegated such authority, if specific statutory guidelines and procedures were established by the Legislature, as are many of DEP's other rule-making and regulation adopting powers, such as in the area of solid waste, and oil terminal licenses. On at least one occasion, DEP has requested of the Legislature, the authority to adopt and amend the State's air and water standards.

SUMMARY

LURC was scheduled under reorganization to be part of DEP. The fact that it is not is due to (1) DEP's unwillingness to accept LURC's proposal as to how LURC would fit in the department's organizational structure, and (2) the Joint Select Special Committee of the Legislature on Governmental Reorganization's failure to resolve this dilemma either by negotiation or by mandate.

Wherever LURC is placed--in DEP, in a Department of Conservation or in a Department of Land Use, which I have proposed, or even if LURC is left alone--the problem of the citizen having to secure review and approval from several different agencies will continue, unless certain similar laws and programs such as the Site Location Law, the LURC Law, the Shoreland Zoning Law, the Wetland Control Law, the Great Ponds Act, etc., are combined into one administrative system.

The functions of State-level land use planning, zoning and their enforcement are an integrated legal and administrative process, the fragmentation of which makes very little sense and would create more problems than it purportedly seeks to solve.

Finally, as this memo and attached appendices exhibit, I have spent literally several hundred hours reviewing the works of people knowledgeable in the fields of Land Use Law, Land Use Planning, Public Administration, Government, and Political Science. I am convinced that my position, with regard to Planning, Zoning and Land Use Review being an integrated process and warranting the establishment of a separate Department of Land Use, is correct, and would be in the long run in the best interests of the people, economy and the environment of the State.

There can be no doubt at this point in the State's history that a great need exists for land use controls that are realistic, consistent and fair.

Land Use planning and zoning practices should be placed on as high a scientific and professional level as possible. Considering the huge investments that taxpayers have in their community (state), and the continual financial demands for keeping these investments viable, it seems that stern measures are necessary.

With updated and integrated planning and zoning procedures, everyone concerned would benefit. Elected officials and bureaucrats will get off the hook, land speculation should sharply decrease, land developers and planners alike should enjoy greater flexibility of approach, and taxpayer subsidy of uneconomically developed land with its inherent environmental problems should diminish.

I am fully aware that some will disagree with my findings--some will disagree strongly, some will say they are politically unfeasible at this time--so be it. I would only ask if we do not do it now, if we do not act to establish a rational land use policy and program, who will do it, and when?

A list of 8 possible alternatuve courses of action open to those who will decide this matter, is attached as Appendix U.

APPENDICES

APPENDICES

Appendix A	A copy of a document entitled "W. S. Brownell, Reorganization-DEP & LURC, Donaldson Koons, Colby College" dated 2/1/73.
Appendix B	A copy of LD 1831, "An Act to Create a Department of Environmental Protection.
Appendix C	A chronological history of LURC.
Appendix D	A comparison of the LURC and the Site Location Law's criteria for approval and types of land-use requiring approval.
Appendix E	A copy of correspondence and minutes of LURC meeting relating to EIC-LURC meeting on April 14, 1971.
Appendix F	A copy of a memo from M. T. Healy to the Joint Committee on Governmental Reorganization dated 11/1/71.
Appendix G	A copy of a position paper entitled "Reorganization and the Opportunity for Comprehensive Land Use Planning" dated 11/71.
Appendix H	A copy of a position paper entitled "Reorganization Of State Government - the Function of State-Level Land Use Planning and Regulations: A discussion of alternatives", dated 11/30/71.
Appendix I	A copy of a letter to Senator Johnson, Chairman, Joint Committee on Reorganization from Senator Elmer Violette, Chairman, LURC dated 12/1/71.
Appendix J	A copy of LURC's proposed organizational structure of DEP in the form of a memo to Senator Elmer Violette, Chairman, LURC from James S. Haskell, Jr., Executive Director, LURC dated 12/22/71.
Appendix K	A copy of a position paper entitled "An Alternative Organizational Structuring of the Proposed Department of Environmental Protection", dated 1/4/72
Appendix L	A copy of EIC's proposed organization of the Department of Environmental Protection, dated 12/21/71.
Appendix M	A copy of a letter to Senator Johnson, Chairman, Joint Committee on Governmental Reogranization from Senator Elmer Violette, Chairman, LURC, dated 2/9/72.
Appendix N	An interdepartmental memo of understanding from John L. Martin, Chairman, LURC, to W. R. Adams, Commissioner of DEP and reply dated 8/16/72

Appendix O	A copy of the list of LURC review agencies and the review form letter.
Appendix P	A copy of a research paper entitled "LURC as an Integrated Planning, Zoning and Land Use Review Process" dated 3/73.
Appendix Q	A copy of T.5, MRSA C. 311, the "Maine State Planning Act".
Appendix R	A copy of the programs of the U.S. Environmental Protection Agency
Appendix S	A copy of the proposed Land Use Policy and Planning Assistance Act of 1972 and related pages
Appendix T	A copy of a position paper entitled "Reorganization of State Government: Establishment of a State Land Use Agency--Reasons for, primarily from a National Perspective," dated 12/20/72.
Appendix U	A list of 8 alternative courses of action open to those who will decide how and where LURC will be placed in the reorganization of State Government.

APPENDIX A

A copy of a document entitled "W. S. Brownell, Reorganization-DEP & LURC, Donaldson Koons, Colby College" dated 2/1/73.

W.S. Brownell
Reorganization - D.E.P & L.U.R.C.
Donaldson Koons Colby College
2/1/73

When the Land Use Regulation Commission Law was drafted there was intentionally included in the legislation duplicitous language of the Department of Environmental Protection Law. This was done with the intent that LURC and the DEP wpuld shortly thereafter be combined into one operation - the functions of LURC being incorporated into DEP - thus making the duplicate authority of the two agencies relatively insignificant. Subsequently there has been no reorganization of the two agencies.

There are several instances where the duplicate authority could be of some consequence. Section 685-A (3) - District Land Use Guidance Standards - of the LURC Law gives LURC the authority to prepare standards for and restraints upon the use of air and waters in the various districts. The DEP, though, is charged with the responsibility of recommending classifications of the state's waters to the Legislature, granting waste discharge licenses, and of enforcing compliance of the standards for all waters (Title 38 Sections 361, 363-365, 413-415, 451) and air (Title 38 Sections 361, 460-463, 581-597) in the state - regardless if in unorganized territories or not. Although this duplication may presently be considered harmless since LURC has not choosen to establish its own standards of air and water use,

that agency does have the authority to do so and the possibility that there may be two dissimilar sets of criteria in this regard does certainly exist. Furthermore, the criteria for approval of a proposed development under Section 685-B (4) of the LURC Law are identical to the criteria established in the Site Location of Development Law (Title 38 Section 484) in which the DEP has the authority to grant or refuse to grant permission to construct a development. While the LURC Law recognizes this duplicity (approval by the DEP of a develpoment being prima facie evidence of compliance with LURC's standards) there may be instances where a developer must receive approval by both the DEP and LURC. The issue thus becomes a question as to whom are the property owners and developers responsible. How many standards and sets of criteria have to be satisfied before a property owner may make use of his land in accordance with the policy of the State?

Again, Section 685-A (3) D which gives to LURC the authority to advise and assist the State Highway Commission with regard to land, air, and water traffic movement should possibly be a responsibility of the newly created Department of Transportation (Title 23 Sections 4201 - 4206). This is also a matter in which the DEP has authority , i.e. traffic movement under the Site Location of Development Law. There are also instances where LURC's authority and the standards that it establishes parallel guidelines and regulations of other governmental agencies such as the Department of Forestry and the Department of Agriculture.

Unlike the DEP, LURC, because the planned reorganization

with DEP never took place, has developed the inherent power to establish and enforce its own standards and not be responsible to the Legislature or the State Planning Office. The DEP, on the other hand, recommends the standards of classifications, etc. to the Legislature and that body in fact authorizes the ~~regulations~~ standards. Koons was particularly disturbed with the fact that LURC has proposed, approved, and enforced its own standards without being responsible to another body (Legislature). It is his belief that unless LURC is checked in this regard its potential for increased uncontrolled power will reach the point where LURC may come to represent a threat to the existing significance that the DEP represents throughout the state. Koons also feels that there is presently a certain degree of compatibility between the property owners (be them private persons or industrial developers) and the environmental interests of the state and that harmony is threatened with the realization that LURC could possibly abuse its authority.

It is interesting to note Koons' observations that there has been little opposition to the establishment of standards with regard to the air and waters of the State. The use of the waters and air of the State has always been recognized as a public right and the state indeed has an interest in preserving and regulating the uses of its natural resources. Restrictive regulations imposed by the legislature at times under certain circumstances has met with approval when the intent is to protect the resources that are public in nature. These are the designs of the DEP.

Yet the objects of regulation and control of the LURC are not necessarily public in nature. As a matter of fact,

according to Koons, 98% of the wildlands of the state is privately owned. If there are restrictive standards imposed on the use of such lands LURC could in fact infringe on private property rights. Although such controls by LURC may still be legitimate extentions of the state's police power it should be recognized that the arena of state control is indeed a unique one - one that must be entered with reasonable regulations and responsible and controlled leadership.

Koons would like to see reorganization of LURC in such a manner that would incorporate LURC into DEP. As such, there would be established a Land Bureau of DEP similar to the already existing Air and Water subagencies of DEP. The primary planning responsibility for development in the state would be with the State Planning Office which would assign the task of enforcement of the development standards to the Land Bureau of the DEP - similar to the air and water standards/enforcement authority which the DEP now has. Some of the responsibility for enforcing regulations of development practices already exist within the DEP with reference to the Site Location Law. The State Planning Office could also assign to other various State agencies the responsibility of recommending standards to the Legislature which would be of direct concern to those departments. After legislative adoption of such standards the enforcement would be a duty of the DEP or the appropriate department.

APPENDIX B

A copy of LD 1831, "An Act to Create a Department of Environmental Protection.

CHAPTER 489 — PUBLIC LAW

S. P. 638 — L. D. 1831

AN ACT to Create the Department of Environmental Protection.

Be it enacted by the People of the State of Maine, as follows:

Sec. 1. R. S., T. 12, Part 7, additional. Title 12 of the Revised Statutes is amended by adding a new Part 7, to read as follows:

PART 7

ENVIRONMENTAL PROTECTION

CHAPTER 425

ENVIRONMENTAL PROTECTION

§ 5001. Department; commissioner

There is created and established a Department of Environmental Protection, hereinafter called "the department", to protect and improve the quality of our natural environment and the resources which constitute it, and to improve the public's opportunity to enjoy and exist healthily in the environment, by controlling the man-made despoliation of our resources and directing growth and development along planned lines which will preserve for all time an ecologically sound and aesthetically pleasing balance of naturally occurring resources, to consist of a Commissioner of Environmental Protection appointed by the Governor with the advice and consent of the Council to serve at the pleasure of the Governor and Council, and the following as heretofore created and established: The Environmental Improvement Commission, the Board of Pesticides Control, the Wetlands Control Board, the Maine Mining Commission, the Maine Land Use Regulation Commission, the Pest Control Compact Administrator, the Board of Certification of Water Treatment Plant Operators, the New England Interstate Water Pollution Control Commission, and the Division of Sanitary Engineering of the Department of Health and Welfare.

Sec. 2. Organization. The Joint Select Special Committee of the Legislature on Governmental Reorganization, with the assistance of the commissioner, shall prepare a plan of organization of the department into such bureaus, divisions and sections as may be necessary to carry out efficiently the work of the department. The committee, with the assistance of the commissioner, shall prepare legislation to be presented to a special session of the 105th Legislature to amend, repeal and rearrange statutes to reflect this department's powers, responsibilities and organization.

Directors of bureaus shall be appointed by the Governor, with the advice and consent of the Council, to serve at the pleasure of the Governor and Council.

The commissioner shall prepare a budget for the department in accordance with the Revised Statutes, Title 5, chapter 149.

The commissioner and the Joint Select Special Committee of the Legislature on Governmental Reorganization may recommend the legislation for the transfer from or to another state department such functions as would appear to properly belong to the other department or to his department. The commissioner shall have no powers or duties relative to the proposed department except those listed in this section.

Sec. 3. Effective date. This Act shall become effective 91 days after adjournment of the Legislature.

APPENDIX C

A chronoligical history of LURC.

CHRONOLOGICAL HISTOR OF

LURC

1967	A bill (L.D. 1260) was introduced to the 103rd session of the Legislature to create the Wildland Use Regulation Commission. Following indefinite postponement, the 103rd directed the Legislative Research Committee to study the matter and report back to the 104th Session.
1969	The Legislative Research Committee reported to the 104th session of the Legislature (LRC 104-1) and following a compromise between a so-called industry bill (LD 1372), LD 1566 was passed and signed into law, which set up the original Land Use Regulation Commission.
Dec. 1969	The Governor posted and the Executive Council confirmed the original seven LURC Commissioners.
Oct. 1970	The LURC Commissioners selected and hired its Executive Director. The Executive Director assumed his duties in late November and hired the secretary authorized in LURC's annual budget of approximately $30,000.
1971	LURC submitted a substantial revision of its statute (LD 1503, which was renumbered as LD 1788) to the 105th session of the Legislature and a request for four additional positions and a supplement of approximately $60,000 to its annual budget. Both requests were approved by the 105th and signed into Law.
Sept. 1971	LURC moved into current office space at 35 Capitol Street.
Dec. 1971	LURC completed the interviewing and hiring of the four additional staff members authorized by the 105th.
1972	LURC submitted minor amendments to its statute to the special session of the 105th Legislature.
July 1972	LURC held its first major public hearing on its proposed Standards for Interim District Boundaries and Permitted Uses
October 1972	LURC adopted the proposed Interim Standards
November 1972	LURC held its public hearing on the application of the Interim Standards to the Interim Land Use Maps for 22 Townships in the Upper Kennebec River Basin
March 1973	LURC adopted the Interim Land Use Maps for 22 townships in the Upper Kennebec River Basin

APPENDIX D

A comparison of the LURC and the Site Location Law's criteria for approval and types of land-use requiring approval.

A COMPARISON OF THE LURC AND THE SITE LOCATION LAW'S CRITERIA FOR APPROVAL AND TYPES OF LAND USES REQUIRING APPROVAL

LURC

Criteria for Approval:

1. Adequate technical and financial provision has been made for meeting the State's air and water pollution control standards, for solid waste disposal, for controlling of offensive odors and for the securing and maintenance of sufficient healthful water supplies, and

2. Adequate provision has been made for loading, parking and circulation of land, air and water traffic, in, on and from the Site, and for assurance that the proposal will not cause congestion or unsafe congestion or unsafe conditions with respect to existing or proposed transportation arteries or methods, and

3. Adequate provision has been made for fitting the proposal harmoniously into the existing natural environment to assure there will be no undue adverse effect on existing uses, scenic character, natural and historic resources or adjoining property values, and

4. Uses of topography, soils and subsoils meet standards of the current soil suitability guide for land use planning in Maine, or which are adaptable to the proposed use pursuant to said guide and will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water, and

5. That the proposal is in conformance with the duly adopted interim or permanent district land use guidance standards.

6. That the public's health, safety, and general welfare will be adequately protected.

SITE LOCATION

1. Financial capacity. The developer has the financial capacity and technical ability to meet air and water pollution control standards, and has made adequate provision for solid waste disposal, the control of offensive odors, and the securing and maintenance of sufficient and healthful water supplies.

2. Traffic movement. The developer has made adequate provision for traffic movement of all types out of or into the development area.

3. No adverse effect on the natural environment. The developer has made adequate provision for fitting the development harmoniously into the existing natura environment and that the development will not adversely affect existing uses, scenic character, or natural resources in the municipality or in neighboring municipalities.

4. Soil types. The proposed development will be built on soil types which are suitable to the nature of the undertaking.

Approval Required for:

1. All buildings

2. Subdivisions--3 or more lots of less than 40 acres each within five year period.

3. All developments

1. Building covering 60,000 square feet of ground area.

2. Subdivisions--5 or more lots, of which at least one is less than 10 acres, within 5 year period, if more than 20 acres is to be offered for sale or lease.

3. Developments occupying more than 20 acres or which require a license from DEP or which involve drilling or excavating, except for gravel pits less than 5 acres.

APPENDIX E

A copy of correspondence and minutes of LURC meeting relating to EIC-LURC meeting on April 14, 1971.

April 1, 1971

Subject: Meeting with Members of Land Use Regulation Commission

Dear Dr. Koons:

Senator Violette has asked me to arrange a meeting with you, Bill Adams and possibly Orlando, to discuss linkage and the coordination of our functions and responsibilities.

The Senator would like, if at all possible, to have this meeting prior to the public hearing on our proposed legislative amendments (L.D. 1503). We do not have an exact date on the hearing as yet, but expect that it will be posted for some time in the next two weeks.

Any consideration you may be able to grant us in this matter will be greatly appreciated. Please advise.

Sincerely yours,

James S. Mackell, Jr.
Executive Director

JSM/s
Cc: Senator Violette
William Adams
Orlando Delogu

Dr. Donaldson Koons
Geology Department
Colby College
Waterville, Maine 04901

MINUTES OF MEETING

LAND USE REGULATION COMMISSION

MEETING OF: April 22, 1971

In attendance were:

Senator Elmer H. Violette, Chairman
Lawrence Stuart, Commissioner
John McKee, Commissioner
Philip Savage, Commissioner
James Haskell, Jr., Executive Director
E. Stephen Murray, Asst. Attorney General

The meeting was called to order by the Chairman; the minutes of the last meeting (3-16-71) were read and accepted.

The Executive Director reported on his activities since the last meeting including:

1. Attended Lakes Conference at University of Maine in Bangor and moderated a panel on land-use problems (3-24-71)

2. Attended a meeting of the Northern Kennebec Regional Planning Commissioners in Waterville and spoke on the Land Use Regulation Commission and its efforts (3-31-71)

3. Attended several working sessions on a coordinated land-use planning manual with EIC and Division of Sanitary Engineering (3-19-71) (4-12-71) (4-21-71)

4. Attended Legislative Committee Hearing on L.D. 1459 "An Act to Create a Department of Environmental Protection" and spoke in favor of the bill (4-13-71)

5. Attended luncheon discussion with Chairman Violette, Commissioner Savage, Dr. Koons and William Adams to discuss integrating the Commission's efforts with EIC (4-14-71)

6. Met with students from University of Maine Forestry School and discussed the Commission, its efforts and wildland-use planning in general.

7. Attended Legislative Committee Hearing on L.D. 1440 "An Act Relating to the Department of Natural Resources" and spoke in favor of the bill (4-20-71)

A general discussion of the Commission's Part II Budget request followed. The Chairman expressed his concern that the prospects of an increase were not good.

The Executive Director discussed the base maps, scale, size, etc., which would be used in the inventory and analysis phase and for final district delineation.

A general discussion of L.D. 1294, An Act Organizing the Township of Carrabassett, followed. The Commissioners expressed their awareness and concern for the fact that we had entered in good faith into zoning the Valley at the request of the landowners . . . but were not informed of the intention to organize the township (and possibly other units in the Valley). It was decided that we should, temporarily, stand still on the project . . . do not expend time and money needlessly, until more is known about the situation ~~from Commissioner Hutchins~~. delete mc Ke It was also decided to wait until after another Commission meeting, before notifying the major landowners in writing, of the decision to stop work on the project.

There then was a general dicussion of the new amendments to the proposed legislation, particularly those amendments clarifying Land Use Regulation Commission's relationship to Environmental Improvement Commission, State Planning Office and State Highway Commission.

The Executive Director asked ... if it were possible to meet with the Legislative Committee on Natural Resources, prior to the hearing, to discuss the Commission's amendments. It was decided that such a meeting would be better held after the hearing.

It was agreed that the Executive Director would see to it that the Legislative Committee and Landowner Representatives would receive a copy of the proposed amendments ... prior to the public hearing.

A general discussion of the presentation to be made at the public hearing followed; and the meeting was adjourned. The date of the next meeting was left open.

Respectfully submitted,

James S Haskell Jr

James S. Haskell, Jr.
Executive Director

JSH/s

APPENDIX F

A copy of a memo from M. T. Healy to the Joint Committee on Governmental Reorganization dated 11/1/71.

STATE OF MAINE
JOINT SELECT SPECIAL COMMITTEE
ON GOVERNMENTAL REORGANIZATION
STATE HOUSE
AUGUSTA, MAINE 04330

SENATOR HARVEY JOHNSON
CHAIRMAN
REPRESENTATIVE LOUIS J. MARSTALLER
VICE CHAIRMAN
REPRESENTATIVE KATHLEEN W. GOODWIN
SECRETARY

SENATORS
KENNETH P. MacLEOD
EX OFFICIO
WILLIAM H. CLIFFORD, JR.
J. HOLLIS WYMAN

REPRESENTATIVES
DAVID J. KENNEDY
EX OFFICIO
DAVID W. BUSTIN
LEIGHTON COONEY
HENRY W. HODGDON
STANLEY F. SHAW
HAROLD L. SILVERMAN

STAFF
SAMUEL A. HINDS
SPECIAL RESEARCH ASSISTANT
MICHAEL T. HEALY
LEGAL COUNSEL
HAZEL L. DAVIS
CLERK

November 1, 1971

M E M O R A N D U M

To: All Members of the Joint Standing Committee on Governmental Reorganization

From: Michael T. Healy

Re: Department of Environmental Protection

Up to this point, the Committee has been considering two (2) proposals in regard to the Department of Environmental Protection. The first is that of William Adams, Director of the present Commission, which basically is as follows: the present Environmental Improvement Commission, Board of Pesticides Control, New England Interstate Water Pollution and Control Commission, Wetlands Control Board, Mining Commission and Land Use Regulation Commission would all be abolished. They would be replaced by a Board of Environmental Licensing. This board would have its own chairman, and the Department would be responsible for administering all the laws presently administered by

these commissions. In Mr. Adams' proposal, those licenses which are presently required under State law would be granted after hearing by the board. The board would also promulgate any rules and regulations pursuant to the authority delegated to the board by the Legislature. The commissioner of the Department would be responsible for all administration, recommendations of policy changes to the Governor and Legislature; negotiate and legally bind the State of Maine on environmental matters with other governmental agencies, and bring legal actions for alleged violations.

The second proposal, presented by Dr. Koons, is basically as follows: he would recommend the abolishment of all the existing boards and commissions. In place of the boards and commissions, would be formed one new Environmental Improvement Commission, the composition to be as recommended by Mr. Adams. He also recommends that the chairman of the commission and the chairman of the Department be the same person. There are some differences in their approaches, in that Dr. Koons speaking on behalf of the commission, indicated that the commission should retain full control over the Department. Not only would the commission be granting the licenses, but also would make decisions on the initiation of enforcement actions; would authorize the commissioner to negotiate with other governmental agencies and specify the

terms of the agreements, and would delegate to the commissioner his specific duties.

I have been requested by the Committee to come up with an alternative proposal to the two that have been presented so far. The following is a suggested alternative: (1) retain the present Environmental Improvement Commission; (2) transfer to it the duties of the Wetlands Control Board, the New England Interstate Water Pollution Control Commission and the Mining Commission; (3) adopt Dr. Koons' recommendation that the commissioner of the Department of Environmental Protection also be the chairman of the Environmental Improvement Commission. The present Environmental Improvement Commission would have the power to exercise the authority delegated to these three boards. The Board of Pesticides Control and the Land Use Regulation Commission would be retained, but included in the Department of Environmental Protection for administrative purposes in the same manner as the boards and commissions which have been incorporated into the Department of Agriculture and the Department of Business Regulation. In other words, allow this board and this commission to carry out their discretionary statutory function of regulating pesticides and zoning the wildlands with administrative control placed in the Department of Environmental Protection under the direction of the commissioner. The commis-

sioner would be responsible for hiring the persons necessary for this board and this commission to carry out its duties, subject to the Personnel Law. He would also have the responsibility for preparing the budget and making sure that the personnel within the Department are not performing unnecessary duplication of work. Dr. Koons and Mr. Adams undoubtedly would oppose this proposal on the grounds that there should be one commission to carry out all the duties and to operate the Department. It seems to me that if the other boards and commissions which the Committee is recommending be included in the Department of Agriculture and the Department of Business Regulation and presumably will be properly administered by the respective commissioners of those two departments, then the commissioner of Environmental Protection can effectively administer his Department with this type of an arrangement. It should be noted that the board and commission which will remain and be part of the Department are two very specialized areas. The Board of Pesticides Control has extremely important decisions requiring unique expertise to make which not only affects many of the citizens of the State, but also affects other State departments a great deal. In regard to the Land Use Regulation Commission, this commission's primary responsibility is going to be the zoning of the wildlands. The sheer magnitude of

this job is self-evident. It would seem that there is a real question as to whether the Environmental Improvement Commission can handle the regulation of water quality, air quality, site selection, oil pollution, plus the other duties which they are going to be given, and at the same time carry out this monumental task.

One of the many complaints now made about the existing framework of environmental laws is that applicants must apply to two or three different boards or commissions before they receive a final decision on their project. Under this recommendation, it would seem that it would be a rather simple matter for the commissioner of the Department to formulate one application which would go to his Department to cover any and all needed water, air, site selection and filling (Wetland) licenses that would be necessary to obtain from the State. Also if the Division of Sanitary Engineering of the Health and Welfare Department is moved into the Department of Environmental Protection the matters that come before them could also be included in this one single application. As far as I can tell, the only area in which a person would have to file two licenses and receive the approval of two commissions would be in the case of a wildland owner who would require a water, air, site selection license in addition to

any approval that the Land Use Regulation Commission would have to grant. There also could be some duplication between the Environmental Improvement Commission and the Land Use Regulation Commission in regard to approval of municipal zoning ordinances which by 1973 are going to have to zone within 250 feet of all navigable waters. However, it seems to me that this problem could somehow be straightened out.

APPENDIX G

A copy of a position paper entitled
"Reorganization and the Opportunity for
Comprehensive Land Use Planning" dated 11/71.

11-71
STAFF DRAFT

POSITION PAPER:

Reorganization and the Opportunity
for Comprehensive Land Use Planning

Position: It is proposed that a cabinet-level agency be established, during the reorganization of State Government, which would be responsible for coordination of all planning in Maine as it affects land use.

The Need: Maine, like other states, is now struggling to resolve the constant conflicts that arise between development pressures and the impact each development has on the State's limited natural resources. Currently, in fact, Maine is a forerunner in its recognition of and efforts to meet the needs of resource conservation.

But those needs persist. Some are being resolved, in part, by the recent planning efforts of many single-purpose state agencies, and as a result of milestone legislation attacking problems of existing resource destruction.

Only in Maine's wildlands, however, is truly comprehensive land-use planning and regulation authorized by statute. The Maine Land Use Regulation Commission, operating in the unorganized and deorganized townships and all plantations, is required to develop land-use policy that will coordinate ecological, environmental, esthetic, economic and social needs.

The Urgency: Maine lies, unique and vulnerable, between the burgeoning Megalopolis to the South and the most populous of the Canadian provinces to the North and East. The crushing impact of demand from these outside forces on the natural resources of the State is reflected in the annual record-breaking increases in tourism and in spiraling costs of real estate. Maine must assess the future significance of this impact and make long-range plans to safeguard its resources and its people. The

cost of non-planning along Maine's coast--in terms of environmental impact and irreversible decisions--is testimony that such planning is already overdue.

The mood of Congress, too, should encourage Maine to hurry, for it is apparent federal sanctions will eventually be brought to bear on states which fail to embrace all-encompassing land use planning. A bill (S. 3354) to create a "National Land Use Policy Act," submitted to the 91st Congress by Senator Jackson of Washington State, illustrates the direction in which Congress appears to be moving. As submitted, the bill allowed states five years to prepare and implement land use plans, and provided funding to subsidize such planning; thereafter, those who failed to comply would be penalized by cuts of 20 percent per year in all federal grants affecting land use for each year of violation. As reported out of committee, S. 3354 requires total suspension of federal funding for "projects and proposals for projects" affecting land in states which have failed to comply. That bill was released from committee too late for action by the 91st Congress; it was recently resubmitted to the 92nd Congress as S. 2554.

Some Opportunities: The opportunities inherent in early creation of a cabinet-level agency for coordination of all planning in Maine as it affects land use are readily apparent. First, such an agency could be a clearinghouse, applying interpretive land-use policy to the thousands of unrelated decisions being made by single purpose agencies, by local governments, and by private developers without regard for each other or for regional, state and national concerns.

Secondly, by assessing future demands and employing long-range planning, such an agency could channel future pressures into constructive development that would ensure conservation and renewal of Maine's resources.

A third advantage to creation of the proposed agency at this time would be the lead gained over other states in meeting eligibility requirements for federal planning funds should S. 2554 or a similar bill become law.

Some Considerations: In retrospect, Legislative action attempting to deal with problems of land-use appears to have been hampered by the very sequence in which that action occurred.

Until the regular session of the 105th Legislature, for instance, the Land Use Regulation Commission existed in name only. It is interesting to speculate how authority for enforcement of the 1970 Site Selection Law might have been assigned had a stronger MLURC existed then. Would responsibility for this essentially land use control legislation have been divided, as it is currently, among three agencies (EIC, MLURC, State Planning Office), or would it have been assigned to the one most concerned with such activity? Similarly, might the Shoreland Zoning Act, passed earlier by the 105th, have had one enforcement agency instead of two?

Moreover, in light of the powers it ultimately granted the MLURC, it seems unfortunate that the 105th Legislature was involved simultaneously with the issue of reorganization. Just four working days after creating that hallmark authority, with little time to reflect on the significance

of the agency it had fashioned, the Legislature consigned it to be dismantled and dispersed within a new single-purpose agency.

For the Department of Environmental Protection is, by its proposed structure, as wholly committed to the single purpose of statewide waste management and control as the new departments of Agriculture, Natural Resources and Transportation are committed to their respective areas of specialty. In terms of paralleling the agency from which the bulk of DEP's federal monies will derive, the structure is as it should be. The newly formed U.S. Environmental Protection Agency has as its objectives the control of pollution in air and water, solid waste management, pesticide control, radiation control, and ecological research. There is a difference, from the federal point of view, between these enforcement activities and long-range, comprehensive land-use planning functions such as prescribed by the Jackson bill.

The Method: Precedence now exists, in Maine, for creation of the proposed agency. The Maine Land Use Regulation Commission, through the authority with which it was empowered by the 105th Legislature, now has the described clearinghouse and long-range planning responsibility for all wildlands--roughly 50 percent of the State. To carry out its duties the Commission has formed a nucleus staff with a broad range of research, planning, land management, engineering, forestry and public information experience.

The tools are at hand, at this time of reorganization, to create a new, cabinet-level agency to carry out the much-needed comprehensive land-use planning described. The framework for such an agency can be

fashioned, moreover, from a realignment of existing legislation.

By creating a new cabinet-level agency and transferring the Maine Land Use Regulation Commission to it, the Legislature will ensure that one-half of the State remains protected by comprehensive land-use planning and regulation. Another approximately 25 percent of the State can be protected by assigning the new agency sole responsibility for the powers now vested in the Shoreland Zoning Act, Great Ponds Act, Wetlands Control Board and Maine Mining Commission. Further, transferring the Site Location Division of the current Environmental Improvement Commission to the proposed agency will protect against major damage to natural resources anywhere in Maine. With most of the State thus protected by long-range planning and clearinghouse coordination, it would remain only for this or some future Legislature to include incorporated areas in the Agency's protection umbrella for Maine to qualify for the anticipated federal approval and assistance.

Some Advantages of This Plan: The recipients of the greatest benefits to arise from this plan will be the residents of Maine and their descendents. For the resources of the State ultimately belong to them, and it is upon the continued use and renewal of those resources that their livelihood and very lives depend.

Advantages will accrue in the operation and efficiency of State government as well; in the elimination of duplication of effort among agencies, in the more orderly use of resources, and in the savings to the State in averted pollution and its related high costs.

The proposed Department of Environmental Protection will benefit directly if this plan is brought to fruition, for it will be spared

having its major function diluted. Most of the agencies scheduled for inclusion in that department have developed highly skilled and specialized staffs; their skills can best be used in detecting and correcting waste management shortcomings. Without the burden of comprehensive land-use planning and regulation, the DEP will be better able to fulfill its detection/enforcement role.

Similarly, the State Planning Office will benefit from the proposed arrangement. Tasked by statute to prepare the "Maine Comprehensive Plan," but limited in staff and budget, the Planning Office relies upon other state agencies for preparation of major segments of that plan: for example, the Park and Recreation Commission's "Comprehensive Outdoor Recreation Plan," the Environmental Improvement Commission's "Comprehensive (pollution abatement) River Basin Plan," and the combined "Comprehensive Fish, Wildlife and Marine Resources Plan" of the Departments of Inland Fish and Game and Sea and Shore Fisheries. Creation of a cabinet-level agency for land-use planning and regulation would ensure preparation of another vital segment of the Maine Comprehensive Plan, thus bringing the Planning Office one step closer to completion of its Herculean task.

Summary: It is urged that, as a result of events which have taken place since the Legislature's decision to reorganize state government, a cabinet-level agency be established which would be responsible for coordination of all planning in Maine as it affects land use.

Further, it is recommended that the authorities established in the Maine Land Use Regulation Commission, Shoreland Zoning, Great Ponds,

Wetlands Control Board, Maine Mining Commission, and Site Location Acts be combined and transferred to the proposed land-use planning and regulation agency.

Through the action outlined above, the Legislature would ensure the orderly use, conservation and renewal of limited resources in more than three-fourths of the State. It would establish the framework by which Maine could qualify early for approval under anticipated federal regulation and assistance.

Ultimately, the establishment of the agency proposed will ensure for all time the continued use and renewal of Maine's natural resources in the best interest of the people of Maine and their descendents.

PROPOSED
DEPARTMENT OF LAND USE

STATUTES INCLUDED

LAND USE REGULATION ACT
TITLE 12, CHAPTER 206-A

GREAT PONDS ACT
TITLE 12, CHAPTER 201

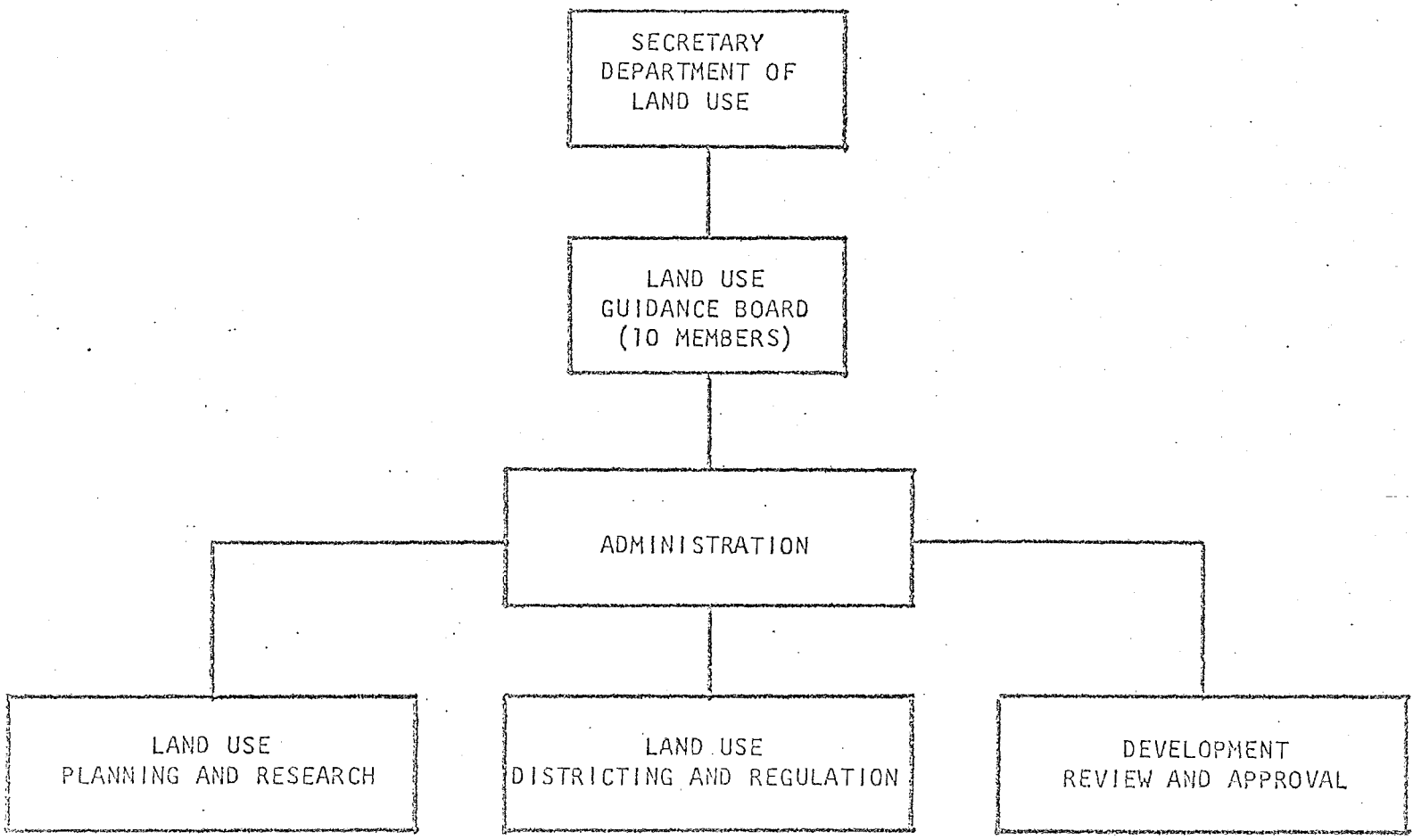
WETLANDS CONTROL ACT
TITLE 12, CHAPTER 421

SHORELAND ZONING ACT
TITLE 12, CHAPTER 42A

MAINE MINING ACT
TITLE 10, CHAPTER 401

SITE LOCATION OF DEVELOPMENT ACT
TITLE 38, CHAPTER 3

Attachment 1



Attachment 2

APPENDIX H

A copy of a position paper entitled "Reorganization of State Government - the Function of State-Level Land Use Planning and Regulations: A discussion of alternatives", dated 11/30/71.

REORGANIZATION OF STATE GOVERNMENT - THE FUNCTION OF STATE LEVEL LAND USE PLANNING AND REGULATION: A DISCUSSION OF ALTERNATIVES

by:
James S. Haskell, Executive Director
Maine Land Use Regulation Commission

PURPOSE

Since the strengthening of the Land Use Regulation Commission (LURC) and the passage of the Shoreland Zoning Act, by the 105th Legislature ....many individuals and groups including landowners, conservationists, planners, legislators as well as LURC Commissioners....have grown increasingly concerned....as to how these new functions of comprehensive state-level land use planning and regulation will be placed and/or affected by the reorganization of state government.

If the intent of the Legislature and the people of Maine....to have effective land use planning and regulation for the unincorporated areas and shorelands of the State is to be effectively carried out ....then careful consideration must be given to these functions in reorganization decisions.

The purpose of this paper is to examine the evolution of these functions and their proposed placement in the Department of Environmental Protection....and to offer constructive alternatives, where appropriate....to those who will be making reorganization decisions.

PERSPECTIVE

While the legislation for reorganization was being researched and drafted....and prior to the enactment of these proposals by the regular session of the 105th....LURC existed in name only and little was known about the Shoreland Zoning Act.

Given the facts that LURC had no staff, an inadequate budget and extremely limited enabling legislation....it was decided by those drafting the reorganization proposals, that LURC should be placed under the proposed Department of Environmental Protection.

Almost simultaneously with the passage of the legislation setting up the Department of Environmental Protection, the Legislature passed legislation....increasing the jurisdiction of LURC to include all of the State's unincorporated areas (approximately 50 percent of the State's total geographic area) and....substantially strengthening LURC, by delegating to it the following responsibilities:

1. The preparation and maintenance of a Comprehensive Land Use Guidance Plan for all lands and waters in the unincorporated areas;

2. The preparation and maintenance of Comprehensive Land and Water Use Regulations and Performance Standards;

3. The preparation and maintenance of Land Use Guidance Maps classifying and districting all lands and waters within its jurisdiction into Land Use Guidance Districts or Zones of similar and compatible uses;

4. The review and evaluation of all Recreational, Residential, Commercial and Industrial Development Proposals within its jurisdiction, including the quasi-judicial power of issuing and denying permits for all:

    a. Buildings and accessory structures;
    b. Subdivisions and leasing proposals;
    c. Planned unit developments; and
    d. Mineral extraction proposals.

In addition....during the same legislative session....LURC was given joint responsibility with the Environmental Improvement Commission (EIC) and the State Planning Office (SPO) for carrying out the new Statewide Shoreland Zoning Act.

Together....the stronger LURC Statute and the new Statewide Shoreland Zoning Act....require the placement of approximately 85 percent of the State's geographic area under mandatory land use regulation by 1973.

Additional area is somewhat regulated....by the existing Site Location Law....presently administered by the EIC. One of the problems with the Site Location Law, however,....is that it is administered reactively ....and on a situation by situation basis. Another is....that unlike LURC's development review and approval function....a similar function ....the Site Law is not related to....or guided by a Comprehensive Plan, nor by Comprehensive Land Use Regulations and Performance Standards.

The result of these problems .... is increased concern as to when and to what extent the Site Location Statute may be in jeopardy by attack ....through the courts.

In summary....an important issue to consider is: if LURC had existed in an effective form....would the following decisions have been made as they were:

1. To place the Site Location Law under EIC....rather than under an effective LURC?

2. To split the responsibility for Statewide Shoreland Zoning between EIC, LURC and SPO....rather than under an effective LURC?

3. To assimilate and fragment LURC's current functions....as proposed within the Department of Environmental Protection?

Strong arguments could and would have been made for ....integrating the functions of the Site Location Law and the Shoreland Zoning Law ....more closely with the functions of LURC. It would be not only the logical thing to do....but a necessary decision....if the intent was for an effective system and body of law....for State-Level Land Use Planning and Regulation.

Another important point of consideration is....the trend towards the establishment of integrated Statewide, State-Level Comprehensive Land Use Planning and Regulation Programs....by several states, including Vermont, Massachusetts, Illinois, Colorado, Montana, Washington, Wisconsin, Oregon, Hawaii, Minnesota, New Jersey....and by legislation currently before Congress....such as S. 2554, "The National Land Use Policy Act." When and how will the Maine Legislature address itself to this most important and long overdue issue: What effect will the decisions of reorganization now, have on these future decisions?

THE CURRENT PROPOSAL

It has been proposed....in the report on the Department of Environmental Protection....submitted to the Joint Select Special Committee of the Legislature on Governmental Reorganization, to:

1. Include within the proposed new department the following agencies:

   a. The Environmental Improvement Commission;
   b. The Board of Pesticide Control;
   c. The Wetlands Control Board;
   d. The Maine Mining Commission;
   e. The Maine Land Use Regulation Commission;
   f. The Solid Waste and Private Sewage Functions of the Division of Sanitary Engineering; and
   g. Several other, related functions.

2. To abolish all existing Commissions;

3. To assimilate all staff and related functions; and

4. To restructure these functions into the various proposed Bureaus, Divisions, and Sections of the new Department.

Most of LURC's newly assigned functions..are proposed to be placed along with the Site Location and Shoreland Zoning functions....in a so-called....Bureau of Land Pollution Control.

The LURC function of establishing and administering Land Use Guidance Districts, Regulations and Performance Standards are assigned to the Bureau's....Division of Land Quality Services.

The location of the LURC function of preparing and maintaining a Comprehensive Land Use Plan....essential to effective Land Use Regulation and Guidance....is not clear or explicit in the proposed structure of the new Department.

The LURC function of Enforcement....is assigned primarily to a separate division....the Division of Land Use Regulation, along with the function of Permit Application Review and Evaluation.

The quasi-judicial decision-making function....for the Bureau of Land Pollution Control, as well as for the other proposed bureaus....is assigned to a proposed, new....ten (10) member Board of Environmental Regulation and Licensing.

PROBLEMS

If Maine is to have an effective State-Level Comprehensive Land Use Planning and Regulation Program....consideration must be given to resolving the following problems inherent in the current proposal:

1. The current proposal lacks or fails to clearly and explicitly provide for....a Comprehensive Land Use Plan....upon which to base: the delineation of Land Use District Boundaries, the development and administration of Land Use Regulations, and to guide decisions to approve or deny specific Land Use Proposals.

   This is a significant problem and if not somehow resolved most likely would result in serious legal consequences.

2. The current proposal fragments or fails to clearly integrate.... the following important functions: the preparation and maintenance of a Comprehensive Land Use Plan, the development and administration of Land Use Regulation Guidelines and Standards, the Delineation of Land Use District Boundaries, the administration and adjudication (decision-making process) of Land Use Permits, and Program Enforcement.

   This....is contrary to the thinking and writings of most leaders in the fields of Land Use Planning and Land Use Law....and if not somehow resolved would most likely result in serious administrative problems....quite possibly even greater problems than now exist and which reorganization seeks to correct.

3. The current proposal includes and has grouped together dissimilar ....specific and single-purpose environmental functions....with broad and multiple-purpose environmental functions....under the assumption that they are all somehow related to the Environment. (What isn't?)

The functions of Pesticide Control, Liquid and Solid Waste Management, Water and Air Pollution Abatement and oil....are clearly single-purpose in nature and involve the control, licensing, abatement and improvement of specific Environmental and Health Problems....whereas the function of land use planning, zoning, regulation and development guidance are broader, long-range and multiple-purpose in nature.

Strong argument could and should be made that the following are specific and single-purpose environmental functions: pesticide control, liquid and solid waste, water and air pollution abatement, and oil terminal licensing....and that the following are broader, multiple-purpose environmental (Land Use) functions: land use planning, zoning, regulation, and development guidance.

4. The current proposal assumes that the proposed ten (10) member Board of Environmental Regulation and Licensing would be capable of effectively and responsibly handling the monumental work load, which can be anticipated.

   If the existing EIC ten (10) member Commission currently has a full agenda every other week....what then will the proposed ten (10) member Board have after assuming approximately three times the amount of function?

   Can we realistically anticipate cost savings and a more effective and responsive delivery of decisions and services from what is currently proposed?

   With the work ahead in the areas of solid waste management, pesticides regulation, air and water pollution abatement and oil ....the proposed Board would have more than enough similar functions and issues to study, deliberate and decide upon.

ALTERNATIVES

Based on the preceeding discussions....the following are offered as viable alternatives to the current reorganization proposal:

1. Rather than abolish the existing LURC Commission....it should be strengthened by replacing the three (3) permanent State Agency Head members with three (3) or six (6) other nonpermanent, outside members more representative of the public and other specific interests involved....thus creating a seven (7) or ten (10) member quasi-judicial comprehensive land use decision-making body.

   Such a body could address itself primarily to the specific and broad issues of land use planning, zoning, regulation and development guidance. When these issues directly involve other environmental issues such as oil, pesticide, liquid or solid waste

regulation, water and air pollution abatement, transportation, natural resource management.....appropriate coordination could be accomplished administratively.

2. Rather than merely grouping and restructuring all environmentally related statutes under one umbrella agency....those statutes clearly related to the broad function of State Level, Comprehensive Land Use Zoning, Planning, and Guidance should be .... modified and integrated into a single body of State-Level Land Use Law.

   Such statutes include, but are not necessarily limited to, the following:

   a. The Land Use Regulation Act (Title 12, Chapter 206-A)
   b. The Shoreland Zoning Act (Title 12, Chapter 42-A)
   c. The Site Location of Development Act (Title 38, Chapter 3)
   d. The Wetlands Control Act (Title 12, Chapter 421)
   e. The Maine Mining Act (Title 12, Chapter 401)
   f. The Great Ponds Act (Title 12, Chapter 201)

   This would create a more effective and responsive body of land use law and would solve the problems of duplication of effort and resources, overlapping jurisdiction, administration and enforcement, and applicant and public frustration.

3. Integrate the Land Use Guidance quasi-judicial body, proposed in "1" above, with the comprehensive body of Land Use Law, proposed in "2" above, into one of the following alternative organizational structures:

   a. A separate cabinet level Department of Land Use Guidance (see organization chart included as attachment A)

   b. A separate Bureau of Land Use Guidance under the proposed Department of Environmental Protection (see organization chart included as Attachment B)

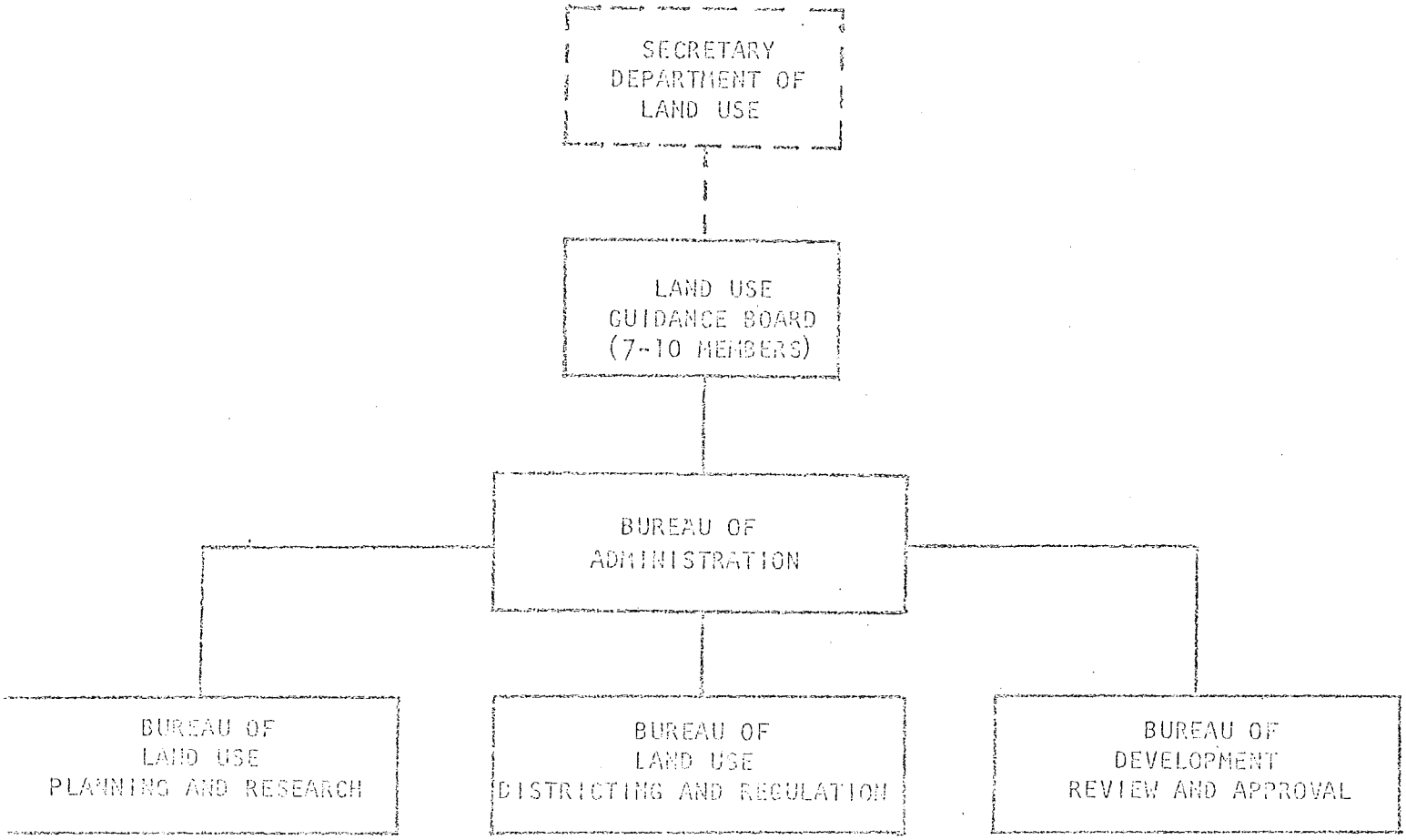
   c. A separate Bureau of Land Use Guidance under the proposed Department of Natural Resources (see organization chart included as Attachment C)

   Through the alternatives listed above, the Legislature would ensure an effective and responsive State-Level Land Use Planning and Regulation Program capable of guiding the orderly use, conservation and renewal of Maine's limited environmental (Human and Natural) resources.

   Thank you.

ORGANIZATIONAL CHART

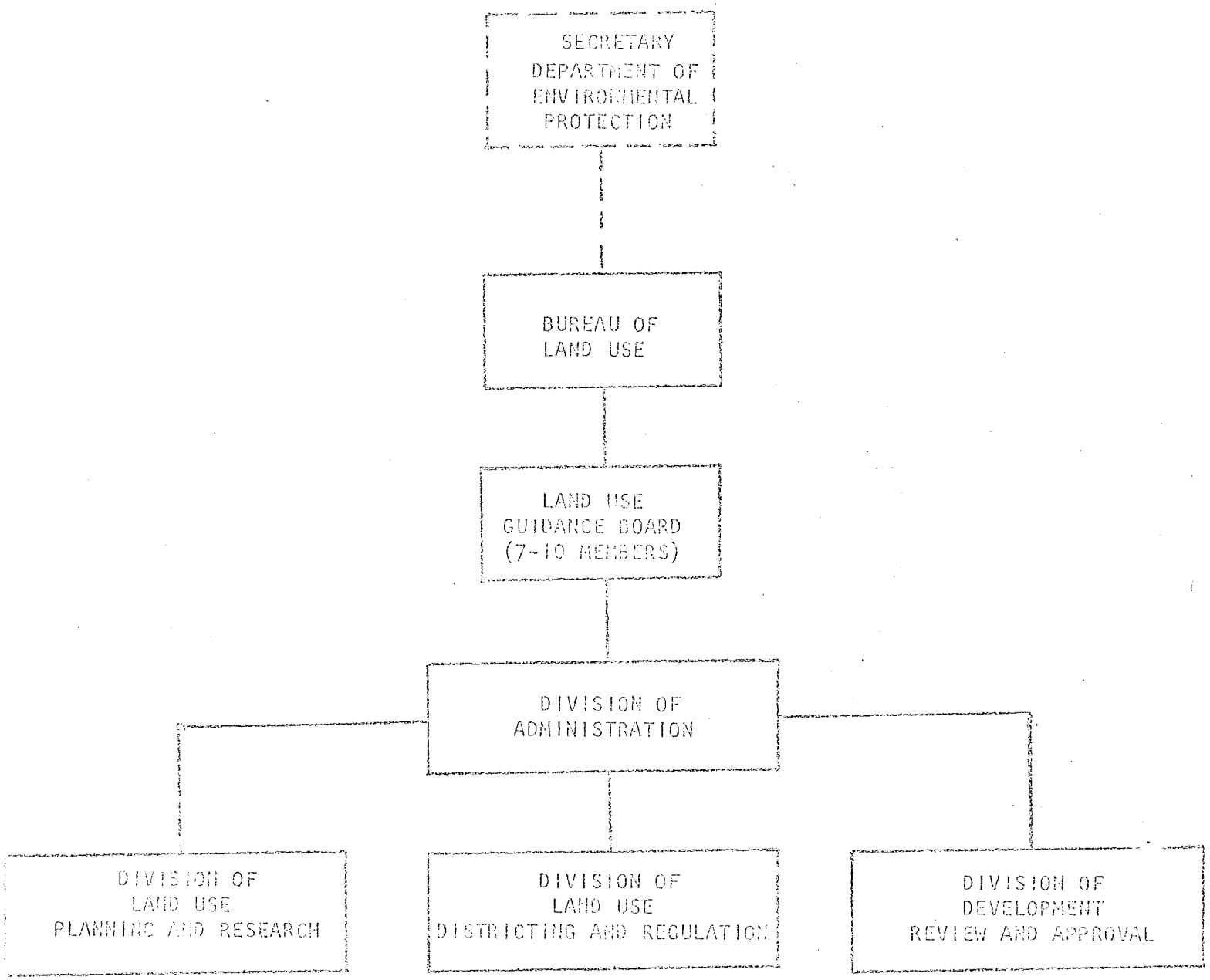
CABINET-LEVEL DEPARTMENT OF LAND USE



Attachment A
ALTERNATIVE I

ORGANIZATIONAL CHART

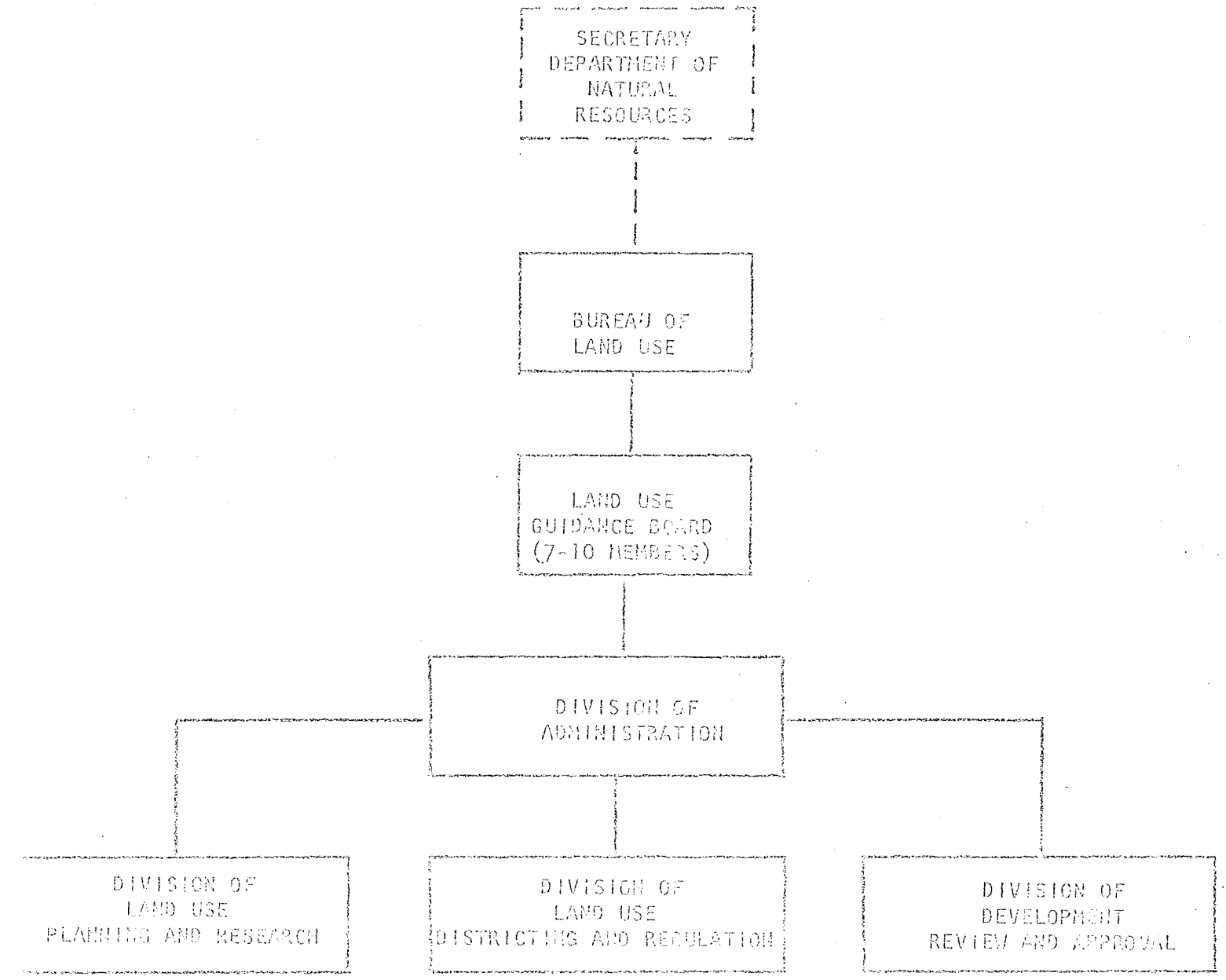
BUREAU OF LAND USE, DEPT. OF ENVIRONMENTAL PROTECTION



Attachment B
ALTERNATIVE 2

ORGANIZATIONAL CHART

BUREAU OF LAND USE, DEPARTMENT OF NATURAL RESOURCES



Attachment C
ALTERNATIVE

APPENDIX I

A copy of a letter to Senator Johnson, Chairman,
Joint Committee on Reorganization from
Senator Elmer Violette, Chairman,
LURC dated 12/1/71.

STATE OF MAINE LAND USE REGULATION COMMISSION

STATE HOUSE AUGUSTA, MAINE 04330 (207) 289-2631

JAMES HASKELL, JR.
EXECUTIVE DIRECTOR

December 1, 1971

Dear Senator Johnson:

At a meeting of the Maine Land Use Regulation Commission held on December 1, 1971, this Commission unanimously reached the following conclusions regarding Maine State government reorganization:

1. The Commission as such should continue to exercise the powers, functions and responsibilities as authorized by the 105th Legislature (An Act Revising the Maine Land Use Regulation Commission Law, L.D. 1788).

   The important and new regulatory functions assigned by the Legislature can best be developed by a working group such as the present Commission.

2. The Commission supports the concept of State government reorganization and is agreeable to working under the umbrella of the Department of Environmental Protection, provided that its jurisdiction and responsibilities are preserved (as a package) as designated by the 105th Legislature. It is the feeling of the Commission that its present functions and duties are equal in significance to those of the present EIC, and further that the Committee may want to consider establishing two boards under the Secretary of the Department of Environmental Protection: one to consider comprehensive land-use development guidance and the other to consider specific matters relating to the environment and public health.

3. The following laws are clearly within the jurisdiction of a land-use regulatory body, as distinct from a pollution control body: Land Use Regulation Act (Title 12, c. 205-A) and Shoreland Zoning Act (Title 12, C. 424); and also Wetlands Control Act (Title 12, C. 421) and the Great Ponds Act (Title 12, C. 201).

The Chairman, Executive Director and individual members of the Commission will be very happy to discuss these considerations with you or the Committee at your convenience.

Sincerely yours,

Senator Elmer H. Violette
Chairman
Maine Land Use Regulation Commission

Senator Harvey Johnson, Chairman
State Government Committee
RFD #2
Oakland, Maine 04963

APPENDIX J

A copy of LURC's proposed organizational structure of DEP in the form of a memo to Senator Elmer Violette, Chairman, LURC from James S. Haskell, Jr., Executive Director, LURC Dated 12/22/71.

December 22, 1971

Senator Elmer H. Violette, Chairman Land Use Regulation Commission

James S. Haskell, Jr., Executive Director Land Use Regulation Commission

Attached Proposed Organizational Chart, Department of Environmental Protection

As per your request I am forwarding a copy of the organizational chart I have prepared for you, separating the functions similar to the Land Use Regulation Commission from those similar to the present Environmental Improvement Commission functions.

Essentially, the proposal calls for three separate bureaus: (1) a Bureau of Administrative Services; (2) a Bureau of Environmental Improvement, and (3) a Bureau of Land UseGuidance.

The Bureau of Administrative Services would be headed up by the Assistant Commissioner of the Department of Environmental Protection. The functions of this Bureau are office management and program management and coordination.

The Bureau of Environmental Improvement would be headed up by a Bureau Chief who would be responsible to a 7 or 10 member Environmental Improvement Board. The primary functions of this Bureau are those of licensing, controlling or abating existing specific environmental or health issues. Laws relating to this Bureau include:

Water Pollution Laws
Air Pollution Laws
Pesticide Control
Solid Waste Management
Oil Conveyance
Mining Rehabilitation
Regulation of Private Sewage Disposal Systems

The Bureau of Land Use Guidance would be headed up by a Bureau Chief who would be responsible to a 7 or 10 member Land Use Guidance Board. The primary functions of this Bureau would be the long-range planning and regulation of broad land use and environmental issues. Statutes relating to this Bureau include:

Site Location Law
Shoreland Zoning Law
Wetlands Control Law
Great Ponds Law
Land Use Commission Law

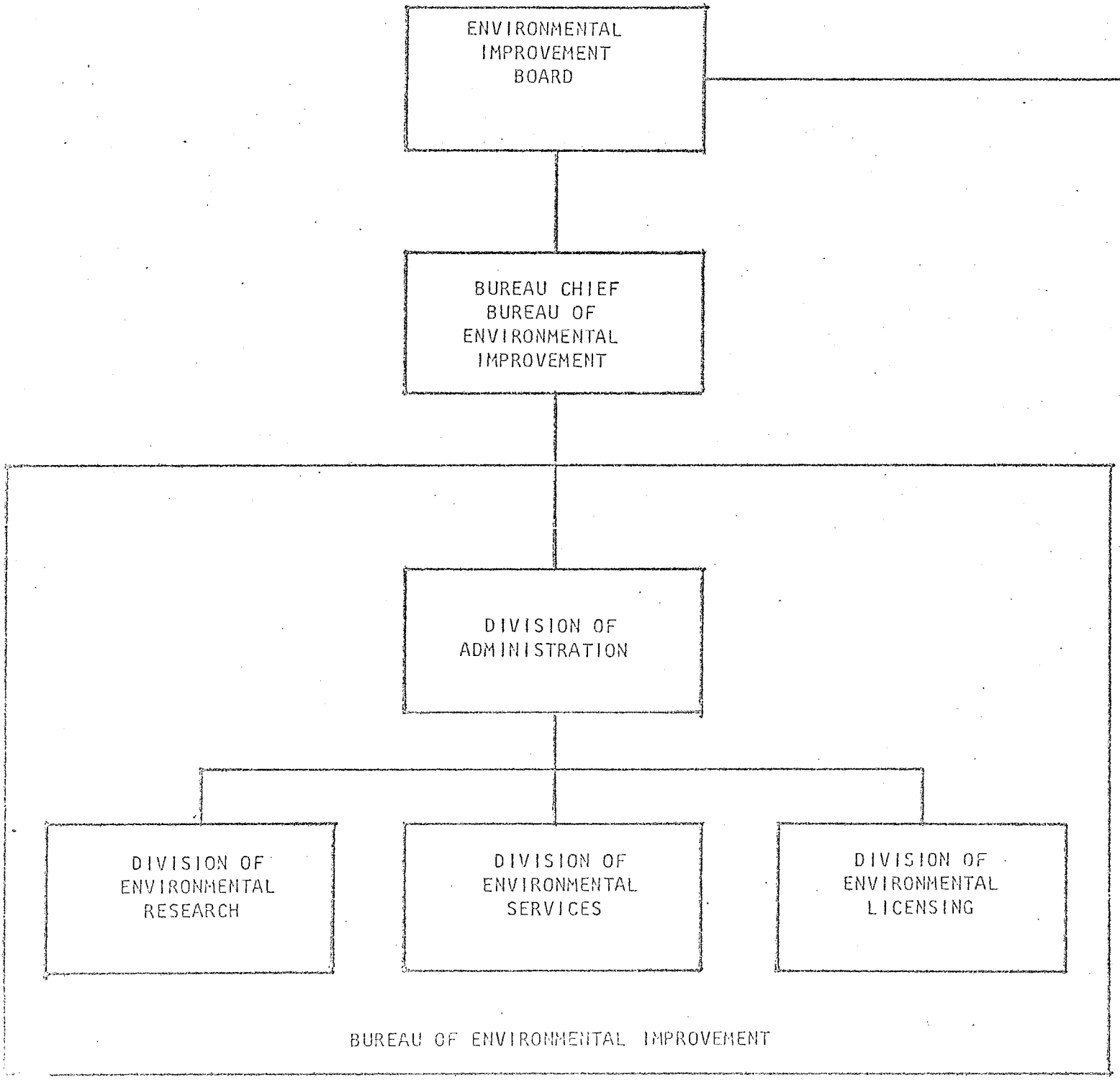
The key to this organizational arrangement as far as minimizing any intra departmental duplication of effort would be the Division of Program Coordination in the Bureau of Administrative Services. This Division would coordinate the programs of the Bureau of Land Use Guidance and the Bureau of Environmental Improvement and would be directly responsible to the Commissioner of the Department.

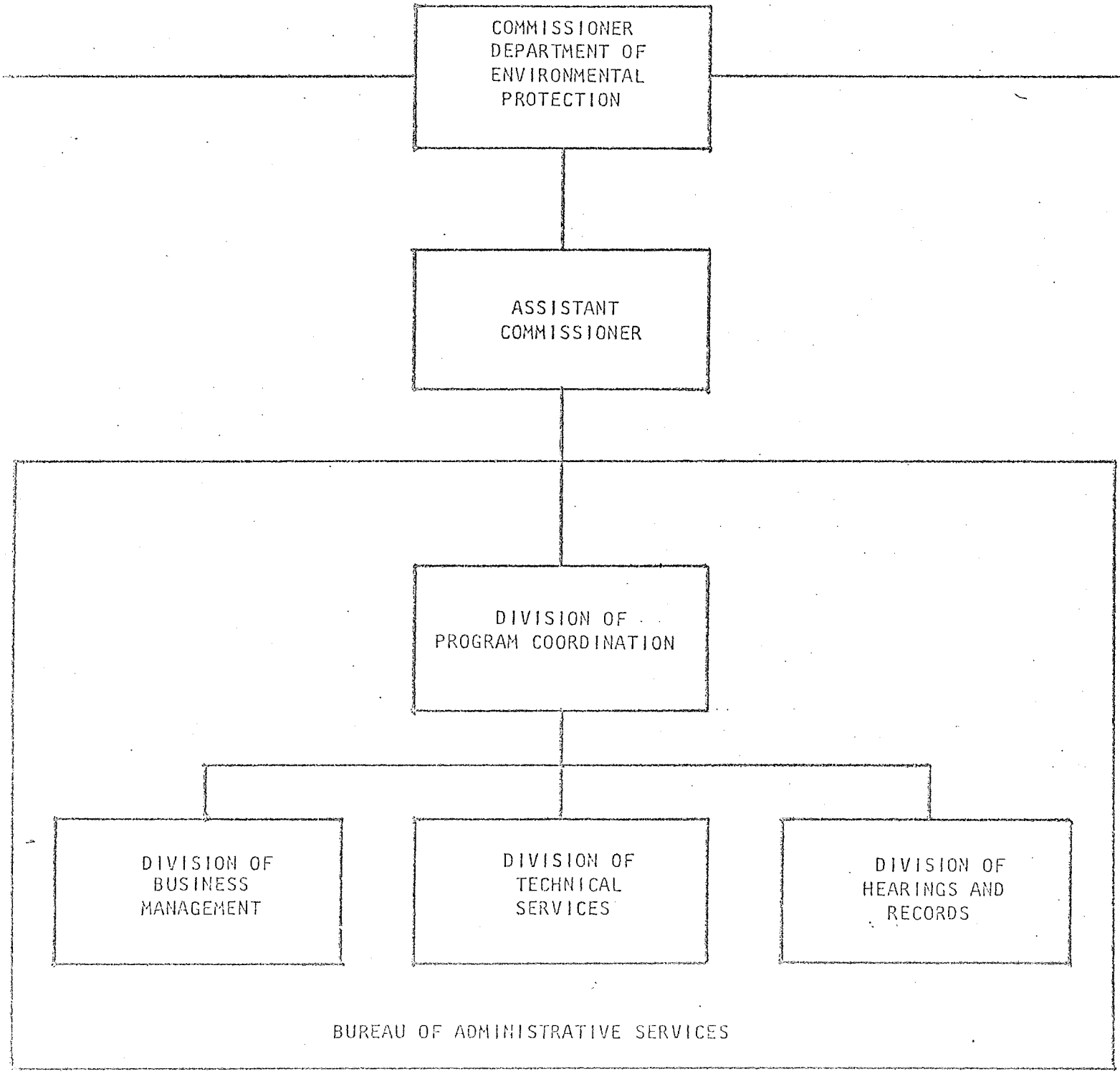
The proposed organizational set-up is designed to satisfy the conflicting desires of the Environmental Improvement Commission and the Land Use Regulation Commission. It treats each as a distinct bureau with its own policy and decision-making body and set of integrated statutes and functions.

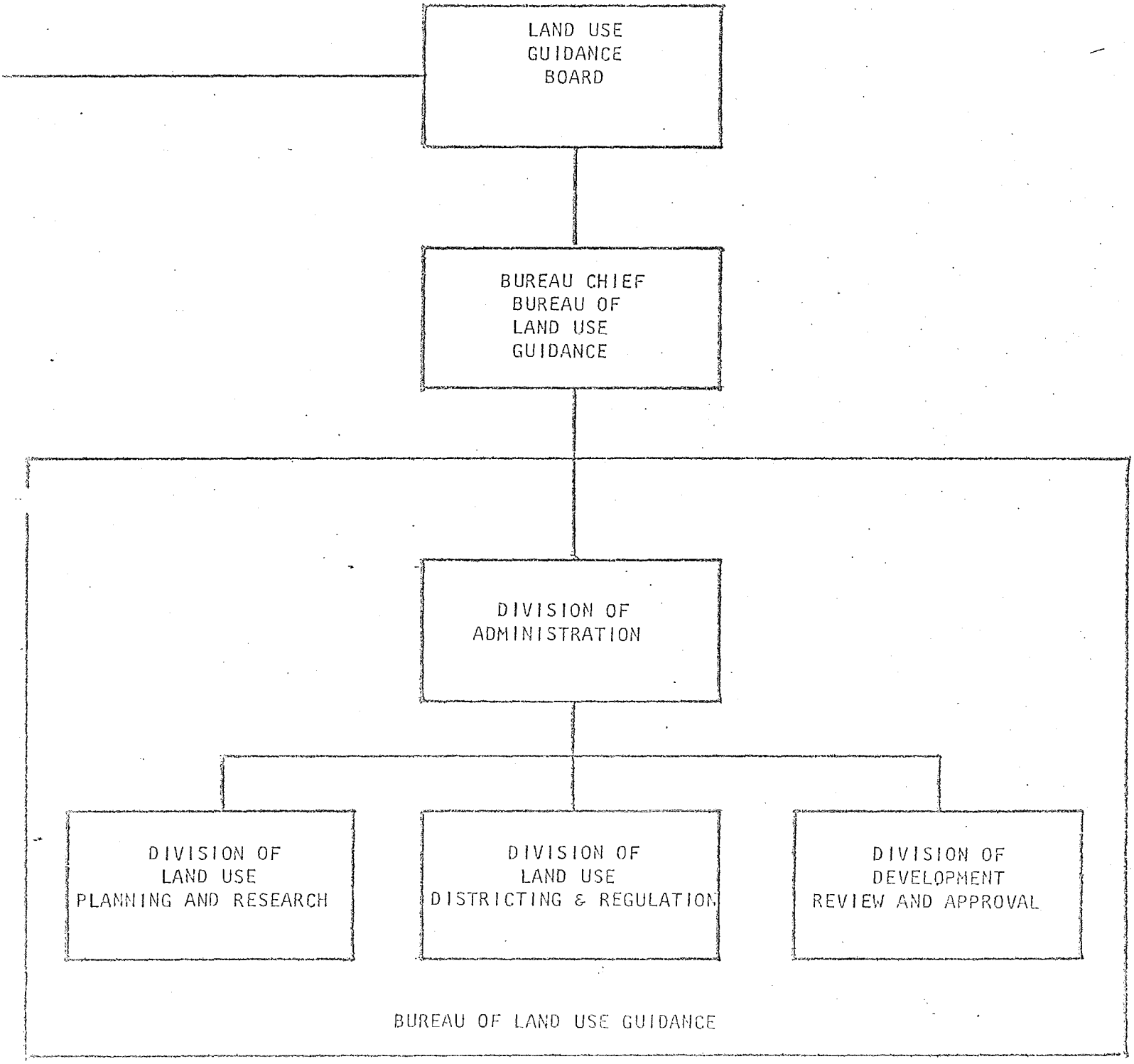
The function of the Commissioner in this proposal is to "orchestrate" the various functions and responsibilities within the department and to direct the two boards as required or needed to reflect the policy decisions of the Governor and Legislature. This is an important reason for reorganization which seems to have been forgotten lately.

If you have any questions or would like to discuss this further prior to the meeting on the 28th, do not hesitate to call me at the office or at home. My home number is 623-8552.

JSH/s
Enc: 1


ENVIRONMENTAL IMPROVEMENT BOARD
BUREAU CHIEF BUREAU OF ENVIRONMENTAL IMPROVEMENT
DIVISION OF ADMINISTRATION
DIVISION OF ENVIRONMENTAL RESEARCH
DIVISION OF ENVIRONMENTAL SERVICES
DIVISION OF ENVIRONMENTAL LICENSING
BUREAU OF ENVIRONMENTAL IMPROVEMENT


COMMISSIONER
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
ASSISTANT
COMMISSIONER
DIVISION OF
PROGRAM COORDINATION
DIVISION OF
BUSINESS
MANAGEMENT
DIVISION OF
TECHNICAL
SERVICES
DIVISION OF
HEARINGS AND
RECORDS
BUREAU OF ADMINISTRATIVE SERVICES


LAND USE GUIDANCE BOARD
BUREAU CHIEF BUREAU OF LAND USE GUIDANCE
DIVISION OF ADMINISTRATION
DIVISION OF LAND USE PLANNING AND RESEARCH
DIVISION OF LAND USE DISTRICTING & REGULATION
DIVISION OF DEVELOPMENT REVIEW AND APPROVAL
BUREAU OF LAND USE GUIDANCE

APPENDIX K

A copy of a position paper entitled "An Alternative Organizational Structuring of the Proposed Department of Environmental Protection", dated 1/4/72

LAND USE REGULATION COMMISSION
January 4, 1972 JSH

AN ALTERNATIVE ORGANIZATIONAL STRUCTURING OF THE PROPOSED DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Intent:

The intent of this paper is to present an alternative solution to the organizational problems being experienced in the formation of the Department of Environmental Protection, for consideration by the persons involved and consistent with the position taken by the members of the Land Use Regulation Commission.

B. Proposed Alternative:

The alternative solution proposed consists of two 7 or 10 member quasi-judicial decision-making and policy-making bodies:

1. An Environmental Improvement Board; and
2. A Land Use Planning and Zoning Board.

and three separate bureaus:

1. A Bureau of Environmental Improvement;
2. A Bureau of Land Use Planning and Zoning; and
3. A Bureau of Administrative Services.

The two boards would be essentially the existing Environmental Improvement Commission and Land Use Regulation Commission, or an appropriate modification thereof. The two boards would serve as the quasi-judicial decision-making and policy-making bodies of their respective bureaus.

Their primary functional duties would include the following:

1. Development of applicable Bureau policies for legislative action;
2. Adoption of applicable Bureau plans and priorities;
3. Adoption of applicable Bureau regulations, standards, criteria, guidelines, classifications and district boundaries.
4. Action on applicable Bureau license and permit applications;
5. Authorization of appropriate public hearings and enforcement actions;
6. Approval of the hiring of the Bureau chief and Bureau staff;
7. Development of a biennial budget sufficient to carry out the Bureau's assigned tasks; and
8. Ensure that the Bureau's statutory and policy responsibilities are implemented.

B. (Continued)

The Bureau of Environmental Improvement directed by a Bureau Chief would be responsible to the Environmental Improvement Board. The primary responsibility of this Bureau would be the effective implementation of the Legislative intent and statutory requirements of the following statutes:

1. Water pollution laws;
2. Air pollution law;
3. Pesticide control law;
4. Solid waste management law;
5. Oil conveyance law;
6. Mining rehabilitation law; and the
7. Private sewage disposal regulation law.

The Bureau of Land Use Planning and Zoning would be directed by a Bureau Chief who would be responsible to the Land Use Planning and Zoning Board. The primary responsibility of this Bureau would be the effective implementation of the legislative intent and statutory requirements of the following statutes:

1. Land use regulation law;
2. Site location law;
3. Shoreland zoning law;
4. Wetlands control law; and the
5. Great Ponds alteration law.

The Bureau of Administrative Services would be directed by the Assistant Commissioner of the department. The primary responsibilities of this Bureau would include the following:

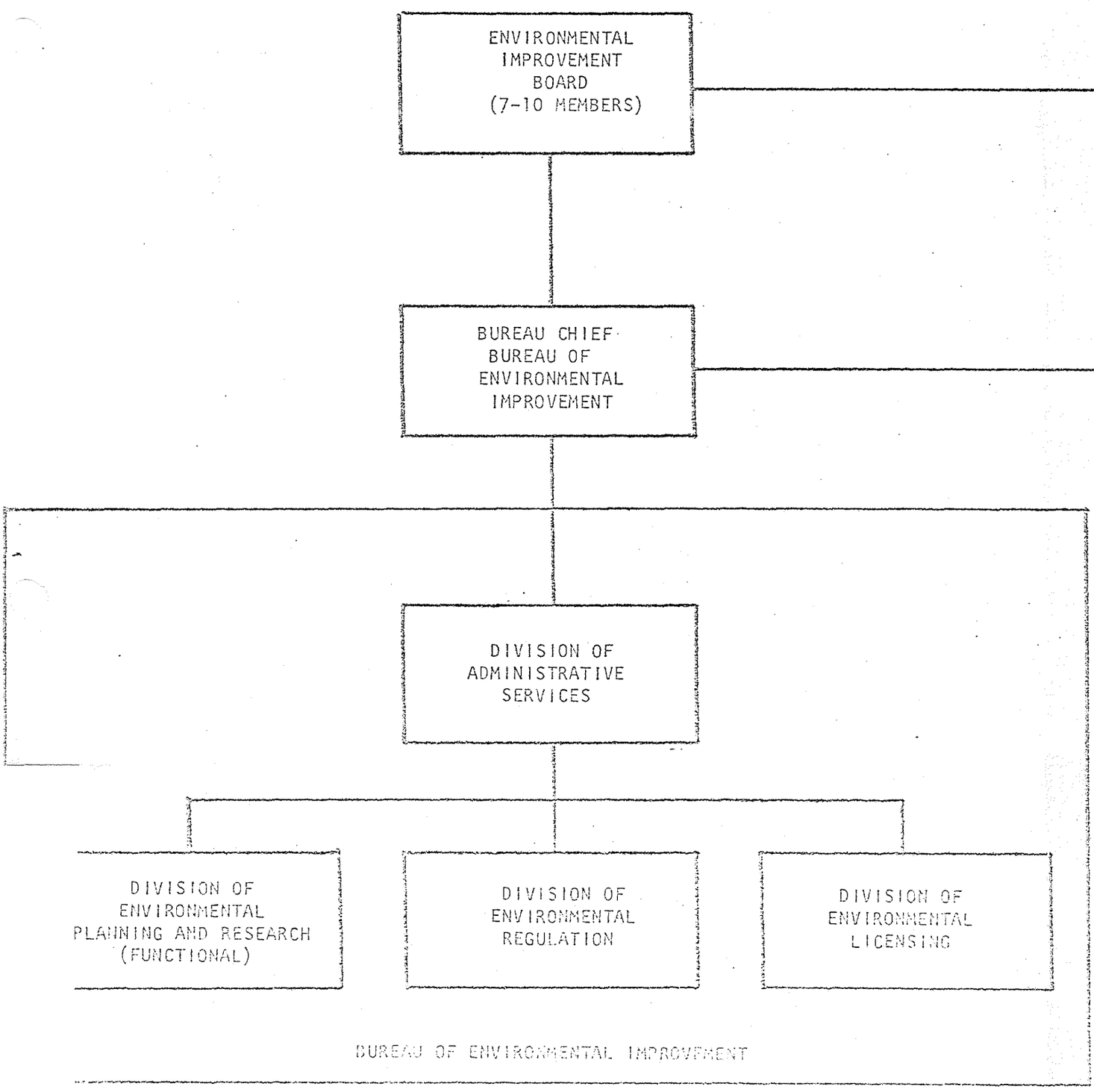
1. Coordination of departmental programs;
2. Management of departmental fiscal and personnel functions;
3. Management of departmental technical and financial assistance functions; and the
4. Management of departmental hearings, records and enforcement functions.

The key to this organizational alternative as far as minimizing any intradepartmental duplication of effort would be the Division of Program Coordination in the Bureau of Administrative Services. This Division would coordinate the programs of the Bureau of Land Use Planning and Zoning and the Bureau of Environmental Improvement and would be directly responsible to the Commissioner of the Department.

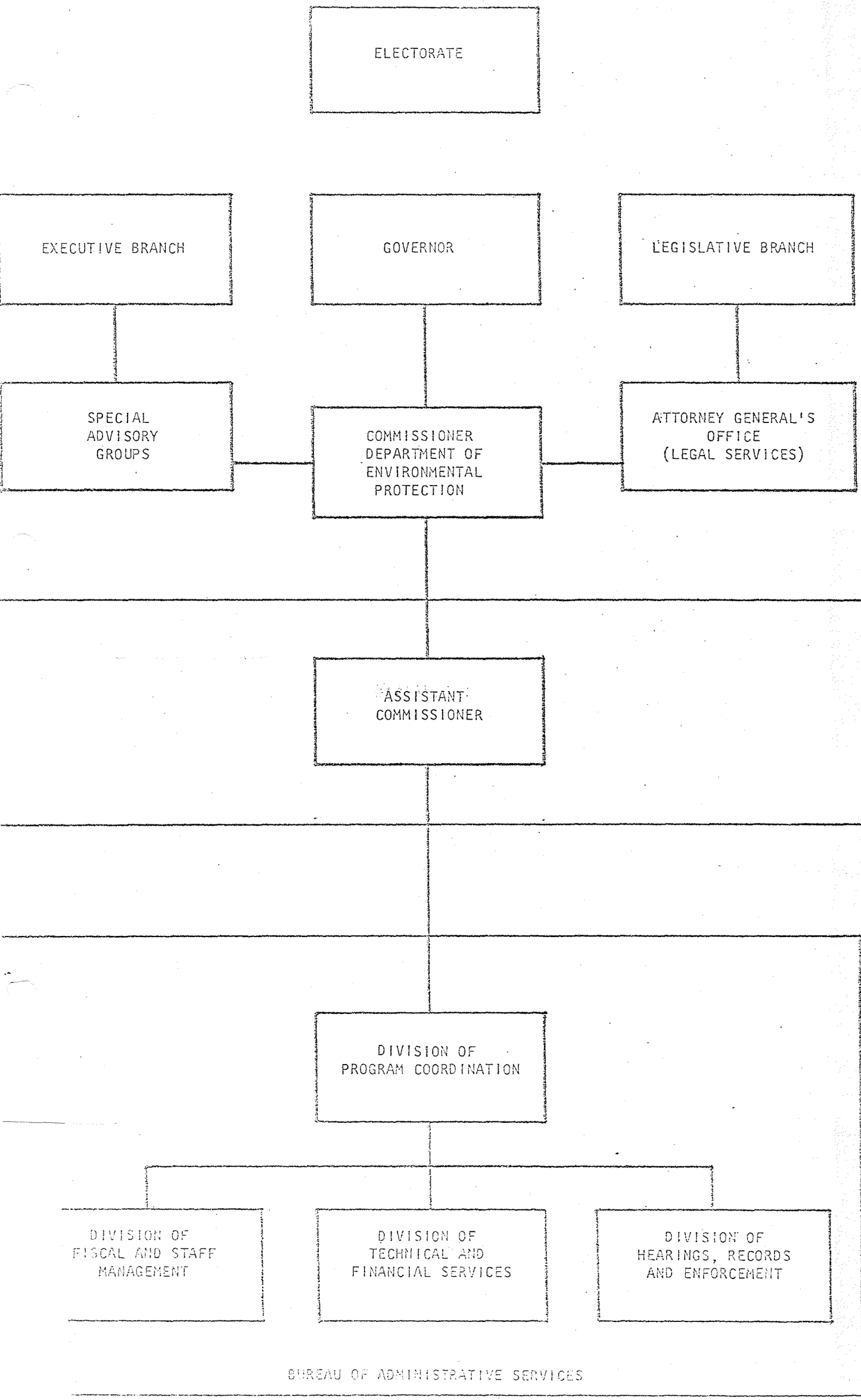
The organizational arrangement proposed was designed to satisfy the conflicting desires of the Environmental Improvement Commission and the Land Use Regulation Commission. It treats each as a distinct bureau with its own policy and decision-making body and set of integrated statutes and functions.

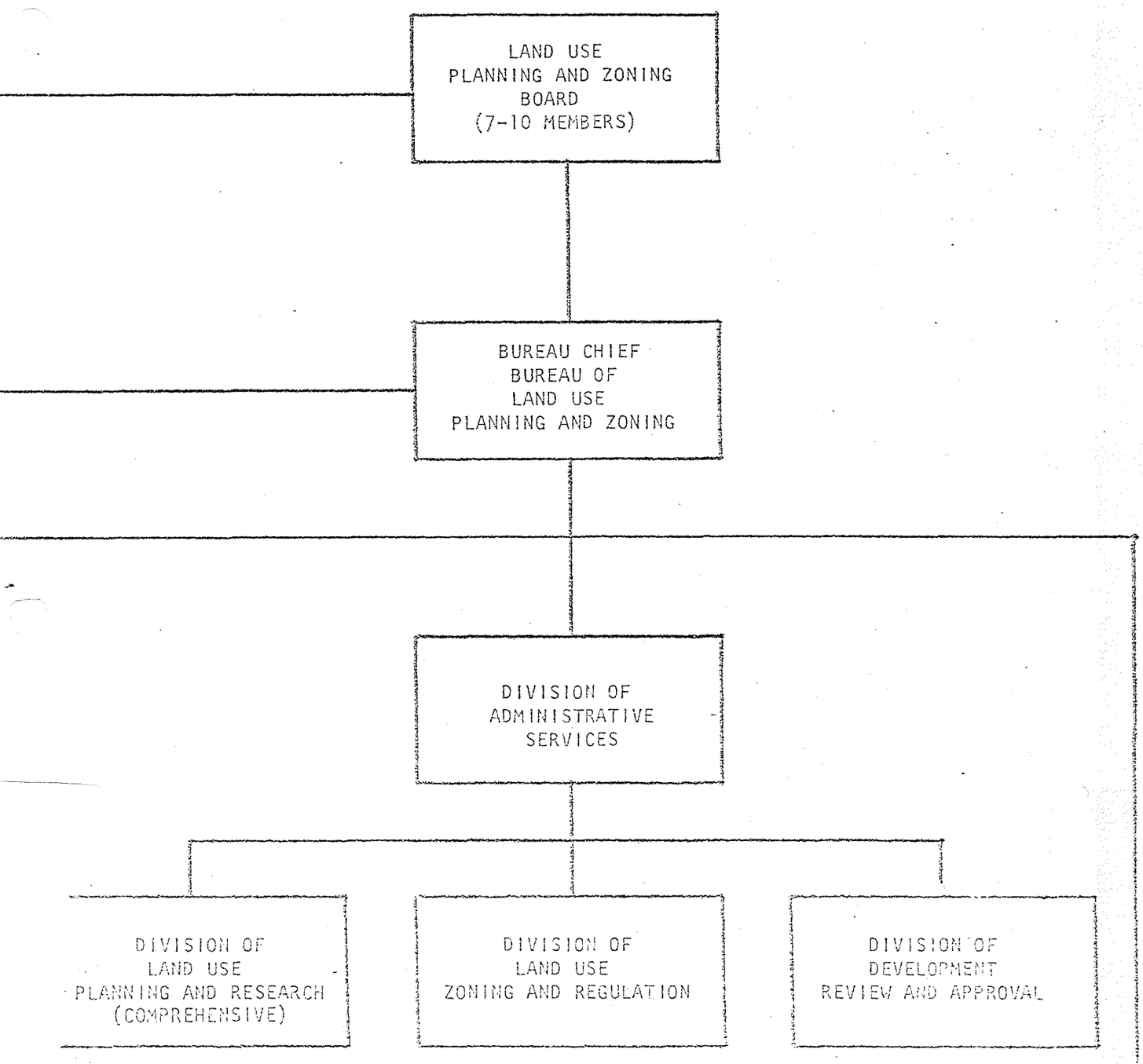
B. (Continued)

The role of the Commissioner in this proposal is to administratively coordinate various functions and responsibilities assigned to the department and to direct the two boards as required or needed to reflect the policy decisions and priorities of the Governor and Legislature. This important reason for reorganization seems to have been forgotten by all lately.



BUREAU OF ENVIRONMENTAL IMPROVEMENT


ELECTORATE
EXECUTIVE BRANCH
GOVERNOR
LEGISLATIVE BRANCH
SPECIAL ADVISORY GROUPS
COMMISSIONER DEPARTMENT OF ENVIRONMENTAL PROTECTION
ATTORNEY GENERAL'S OFFICE (LEGAL SERVICES)
ASSISTANT COMMISSIONER
DIVISION OF PROGRAM COORDINATION
DIVISION OF FISCAL AND STAFF MANAGEMENT
DIVISION OF TECHNICAL AND FINANCIAL SERVICES
DIVISION OF HEARINGS, RECORDS AND ENFORCEMENT
BUREAU OF ADMINISTRATIVE SERVICES



BUREAU OF LAND USE PLANNING AND ZONING

APPENDIX L

A copy of EIC's proposed organization of the Department of Environmental Protection, dated 12/21/72.

STATE OF MAINE
ENVIRONMENTAL IMPROVEMENT COMMISSION
AUGUSTA, MAINE 04330

December 21, 1971

TO: Mr. James Haskell, Director, Land Use Regulation Commission

FROM: William R. Adams, Director

A previous memorandum to all but Mr. Haskell informed you of Senator Harvey Johnson's instructions to me to meet with the Chairmen of the Land Use Regulation Commission and the Environmental Improvement Commission and Mr. Healy to work out a solution to the organizational problems being experienced by the Committee in the forming of the Department of Environmental Protection. Since that memorandum, a letter from Mr. Healy has informed me that it was the Committee's wish to include Mr. Haskell in these discussions.

After telephone conversations with both Senator Violette and Chairman Koons, it was determined that a meeting could be held on Tuesday, December 28 at 3:00 P.M. The meeting is scheduled to be held in the conference room of the Environmental Improvement Commission. In a recent telephone conversation, Senator Violette indicated his wish that I prepare one or more alternate plans which could be discussed at the meeting. It was his thought that the group could more quickly get to the problems at hand if a written proposal were before them. This suggestion was found to be acceptable to Chairman Koons and therefore, I have prepared a brief organizational chart of the super structure of the proposed department. Attached to the chart are brief descriptions of the composition of the units proposed and their responsibilities. The thoughts set down in this brief proposal are mine and were triggered by the comments made by Senator Johnson at the meeting of the Joint Legislative Committee. I realize that they may not meet the expectations of some, but they were developed with the following points in mind.

1. The Joint Legislative Committee expects an organization to be developed which will include the present functions of the Environmental Improvement Commission and the Land Use Regulation Commission.

2. The Joint Legislative Committee wanted to insure that the responsibilities of the Land Use Regulation Commission were not "swept under the rug".

3. The organization developed in my report of September 30, 1971 for the Legislative Committee is conceptually correct even though it might need expansion and amplification to insure that all interests are properly safe-guarded.

4. A formal organization with clear lines of authority would insure better coordination and cooperation than a loosely structured organization or an affiliation of agencies.

5. The State's Environmental Policy should be formed by a Board and all policies, whether they deal with water, air, land or other environmental functions, should be consistent in concept and emphasis.

6. Perhaps the opportunity to consolidate and to solidify the environmental interests of all of the affected agencies will never be so great.

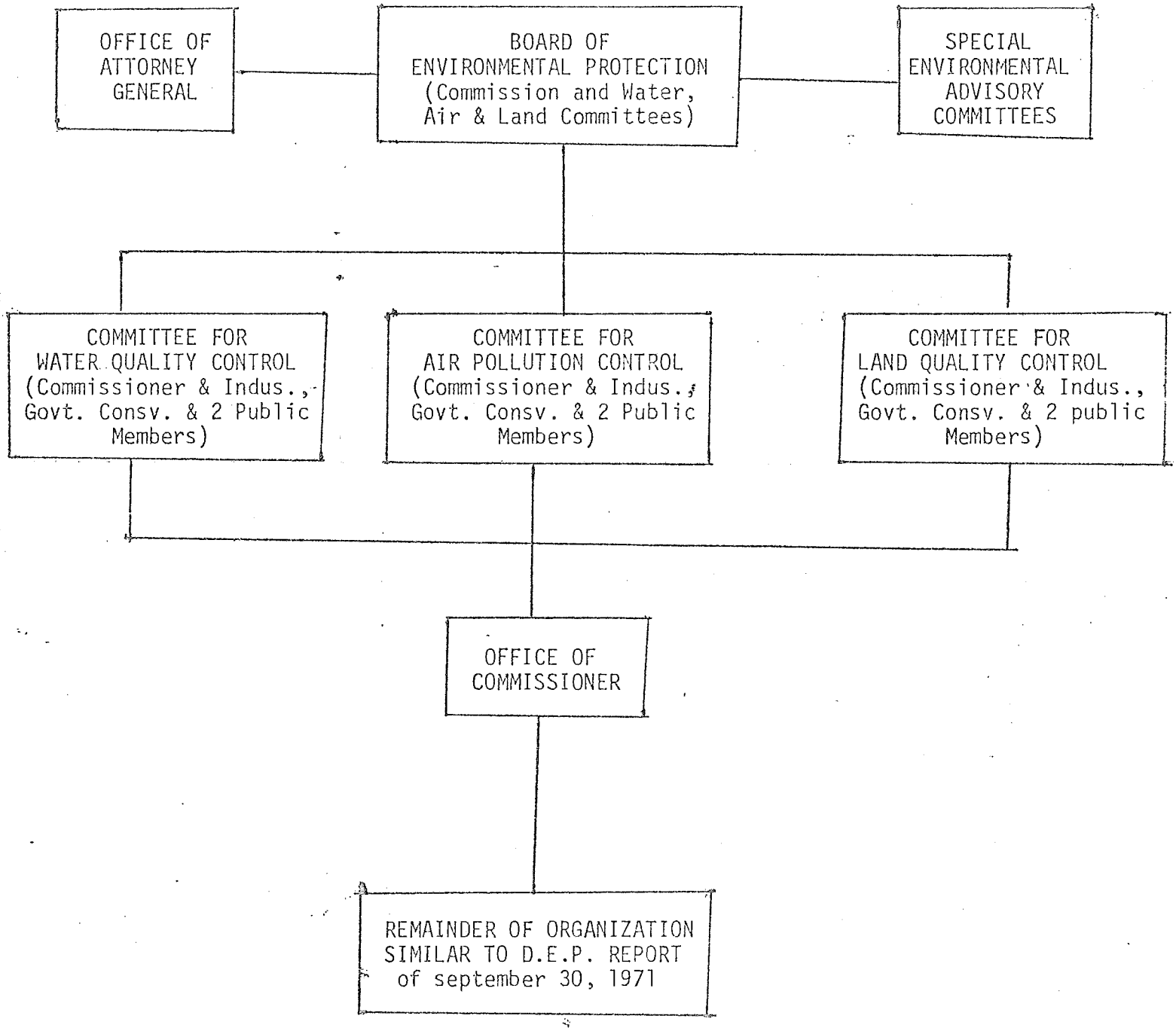
Obviously, this proposal is neither complete nor final but the January 13th deadline for the submission of an organization plan to the Joint Committee is close at hand. This proposal will form a basis for discussion and should decrease the time necessary to reach a final decision.

WRA:lm

CC: Mr. Michael Healy
Dr. Donaldson Koons
Senator Elmer Violette

December 20, 1971

ORGANIZATION CHART



December 20, 1971

BOARD OF ENVIRONMENTAL PROTECTION

CHAIRMAN - Commissioner of Environmental Protection (Votes to break a tie)

COMPOSITION

A. Committee of Water Quality Control

B. Committee of Air Quality Control

C. Committee of Land Quality Control

RESPONSIBILITIES

A. Determination of Departmental Policy

B. Issue licenses and permits

C. Adopt regulations

D. Authorize enforcement actions

E. Adopts standards, criteria, comprehensive plans, guidelines, classifications, district boundaries, etc.

F. Administrative responsibilities not assigned Commissioner.

MEETING - Monthly or as required

MISCELLANEOUS

A. Members are notified of all Committee meetings and agendas. May participate but not vote, except at Board meetings and their assigned Committee meetings.

B. Members may participate in any public or enforcement hearing.

December 20, 1971

COMMITTEE OF AIR, WATER, LAND QUALITY CONTROL

CHAIRMAN - Commissioner of Environmental Protection (votes to break a tie)

COMPOSITION

1 - Industrial member (Bureau Oriented)

1 - Governmental member (any level)

1 - Conservation member

2 - Public members

RESPONSIBILITIES

A. Ensure statutory and policy responsibilities of Bureau are fulfilled.

B. Recommend to Board of Environmental Protection

1. Licenses and permits

2. Regulations

3. Enforcement action

4. Standards, criteria, guidelines, classifications, district boundaries

5. Hold public hearings

6. Comprehensive and long range Bureau plans

C. Recommends enforcement actions

MEETING - Monthly or as required (usually one week previous to Board meeting) (Board members are notified and invited)

MISCELLANEOUS

A. Members are all members of Board of Environmental Protection

B. Committee prepares final form and recommendations of all licenses, permits, regulations etc. for Board consideration. Committee votes shall automatically be motions to be presented to Board.

APPENDIX M

A copy of a letter to Senator Johnson, Chairman, Joint Committee on Governmental Reorganization from Senator Elmer Violette, Chairman, LURC, dated 2/9/72.

Raymond S. Wood, Old Town

February 9, 1972

Honorable Harvey Johnson
Chairman,
Joint Legislative Committee on Government Reorganization
State House
Augusta, Maine 04330

Dear Senator Johnson,

Our Commission discussed at length the subject of governmental reorganization, specifically the proposed Department of Environmental Protection, at its meeting on January 29th.

The Commission urged that I reiterate again to you and the members of the Joint Legislative Committee on Reorganization the position of our Commission -- that it should be brought within the framework of the proposed Department of Environmental Protection -- consistent with my letter to you dated December 1, 1971 and my testimony before your committee shortly thereafter.

I feel it is important at this time that I put in writing to you, as devoid of rhetoric and argument as possible, my feelings and that of the Land Use Regulation Commission relative to the structuring of the Department of Environmental Protection and the relationship of the Commission within that Department.

The State of Maine has, in the last several years, enacted very significant and important laws regarding the improvement of those of our natural resources which have been abused, and the safeguarding of those which have yet to be abused, but which are fast becoming threatened.

Indeed, our State is recognized nationally as a leader in this vitally important field. We have also undertaken the necessary development of our governmental agencies and institutions to carry out these functions.

We have enacted water and air quality standards, sewage disposal laws, oil discharge and conveyancing law, the Site Location Law and have created an Environmental Improvement Commission to carry out the regulatory and enforcement provisions of these laws. Except for the

Site Location Law, all of the functions of the EIC are remedial and regulatory in nature. The Site Location Law is our state's first attempt to bring into consideration the effects and impact of the increasing number and variety of development proposals upon the natural resources of our State. It does not extend in the direction of land use planning.

I have consistently supported the objectives of the EIC and the legislative efforts to give it the tools to do a meaningful job. I have at times takenthe initiative in these measures. The responsibility of the EIC in administering these laws is a monumental one and I feel they are to be commended for what they have accomplished.

The State of Maine, with the creation ofdthe Land Use Regulation Commission and the major revision thereof by the 105th Legislature has for the first time adopted a policy of comprehensive land use planning, zoning and regulation at the state level. This Commission is now required to formulate a Comprehensive Land Use Planning and Zoning Program and Land Use Guidance Standards for the unorganized and deorganized areas of the State, approximately 52 percent of the State's land area. This is a tremendous task, bringing into play many considerations not heretofore employed in implementing our environmental laws.

In the past few years our State, responding to a vital concern for the protection, preservation and improvement of our natural resources, has enacted a series of far-reaching laws. These laws, in their application and enforcement, will of necessity affect the varied interests and desires of all of Maine's people for the protection and use of the State's natural resources.

Many of these laws are new concepts, resulting from the growing public realization that our limited supply of land and water resources can no longer be dealt with in the ways of the past, and the impact of their application can only be projected into the future.

The real issue as I see it, is how to best place the emerging concepts and functions of State-level land use planning and regulation within the proposed Department of Environmental Protection so as to, at the same time, accomplish the objectives and intent of reorganization.

The position of our Commission is a fundamental one, which is, that all the State's environmental policy and decision-making powers should not be vested in a single board or commission.

In reviewing the list of agencies and responsibilities scheduled to be placed within the Department of Environmental Protection, it is apparent that they could be grouped into two levels of function: one being the single or multi-purpose functions of environmental licensing, pollution abatement and regulation, the other being the more comprehensive and long-range functions of land use planning, zoning and regulation.

We feel that the determination of the best use of our land and water resources requires a planning process, which weighs the various use alternatives against the overall goals and policies of the State, and further, that the purpose, scope and intent of comprehensive land use planning, regulation and zoning requires a decision and policy-making body separate from the body making the day-to-day decisions of the State's environmental licensing and pollution abatement programs.

We feel the Land Use Regulation Commission, with its jurisdiction and responsibilities as assigned by the 105th Legislature, or a similar board, is the appropriate decision-making body to handle land use planning, zoning and regulation.

I have talked with and reviewed the works of people knowledgable in the areas of land use law, land use planning, public administration, government and political science, and am convinced that our position is correct and would be, in the long run, in the best interest of the people and the environment of the State.

I feel that this combination of a regulatory process combined with an extensive planning program offers the potential for a well-reasoned framework for evaluating development proposals and protecting the State's desirability as a place to live and work and play.

I feel that a separate board with an overall comprehensive view of land use and future growth is required, with its regulations and decisions based on clearly enunciated planning policies and processes, which takes into consideration both environmental and socio-economic conditions, and allows maximum public participation in the major decisions that affect the use of our increasingly limited supply of land.

Although we feel strongly about the separation of functions as herein outlined, we also consider the importance of granting the Commissioner ~~of the~~ Department the necessary administrative authority to coordinate the related work of the two commissions or boards, in order to avoid as much duplication of effort as possible. We have proposed making the Commissioner a member of the LandUse Regulation Commission, or any board which might be designed in lieu of it. In fact, I have even suggested the possibility of the Commissioner being the Chairman, although my own Commission questions that. Our Commission agrees that the Commissioner could be given administrative authority and, possibly a central administrative staff, with responsibility of handling budgets, coordination of personnel, technical and financing assistance programs, conducting hearings for the boards, carrying out enforcement, laboratory work and field inspections.

We were all aware when reorganization was initiated that it would require a great deal of study, effort and compromise on the part of everyone concerned. Our Commission has, I believe, taken a responsible and constructive position as we have progressed through the series of discussions and meeting with Interim Commissioner Adams, EIC Chairman Koons, Mr. Hasley and yourself.

While the meetings had not reconciled the basic differences as to the structure of the DEP, I felt that progress was being made. I was hopeful that, following the meeting of January 4th which you attended, we had arrived closer to an alternative that could be worked upon for further consideration. We were somewhat disappointed that this was not pursued further, but I recognize thatvast volume of work of your Committee and staff in trying to have all the reorganization bills ready for the special session.

In your Committee's consideration of LD #1978 on Reorganization of the Department of Environmental Protection, our Commission hopes that consideration will be given to structuring the DEP along the line we have here put forth. Should that be considered not feasible at this time, we would hope that some way be worked out to bring the Commission within the framework of the DEP. Finally, as a minimum, if our Commission is not included in the DEP at this time, that provisions be made in the Act for a review by the 106th or 107th Legislature for inclusion of the Commission at a future date.

Sincerely,

Elmer H. Violette,
Chairman

EHV/gr

APPENDIX N

An interdepartmental memo of understanding from John L. Martin, Chairman, LURC, to W. R. Adams, Commissioner of DEP and reply dated 8/16/72

August 16, 1972

William Adams, Jr., Director — Environmental Protection

John L. Martin, Chairman — Land Use Regulation Commission

Proposed administrative alternative to current overlapping jurisdictions of DEP and LURC

The Land Use Regulation Commission has instituted procedures to fully administer § 685-B of the Land Use Regulation Law, which requires permits for all construction, subdivision, and commercial or industrial development in the unorganized territories and plantations. § 685-B overlaps the jurisdiction of the Bureau of Land Quality Control, DEP, in three areas:

1. Site Location
2. Great Ponds
3. Mining

Such overlapping of jurisdictions causes a duplication of effort by the state and by developers, as it necessitates the acquisition by a developer of two different permits from two different state agencies which have essentially the same concerns. Some way should be found to eliminate such duplication of effort as much as possible.

The Land Use Regulation Commission offers the following administrative alternative to resolve the problem:

1. That a developer requiring both Site approval and a LURC permit be routed first to the Land Use Regulation Commission.

2. That the Land Use Regulation Commission act upon the developer's LURC application with the review of the DEP. If the Land Use Regulation Commission disapproves the application, the process ends, and a copy of the disapproval is sent to the DEP. If, however, the LURC approves the application, then

3. That the Land Use Regulation Commission send a complete copy of the developer's LURC application to the DEP along with a copy of the LURC approval.

4. That the DEP accept the developer's LURC application as an application for Site Location approval, and accept the LURC approval as prima facie evidence of accord with the criteria of the Site law.

The Land Use Regulation Commission agrees that if the Department of Environmental Protection requests in a review of a project falling within both jurisdictions that a public hearing be held, the LURC will grant such request. In any case, whenever the LURC determines to hold a public hearing on a project falling within both jurisdictions, the DEP will be invited to participate in a joint hearing, and the transcript will be made available to both agencies.

Included with this memo for the perusal of the DEP are copies of the LURC application forms for subdivision permits, and development permits.

Regarding Great Ponds permits, the LURC thinks that DEP consideration and action on proposals also within LURC jurisdiction will adequately satisfy the criteria of the Land Use Regulation Law. The LURC would like to continue to be a review agency for

Great Pond applications in the unorganized territories and plantations, but will not require a separate LURC permit in cases where a Great Ponds permit is necessary.

Regarding Mining permits, the LURC understands that the DEP has authority to review only rehabilitation plans. Such being the case, the LURC would like to exercise its independent authority over mining developments in the unorganized territories and plantations.

We ask for the concurrence of the Department of Environmental Protection in these matters.

JLM/j

September 15, 1972

John Martin, Chairman
Land Use Regulation Commission
Eagle Lake, Maine

Dear Mr. Martin:

The Board of Environmental Protection took two actions at its meeting of September 13, 1972 which relate to the Land Use Regulation Commission.

First, the Board approved the concept of your August 16 memo as regards overlapping jurisdiction between the Department of Environmental Protection and Land Use Regulation Commission in the unorganized territories. We are sure that this will be beneficial to all parties and look forward to working with the Land Use Regulation Commission in this area. Some details, particular as regards the concept of joint hearings, remain to be worked out by staff, but this can be done easily.

Second, as regards the application of Shelton Noyes for the Bugle Cove development in Rangeley Plantation, the Board tabled the application for the 30 days offered by the applicant to permit Land Use Regulation action. In this situation, use of the newly adopted policy would be to everyone's benefit so that we do not end up with conflicting decisions in a sensitive area. Such an approach would presumably require action by Land Use Regulation Commission within that 30 day period. If that is not possible, staff discussions should be held to attempt to agree on a satisfactory course of action.

Thanks for your assistance and cooperation.

Sincerely,

William R. Adams
Commissioner

WJ:lm

CC: James Haskell, Director

APPENDIX O

A copy of the list of LURC review agencies and the review form letter.

LETTER OF REVIEW

The Land Use Regulation Commission hereby requests the completion and return of this Letter of Review by _____ in order to assist the Commission in the disposition of the land use application #_____ summarized and enclosed herewith. Please contact the Commission if any further information is needed. Thank you.

Reviewing Agency _____

After review of the above named application and consideration of the proposal's probable effects on the environment and on our programs and responsibilities, we recommend:

- ☐ A public hearing for the reasons noted below
- ☐ Disapproval for the reasons noted below
- ☐ Approval with conditions as recommended below
- ☐ Approval as submitted
- ☐ No recommendation for the reasons noted below

We note herewith the following reasons or recommended conditions:

Date _____ By: _____
(Signature)

REVIEW AGENCY

Soil & Water Conservation Commission
Department of Agriculture
Charles L. Boothby
Executive Director
127 Sewall Street
Augusta, Maine
(207) 289-2666

Department of Transportation
Mr. Roger Mallar
Deputy Commissioner,
Planning & Administration
State Office Building
Augusta, Maine
(207) 289-2551

Division of Health Engineering
Dept. of Health & Welfare
Mr. Earle W. Tibbetts
Director
Health & Welfare Building
Augusta, Maine
(207) 289-3826

State Planning Office
Mr. Philip M. Savage
Director
189 State Street
Augusta, Maine
(207) 289-3261

Dept. of Sea & Shore Fisheries
Mr. Robert L. Dow
Director of Marine Research
State Office Building
Augusta, Maine
(207) 289-2291

Dept. of Inland Fisheries & Game
Mr. Kenneth Anderson
Director of Planning & Coordination
State Office Building
Augusta, Maine
(207) 289-3286
Copy to: Appropriate fisheries biologist, game biologist, and warden supervisor

Forestry Department
Mr. Fred Holt
Commissioner
State Office Building
Augusta, Maine
(207) 289-2791

Department of Park & Recreation
Mr. Lawrence Stuart
Commissioner
State Office Building
Augusta, Maine
(207) 289-3821

Department of Environmental Protection
Mr. William Adams
Commissioner
State Office Building
Augusta, Maine
(207) 289-2811

Regional Agency
Contact the regional planning commission or similar agency if one exists in the project area

Plantation Officials
Contact the plantation officials of the plantations involved in the project area

APPENDIX P

A copy of a research paper entitled "LURC as an Integrated Planning, Zoning and Land Use Review Process" dated 3/73.

LURC AS AN INTEGRATED PLANNING, ZONING AND LAND USE REVIEW PROCESS

The 105th Maine Legislature created LURC to extend the principles of sound planning, zoning and subdivision control to the unorganized areas of the state, (12 M.R.S.A. §681) and to review and approve various types of land use in those areas. (12 M.R.S.A. §685-8)

Thus created, the Land Use Regulation Commission is a state agency which combines into one intergrated administrative system, separate functions equivalent to those of the planning board, zoning board, appeals board, subdivision control board and building inspector at the local-level.

The purpose of this paper is to more clearly define LURC's three major functions, to present a discussion on enforcement and to show how these functions and their enforcement form a comprehensive and integrated administrative process.

I. PLANNING FUNCTION

LURC is responsible for preparing and maintaining a Comprehensive Land Use Plan. (12 M.R.S.A. §685-C)

Land Use is a term used to indicate the utilization of any piece of land whether it be lot, plat, tract, or acreage. The way in which land is being used is the land use. This is the basis for a study that results in the formulation of the district boundaries for zoning regulations.

A Land Use Plan is the proposed or projected utilization of land resulting from planning and zoning studies. It is a compilation of policy statements, goals, standards, maps and other pertinent data dealing with past, present, and anticipated private and public land utilization and proposing changes in existing land use policy so that present and future land use will be most economical, provide for a pleasant environment, and be least wasteful of land resources.

A Comprehensive Land Use Plan is a compilation of policy statements, goals, standards, maps, and all other pertinent data relative to the past, present and future trends with respect to its population, housing, economics, social patterns, land and water resources and their use, transportation facilities, and public facilities. The comprehensive land use plan, being as much a process as a document capable of distribution, may, at successive stages, consist of data collected (including photographs, maps, and other visual materials), preliminary plans, alternative action proposals, and finally as a comprehensive land use plan officially adopted by the Commission. In its final stages, it may consist of a series of subsidiary but interrelated detailed regional plans. The comprehensive land use plan shall include recommendations for plan execution and implementation such as, but not limited to, a capital improvements program, legislative recommendations, rehabilitation programs, land use regulations, and building, safety, and housing codes. Any or all of these plan execution and implementation devices may be acted upon or enacted as regulations, after the official adoption of a comprehensive land use plan. The comprehensive land use plan shall include mechanisms which will ensure continual data collection, reevaluation in light of new alternatives, and revision. These new materials and findings shall periodically be forwarded for official adoption and intergration into the comprehensive land use plan.

In summary, the major purpose of a comprehensive land use plan is to inventory the man-controlled phenomena, natural processes and visual characteristics of an area; to reconstitute these in a value system, and thus perceive the degree to which they offer both opportunities and restraints to single and combined land uses.

II. ZONING FUNCTION

LURC is responsible for preparing and maintaining zoning regulations and zoning maps. (12 M.R.S.A. §685-A)

Zoning consists of dividing a geographical area into districts or zones and regulating within such districts the use of land and the use, height, and area of buildings, for the purpose of conserving and promoting the health, safety, morals, convenience and general welfare of the people of the area. Zoning is the instrument for giving effect to that part of the comprehensive land use plan which is primarily concerned with the private use of, and the private developments on, privately owned land--as distinguished from that part which is concerned with public uses and facilities. The zoning map along with the zoning regulations pertaining thereto are thus a part of the comprehensive land use plan of the area--while the enactment of the zoning regulations and its administration are the legislative and administrative acts or processes for giving effect to or carrying out this part of the comprehensive land use plan.

Zoning Regulations are designed to be a means of implementing a comprehensive land use plan. Zoning regulations seek to incorporate the widest possible range of legal land use alternatives in appropriate zoning districts which ensure that development activities will be in harmony with the landscape and with one anoth orderly, and economical (in terms of both public and private investment), and that the public's health, safety, and general welfare are safeguarded. Zoning regulations set forth all of the steps which must be taken and the conditions, which must be met before an existing land use may be altered or a lot, tract, or parcel of land improved. Zoning regulations provide for an appeals process to interpret the zoning law and hear and decide alleged error in any interpretation, a process to determine whether special conditions, required by the regulations and prerequisite to the granting of a conditional use permit, have been met, and a process to hear and decide requests for special exceptions to the regulations.

Zoning districts are geographic areas in which the provisions of the zoning regulations sets forth requirements dealing with all uses which may be conducted therein. Zoning districts are indicated by boundaries on a zoning map. Zoning districts are established only after careful consideration of existing developmen future trend, and sound land use planning principles.

A zoning map is the graphic depiction of the zoning districts within the area for which the zoning regulations are applicable. It normally includes an indication of the boundaries of each of the zoning districts, as well as a legend showing the type of uses which may be permitted in each of the zoning districts. It also normally includes identification names of roads, streams, and other places, as wel as dimensions indicating the boundaries between zoning districts, as such it becomes an inventory of existing land use. It is adopted as a legal part of the zoning regulations and is designated as the official zoning map for a particul geographic area.

As part of the zoning function, LURC must also handle special exceptions and appeals.

Special exceptions are the granting of an exception to the provisions of the zoning regulations. This implies that within the framework of the zoning regulation an unusual circumstance is anticipated and special provisions are set forth in the text which state that when certain things happen, an exception can occur. It also entails the granting of relief from the terms and conditions of the zoning regulations. It is granted only in cases where an individual has proved that he cannot be fairly treated unless certain of the requirements of zoning regulations are relaxed in his particular situation.

Zoning appeals is an appeal filed by an individual who has applied to the Commission for a land-use permit and who has been turned down for non-compliance with the requirements of the zoning regulations. The zoning regulations themselves will set forth the procedure which must be followed in filing such an appeal.

III. LAND-USE PERMIT FUNCTION

LURC is responsible for developing performance standards and administrative handling procedures for the review and issuing of permits for various land uses within its jurisdiction and for assuring their compliance with adopted regulations (12 M.R.S.A. §685-B).

Performance standards are special standards in the zoning regulations dealing with specified uses, which instead of spelling out the prohibited list of uses which would be disallowed in a particular zone, sets forth certain performance measurements which must be met and says that any use that can meet these standards will be allowed. Performance standards usually deal with smoke emission, noise, odor, glare, disposal of waste material and the actual process of operation of the particular use. Performance standards are established in the zoning regulations for the desired norms with a method of measurement to be enforced by the Commission. Any proposed use which cannot meet these standards would not be allowed and once a use has been permitted, it must maintain its ability to conform to the standards or else have its certificate of compliance revoked.

Land-use permits are permits issued by the Commission indicating that the plans submitted show compliance with the zoning regulations and that the use or structure proposed is allowed by the zoning regulations or has been allowed by the granting of a special exception by the Commission. No use or structure can take place unless it has obtained such a permit where a zoning map and regulations are in effect. Land-use permits are documents to be secured from the Commission by every landowner within the Commission's jurisdiction who, after the date of passage of a zoning map and accompanying regulations, desires to erect any building or structure on his land or change the present use of this land or of any building or structure on it, showing that the landowner has fully complied with the provisions of all applicable regulations.

Certificates of compliance are certificates which are issued by the Commission to indicate that after construction of a building, subdivision, development, etc., has been completed, or a use in an existing building, subdivision, development, etc., has been changed, the purpose for which the proposal was constructed is being carried out in accordance with the terms of the zoning regulations. This is a check and balance system on the zoning procedure. It means that an inspection has

indicated that the use being carried on at the time of occupancy or operation or that conditions of the proposal at the time of completion meets all applicable requirements and legitimately can be conducted. No structure can be occupied ar no use or sales can be undertaken until a certificate of compliance has been issued.

IV. ENFORCEMENT OF ZONING

The earliest zoning regulations reflected the conviction that control of land use involves administrative problems which are different than those prepared by other kinds of public restrictions on conduct.

Zoning regulations commonly provide for criminal penalties, but this customary and uncomplicated method of enforcement does not play a major role in zoning administration. Legislators, and the planners and attorneys who advise them, have assumed that zoning regulations pose a unique enforcement problem. Zoning regulations, to a greater extent that is true of other restrictions upon conduct impose singularly unequal burdens. It is believed that land-use restrictions are more technical than the generality of other public regulations. Finally, the accommodation of land uses is regarded as a peculiarly sensitive one which must be administered both deftly and tactfully.

The zoning offender commonly is a person whose contact with crime, if any, has been limited to an occasional traffic infraction. He is a contractor developing a tract of land by subdivision and construction. Or he is a landowner constructing a cottage as a second home. Such an offender, whether his alleged infraction is willful or inadvertent, seldom is regarded as a person to be punished. Rather h is regarded as one to be cautioned, cajoled, and, if necessary, forced into compliance with the zoning regulations through civil sanctions. The chores of enforcement and administration of zoning regulations are entrusted to civil officials, as in the case of LURC, to a 7 member Commission and its professional staff.

Zoning offenses are considered to be both specialized and technical. Zoning or land-use regulations are not run-of-the-mill rules which can be readily understood, articulated, and applied by persons who lack technical training. In addition, the application of regulations in the issuance of permits involves the use of judgment and sometimes discretion. Most systems of zoning administration meet this problem by providing for personnel with specialized training to participate in the permit-issuing function, by authorizing an administrative appeal from permit or other enforcement rulings, and by interposing a quasi-judicial administrative step in the issuance of certain permits.

The harm which is caused by a zoning infraction may be peculiarly difficult to repair. Because the cure is cumbersome and costly, zoning administration is aimed toward prevention. Zoning offenses are discouraged by requiring the issuing agency to review the application for a building permit to determine whether the planned building will comply with the zoning regulations, or by prohibiting the issuance of a building permit until the issuing agency has reviewed the application and certified to its compliance with zoning regulations. Additional insurance is provided by many statutes through a requirement that the landowner acquire a certificate of compliance before use of a new building is

commenced. Thus, these requirements give two chances to detect and prevent potential violations of the zoning regulations. The persons entrusted with the issuance of such permits under a well-administered statute are persons qualified by training and experience, and conversant with the zoning regulations and the relevant statutes. They review each proposed use or structure in relation to the zoning statute, the building code, and other applicable zoning or land-use regulations. They refuse to permit construction or use which would violate any of these restrictions.

Literal enforcement is rare where zoning regulations are concerned. Nearly every unit of government having zoning has created an administrative board, sometimes called a board of adjustment, with power to adjust the burden imposed by the regulations, through the granting of variances and/or special exception permits. Such boards, designed to supply the specific needs of zoning administration, have become the most important single feature of zoning administration and enforcement. In the LURC statute, the Commission serves the function of such a board.

V. SUMMARY

In summary, it is evident that no one function of the comprehensive land-use planning-zoning process exists of and by itself--indeed, to isolate any one function, whether by oversight or legislative fiat is to destroy both the fabric and the spirit of the process. By extension, it is likewise evident that any fragmentation of the duties and functions of the Land Use Regulation Commission is contrary to sound professional planning and zoning practice, and would destroy both the fabric and the spirit of the law that established the Commission.

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Bosselman, Fred and Callies, David; The Quiet Revolution in Land Use Control; prepared for the President's Council on Environmental Quality, 1971

Delogu, Orlando and Gregory, David; Planning and Law in Maine (4 parts); Maine Agrucultural Experiment Station Bulletin; 1967-68

Heeter, David; Toward a More Effective Land Use Guidance System: A Summary of 5 Major Reports; American Society of Planning Officials; 1969

Smith, Herbert H.; The Citizen's Guide to Zoning; Chandler-Davis Publishing Co; 1970

Smith, Herbert H.; The Citizen's Guide to Planning; Chandler-Davis Publishing Co.; 1972

APPENDIX Q

A copy of T.5, MRSA C. 311, the "Maine State Planning Act".

PART 8

STATE PLANNING

CHAPTER 311

STATE PLANNING

§ 3301. Title

This chapter shall be known and may be cited as the "Maine State Planning Act."

1968, c. 533, § 1.

Amendments:
—1968. Chapter new.

§ 3302. Definitions

The following terms shall have the following meanings, unless a different meaning is plainly required by the context:

1. **Comprehensive planning.** "Comprehensive planning" includes, but is not limited to:

A. Preparation of long-range plans and goals for human and physical resources development and utilization;

B. Programming and financing plans for capital improvements;

C. Coordination of related departmental plans;

D. Intergovernmental coordination of related planning activities;

E. Preparation of regulatory and administrative measures in support of paragraphs A to D;

F. Continuing analysis of the economy of the State.

2. **Council.** "Council" means the State Planning Council as provided in section 3306.

3. **Director.** "Director" means the State Planning Director.

4. **Office.** "Office" means the State Planning Office as provided in section 3303.

1968, c. 533, § 1.

Amendments:
—1968. Enacted this section.

§ 3303. State Planning Office

There is established to carry out the purpose of this chapter a State Planning Office in the Executive Department which shall be concerned with coordinating and developing the several planning responsibilities of the State Government.

1. Responsibility. A system of state planning and implementation being a function and responsibility of the executive branch of State Government, the State Planning Office shall be directly responsible to the Governor, and

to executive Bureau

shall serve as an advisory, consultative, coordinating, administrative and research agency as specified in section 3305.

1968, c. 533, § 1.

Amendments:
—1968. Enacted this section.

§ 3304. State Planning Director

1. Director. The executive head of the State Planning Office shall be the director and shall be appointed by the Governor with the approval of the Executive Council and shall hold office for a term of 5 years. The director shall be paid a salary fixed by the Governor and Council.

2. Qualifications. The director shall be qualified by education, training and experience in planning or public administration with a master's degree in these or related fields.

3. Powers and duties. The director shall exercise the powers of the State Planning Office and shall be responsible for the execution of its duties. The director shall:

A. Appoint and remove the staff of the office and prescribe their duties as may be necessary to implement the purposes of this chapter. Professional employees authorized by this chapter shall be hired as unclassified employees. All other employees shall be subject to those civil service and personnel policies established for state employees generally and shall be paid salaries at rates of pay comparable to those of state employees with equivalent responsibilities in other state agencies.

(1) The State Planning Director is authorized to employ professional planning personnel competent by education, training and experience in the fields of economics, local and regional planning, urban renewal, human resources, natural resources, transportation and engineering.

(2) The director is authorized to employ such statistical, clerical and other office help as required and authorized by the budget.

B. Supervise and administer the affairs of the State Planning Office and advise the Governor, the Legislature and the State Planning Council with respect to matters affecting state, regional, and community planning generally and more specifically the extent to which the State should participate in such planning.

C. Serve as secretary of the State Planning Council or designate a staff member of the office to act in his stead.

D. Advise the State Planning Council of the activities of the office and submit to the council for its consideration and advice the Maine Comprehensive Plan or any phase or part, amendment, revision or deletions thereto.

E. Advise the Governor, the State Planning Council, and other officials of the State Government on all matters of state-wide planning and consult with them in respect to planning matters and projects which affect the future plans of the State.

F. Be assisted by departments, agencies, authorities, boards, commissions, other instrumentalities of the State or other governmental units in the gathering of information, reports and data which relate to state planning. The State Planning Office shall designate staff members of the office who shall work with the several departments.

G. The director may act for the State in the initiation of or participation in any multi-governmental agency program relative to the purposes of this chapter.

H. The director shall prepare and submit for executive and legislative action thereon the budget for the State Planning Office.

I. The director shall make reports at least annually to the Governor and to the Legislature on the activities of the office and, after consultation with and approval by the Governor, submit such recommendations for legislative action as deemed necessary to further the purposes of this chapter.

1963, c. 533, § 1.

Amendments:
—1963. Enacted this section.

§ 3305. State Planning Office

1. Powers and duties. The State Planning Office shall:

A. Technical assistance. Provide technical assistance to the Governor and the Legislature in identifying long-range goals and policies for the State.

B. Maine Comprehensive Plan. Prepare and from time to time revise and perfect a comprehensive plan or plans for the physical development of the State which plan or plans shall be known as the Maine Comprehensive Plan. Such comprehensive plan, with any accompanying maps, plats, charts and descriptive matter, shall be designed with the general purpose of guiding and carrying forward such coordinated, effective and economic development of the State, with due respect to its topography, resources and its present needs and future possibilities, as will best promote the health, safety, order, convenience, welfare and prosperity of the people. Among other things, such comprehensive plan shall tend to bring into suitable relation the use of land, soil, water and natural resources; the location and distribution of population and habitation; the quality of the natural and man-made environment; agriculture and forestry, recreational resources, facilities and opportunities; fishing and mining; trade and industry; ports, highways, airways and every form of transportation, travel and communication; public instrumentalities of every description, whether publicly or privately supported, water supply and disposal of sewage; and all such other developments and uses as will tend to avoid waste of the human, financial and physical resources of the State and to promote the above purposes through guidance of and assistance to private activities and public programs at all levels of government.

C. Economic analysis and planning. Conduct continuing economic analysis of the economy and resources of the State of Maine, collect and collate all pertinent data and statistics relating thereto; participate in establishing a data and statistics center for making such material available in useful form; and assist the Governor, the Legislature and the various state departments in formulating economic goals and programs and policies to achieve such goals.

D. Planning assistance. Upon request provide technical assistance to local and regional planning groups in the fields of planning, public housing and urban renewal. The State Planning Office may assist in forming regional planning commissions and councils of governments and may assist with financing the cost of operation of such regional planning commissions established under Title 30, sections 4501 to 4503, and of councils of governments empowered under Title 30, section 1983, subsection 3. Participation shall be limited to half of the nonfederal share of a federally assisted project or ⅓ of a nonfederally assisted planning operation.

E. Inter-governmental planning. Participate with other states or subdivisions thereof in interstate planning, and assist cities, towns, municipal corporations and regional planning commissions to participate with other states or their subdivisions in planning.

F. Assistance to public or citizens groups. The State Planning Office may assist in planning and executing any public or private project in-

volving grants or loans; advise, confer and otherwise cooperate with municipal planning boards, agencies, officials, civic and other groups and citizens in matters relating to urban renewal, zoning and planning relating to schools, housing, health, land use controls and other objectives.

G. Coordinating agency.

(1) The State Planning Office shall act as the coordinating agency between the several officers, authorities, boards, commissions, departments and divisions of the State in matters relative to the physical development of the State, and review the proposals of said agencies in the light of their relationship to the comprehensive plan and incorporate such reviews in the reports of the office.

Nothing in this section shall be construed as limiting the powers and duties of any officer, authority, board, commission, department or political subdivision of the State.

(2) Provide general coordination and review of plans in functional areas of State Government as may be necessary for receipt of federal funds.

1969, c. 382, § 1.

2. Administrative responsibilities

A. Staff. The State Planning Director is authorized to employ staff as described in section 3304, subsection 3.

B. Consultant services. The State Planning Office, with the consent of the Governor, may employ such expert and professional consultants, and contract for such research projects, as it deems necessary within the limits of the funds provided and consistent with the powers and duties of the office.

C. Agreements. The State Planning Office is authorized and empowered to enter into such agreements with the Federal Government and other agencies and organizations as will promote the objectives of this chapter.

D. Acceptance of funds. Funds from the Federal Government or from any individual, foundation or corporation may be accepted by the State Planning Office and expended for purposes consistent with this chapter.

1968, c. 533, § 1.

Amendments:
—1969. Subsection 1, D: Added references to councils of government in 2nd sentence.

Law Review Commentaries
Suggested Revisions in Maine's Planning and Land Use Control Enabling Legislation. (1968) 20 Maine L.Rev. 175.
—1968. Enacted this section.

§ 3306. State Planning Council

1. Appointment. The Governor shall appoint a State Planning Council of not to exceed 15 members to advise the Governor and the director on policy matters as specified in this chapter.

2. Membership. The State Planning Council shall be appointed by the Governor with the advice and consent of the Executive Council and shall consist of representatives drawn one each from the fields of health, education, natural resources, transportation, local and regional planning, and commerce and industry; at least 3 citizens-at-large; and the Speaker of the House and President of the Senate, or their designees, as members ex officio. Terms of office shall not be in excess of 4 years except that initial appointments shall be for 1, 2, 3, and 4 years. The members shall serve without compensation but be reimbursed for necessary expenses incurred in the performance of their duties. The chairman of the State Planning Council shall be elected annually by the council.

3. Duties. The State Planning Council shall meet at least twice each year and at other times at the request of the Governor. In addition, the chairman

shall call a meeting of the council whenever requested to do so by the State Planning Director or by any 4 members, or he may do so on his own initiative.

1968, c. 533, § 1.

Amendments:
—1968. Enacted this section.

§ 3307. Limitation

Nothing in this chapter creating a State Planning Office and State Planning Council shall operate to restrict, limit or alter planning powers conferred upon state agencies, state agency heads, instrumentalities of the State, regional planning agencies or municipalities by any existing law except as provided in this chapter.

1968, c. 533, § 1.

Amendments:
—1968. Enacted this section.

APPENDIX R

A Copy of the Programs of the U.S. Environmental Protection Agency

ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency was established on December 2, 1970, by Reorganization Plan Number 3 of 1970. This reorganization provided for consolidation of pollution control and abatement activities which previously were assigned to several departments and agencies.

Operations, Research, and Facilities

Five major activities are supported under this appropriation.

1. *Research and Development* – This activity includes research concerning the effects of pollutants on man and the environment and the processes which influence the movement, dispersion and fate of pollutants; and it includes research and development leading to new and improved analytical methods and instruments for detecting and measuring pollution and to new and improved technology for preventing and controlling pollution. Research and development activities are conducted through grants, contracts, and other agreements with universities, industries, other private commercial firms, non-profit organizations, state and local governments, and other federal agencies as well as through research and development at EPA's laboratories and field locations.

2. *Abatement and Control* – This activity includes EPA's pollution control efforts in support to and in cooperation with state and local agencies, as follows: development of environmental standards and related guidelines and regulations; conduct of monitoring and surveillance to keep appraised of pollution conditions; grant support for state and local pollution control planning; direct pollution control planning; grant support for development and operation of state, regional, and local pollution control programs; provision of technical assistance to pollution control agencies and organizations; assistance to other federal agencies in bringing their facilities into compliance with environmental standards and ensuring that their activities have minimum environmental impact; and support for and conduct of training to improve the skills of pollution control personnel and to increase the supply of trained pollution control manpower.

3. *Enforcement* – This activity includes EPA's efforts to achieve compliance with environmental standards and regulations in air, water, and pesticides products. Much of the effort is in support of or in cooperation with state and local enforcement programs, such as in enforcement of ambient air quality and air stationary source standards; navigable and interstate water quality standards; and permits under the Rivers and Harbors Act of 1899; while some efforts involve primarily federal responsibility, such as in enforcement of air mobile source standards and pesticide product registrations. Enforcement includes such actions as notices of violation, abatement orders, enforcement conferences, civil and criminal court actions, and, in the case of pesticides, recalls and seizures.

4. *Facilities* – This activity provides for construction of laboratory facilities and alterations, repairs, and improvements to existing facilities.

5. *Agency and Regional Management* – This activity provides for top-level management of EPA through the administrator's immediate office and the immediate offices of the regional administrators and for administrative support to the program activities through the Office of Planning and Management and its regional counterparts.

Research and Development

Air

The air research and development program encompasses (1) research on the effects of air pollutants on man, animals, plants, materials, and the general environment, (2) research on the processes, such as dispersion that affects air pollution, (3) the development of new and improved sampling and analytical methods and instruments for measuring air pollutants, and (4) the development and demonstration of new and improved technology for preventing and controlling air pollution.

The research on pollution effects and processes is directed toward development of adequately protective but economically feasible air quality and emission standards. The specific information developed by this program provides the basis for establishing and revising such standards. The analytical methods and instrumentation development is focused on providing improved methodology for monitoring air quality and air emissions to enable surveillance of air quality and emission standards. The development of control technology is directed toward providing effective and feasible means for complying with air quality and emission standards.

Regional air pollution study – The Clean Air Act, as amended, requires the development and adoption of state plans for implementation of ambient air quality standards. Among other things, these plans are to set forth emission standards for all significant sources within each designated air quality region based on a determination of the impact that the emission from each source has on air quality of the region. To make such determination requires a complex analysis of the dispersion, mixing, travel, decay, and atmospheric reaction of the pollutants discharged by each

source and analyses of the influencing atmospheric processes. From these analyses it is possible to assess the impact that emissions from each and all sources have on air quality at points throughout the region and to develop therefrom the limitations to be placed on individual sources to enable compliance with the ambient air quality standards.

Currently, the methods available for making such analyses and thereby developing implementation plans having a high probability for achieving standards compliance are relatively crude and embody only first-order precision. Although these current methods are deemed adequate for development of the first generation plans to be adopted during 1972, it is quite clear that future growth and concentration of pollution-causing industry and residential and commercial sources and activities will require analytical methods having greater precision to enable effective revision of state implementation plans. To provide such methods, EPA plans to embark on a multi-year regional air pollution study.

Preliminary work for this study was accomplished in 1970 and 1971 but the follow through work had to be deferred in 1972 to meet the many time-constrained requirements of the Clean Air Amendments of 1970. Nevertheless, a significant amount of support research in atmospheric processes and analytical methods development was accomplished in 1972.

An increase in fiscal 1973 funds was requested to initiate the development of an air pollution model for each of three metropolitan areas having different meteorological/air pollution characteristics. Each model will enable the correlation of air emissions with ambient air quality and ambient air quality standards and thereby provide a tool for establishing fully-effective, least-cost abatement strategy for the area and other areas of similar character. The first model will be developed for St. Louis and the others will be started six and 12 months later in two other dissimilar areas. The development of each model will involve a comprehensive source inventory, pollution and meteorological measurements and data analysis, and model development and verification. These models will be superior to the techniques now used to establish air emission limitations for specific sources and other aspects of abatement strategy.

Pollution effects research — A vital element of EPA's air program is the air pollution effects research program. The objective is to produce the body of scientific knowledge necessary to support development of adequately protective but not unreasonably restrictive air quality standards. Research by EPA and its predecessor in the air program has provided the body of knowledge on which present primary and secondary ambient air quality standards for particulates, sulfur oxides, nitrogen oxides, hydrocarbons, photochemical oxidants, and carbon monoxide have been set. Even though this knowledge has been deemed sufficient to support these standards, it is by no means fully complete. Further work is essential to provide the basis for sustaining or revising present ambient air quality standards so that the Nation might have a set of standards that are fully adequate to protect human health and the environment.

The air pollution effects research program has made progress in eliminating the detrimental effects of air pollution on human health. This has been primarily accomplished by, but not limited to, the Communities Health Effects Surveillance Studies (CHESS), the characterization of emissions from motor vehicle fuels, their additives and their health effects, and the research on biological systems, both human and animal, to assess the effects of air pollutants. The expansion of these efforts in 1973 will increase the base of scientific information presently available so as to provide a better understanding of exposure effects and thereby result in setting or revising standards with greater confidence.

An increase of $5,270,700 was requested to expand the collection of scientific information on the effects of air pollutants on human health and welfare. A series of epidemiological investigations in urban settings, where known exposure to air pollutants exists, will be conducted, expanding on the current CHESS program. In addition, direct studies on human and animal exposures under laboratory conditions along with further studies of human populations exposed to particular kinds of stationary source emissions (power plants, incinerators, etc.) will be conducted. This research expansion in the air health program will provide EPA with scientifically sound data for development and revision of criteria and standards for air pollutants and for appraisal of the effectiveness of environmental standards already promulgated in protecting human health. This health data also will enable the agency to reduce the true social costs of air pollutant exposure by providing firm quantitative information on the contribution of air pollutants to diseases of major public health importance.

Pollution processes research — Pollution processes research in the air program is one aspect in trying to understand how various air pollutants impact on man's health and welfare. This research deals with a combination of (1) the processes of dispersion, transformation, and ultimate disposition of pollutants in the atmospheric transfer cycle from source to receptor, and (2) atmospheric chemistry and physics. Atmospheric chemistry and physics are the basis for pollution control strategies. Knowledge of the details of how pollutants react with each other, with the permanent atmospheric gases, with the sunlight, and with the hydrosphere and biosphere is required.

A decrease of funds for this activity has been accomplished through completion in 1972 of the more significant theoretical modeling efforts, model tests, and monitoring and field tests which have direct application to work being conducted under the air pollution effects research program and the regional air pollution study. A base program will be available in 1973 to continue necessary research in order to (1) estimate the relationship between arbitrary distributions of pollutant sources and the resultant air quality; (2) evaluate the impact of air pollutants on weather and climate; (3) provide a description of the roles and interrelationships of atmospheric processes and ecology in effective air, water, and land resource management; and (4) define the chemical and physical production and/or decay or removal of pollutants of importance in the atmospheric.

Analytical methods – Proper enforcement of air quality standards that have been or will be promulgated under the Clean Air Act requires a capability to determine the concentrations of pollutants in both the ambient air and at the sources of the pollutants. The measurement of pollutants depends on the availability of standardized and calibratible instrumentation and/or methodology for measurement. These methods or instruments must be made available to federal, state, and local control agencies for routine monitoring of ambient air (for the achievement of the National Ambient Air Quality Standards) or pollution sources (to enforce controls on stationary and mobile source emissions). In addition, these measurement methods, both manual and instrumental, support such research activities as the CHESS program.

Particulate control – One aspect in the prevention and control of air pollution is the development of effective and practical processes, methods, and prototype devices for meeting the national ambient air quality standards for particulates. Currently, technology is inadequate for the removal of fine particulates of particle sizes two microns or less. Since a substantial part of the physiologically active particulates is concentrated in these fine particulates and since the fine particulates are very slowly removed by natural processes, there is a need for R&D to improve present control devices and measures to cope with this fraction of the particulate emissions. Fine particulates are chiefly implicated in health and welfare effects. The objective of the program is to provide the basis for setting new standards for fine particulates should these prove necessary.

During 1972, efforts in this program have consisted of the program planning activities required to attack the problem, maintain cognizance of technology development elsewhere, and accomplish limited theoretical studies.

The expanded effort in 1973 will undertake more in-depth theoretical studies, including mathematical modeling of electrostatic precipitation (ESP), and bench-scale laboratory tests to verify theoretical studies and to gather basic engineering data on fabric filter characterization, wet scrubbing techniques and ESP designs. Through a process of pilot-scale demonstrations on those systems having the greatest commercial potential, users of these devices will have sufficient data for selection, design, costs, and operation of particulate control devices.

An increase of funds was requested to (1) expand and accelerate research on wet scrubbing, electrostatic precipitation, and fabric filtration particulate control devices to increase their efficiency and applicability, particularly for the control of fine particulates; (2) characterize and quantify the fine particulate control capability of conventional control equipment currently being evaluated; and (3) quantify the collectibility of fine particulate and particulate in the presence of difficult-to-handle co-contaminants. The control of fine particulate (chiefly implicated in health and welfare effects) will consider both increasing the efficiency of existing techniques and initiating research on novel approaches to the problem.

Sulfur oxides control – Approximately 75 percent of sulfur oxide emissions originate from fossil fuels combustion in stationary sources. EPA, in its role of carrying out research and development for the prevention and control of air pollution, includes research and development into new and improved methods for attacking pollution from the combustion of fuels. Improved, low-cost techniques having industry-wide application are required for (1) removal of potential air pollutants from fuels prior to combustion; (2) improvement in the efficiency of fuel combustion to reduce the formation of pollutants; and (3) removal of pollutants from flue gases after combustion.

In 1972, development and demonstration of ongoing clean fuels projects will be accelerated. These projects include the mechanical and chemical desulfurization of coal, molten iron combustion which partially burns coarsely ground coal in a molten bed of iron and traps the sulfur, in the form of hydrogen sulfide, in the slag together with coal ash, and the fluidized gasification/desulfurization of residual oil. A second result will be the intensified development and adaptation of flue gas cleaning technology to the industrial source sector. Part of this effort is the Agency commitment to demonstrate six flue-gas treatment techniques, one of which (dry limestone injection) has been completed.

During 1973, efforts will be broadened to achieve (1) product emission control capabilities for industrial and area combustion sources which have a primary effect on ambient air quality; (2) improve, second generation control capabilities for large combustion sources; and (3) control for specific industrial processes which are major emission contributors in specific localities.

Nitrogen oxides control – The control of nitrogen oxides emissions is an achievement in solving the health problems of the cities. On a national basis, 65 percent of these emissions are from sources other than motor vehicles. In some air quality regions, complete elimination of all motor vehicles may not reduce nitrogen oxides enough to achieve ambient standards within the time frames set by the Clean Air Act. Control technology for nitrogen oxides is still at an early stage of development. Further work is essential to provide the body of knowledge necessary to advance the state-of-the-art for attainment of ambient air standards in a number of regions.

Previous efforts in this area involved basic research and development of potential aqueous absorbants. Expansion of combustion modification research and development will generate considerable data on combustion kinetics, the practicality of combustion modification and techniques such as flue gas recirculation, staged combustion, and low-excess-air firing. The data will be reduced to specific combustion system hardware through applied research and development utilizing bench, pilot, and demonstration test units to define technical and economic feasibility.

An increase in funds was requested to expand combustion modification research and development in two broad areas: (1) field testing and fuels research and development, covering mechanisms and chemistry of Nox production, and (2) process research and development studies covering application of theory and field testing findings to specific combustion system hardware.

Other pollutants control – The Clean Air Act authorizes national emission standards for hazardous pollu-

tants (NESHAPS), new source performance standards (NSPS), and national ambient air quality standards (NAAQS). Standards are currently based on the best available technology. Subsequent standard setting for new pollutants or sources, or revision of current standards, probably will require the development and demonstration of improved control techonology by EPA. Currently, there exists little knowledge of technology to control emissions of the most hazardous pollutants such as asbestos, mercury, and beryllium. Better techniques and information are needed to allow more comprehensive standards to be set for these pollutants.

Preliminary work for this program emphasizes investigations and development of control technology for odors and products of incineration and planning studies for hazardous pollutants. Current technology for controlling emissions of hazardous pollutants (asbestos, mercury, and beryllium) from some sources is limited.

In 1973, the program will be expanded to include investigating at bench-scale, multiple approaches to odor control, and initiating pilot-scale and demonstrations work on control technology for asbestos, mercury, and beryllium.

An increase in funds was requested to initiate research and development projects on control technology. These projects will include (1) characterization and quantification of the hazardous pollutant control capability of ongoing or planned control system projects for combustion and industrial processes, and (2) extension and acceleration of studies on specific industries and pollutants in order to quantify the pollutants emitted and the degree of control currently available. The output of these efforts will support more comprehensive standards to be set for hazardous pollutants.

Land use planning – Recent federal legislation recognizes the need to control and prevent air pollution through urban and transportation planning actions. The need for this program is to ensure that air pollution control needs are objectively considered in the design and function of urban land use and transportation planning systems. Facets of transportation and land use planning will be investigated and incorporated into the planning guidelines which are issued to the state for their use.

An increase was requested to expand ongoing efforts in formulation and issuance to the state of planning guidelines and methodologies. The following topics will be covered in future guidelines: controlling the air pollution impact of regional growth through land use management; planning multi-model transportation systems; planning, locating, and designing buildings; developing legislation and conducting administrative studies to implement land use; and effecting transportation actions.

Mobile source control – An aspect of EPA's air program is the research, development, and demonstration of mobile source pollution control technology. The primary objective of this element is to provide direct proof that an unconventionally-powered low emission vehicle capable of meeting the 1975-1976 emission standards of the Clean Air Act can be produced by the mandatory dates or within a minimum extension of such dates. Several years of research have been devoted to this problem, providing the base of technical data from which has been identified the most promising alternative automotive power systems for meeting the 1975-1976 standards. Further work on such systems is essential to fully develop and commercially demonstrate a practical and mass-produceable low emission power system.

For the gas turbine and Rankine cycle engines, development of low emission combustors was carried out in an attempt to eliminate the principal problem which has blocked several industry-sponsored development efforts. For the stratified charge engine, second-stage prototype demonstration and testing was undertaken with the expectation that preproduction prototype demonstration can begin in 1973. In addition to these projects being conducted under the Advanced Automotive Power Systems (AAPS) program, testing and demonstration was begun on several entries received from private industry under the Federal Clean Car Incentive program (FCCIP). These proposals covered such systems as the diesel, hybrid Rankine cycle, heat engine-electric hybrid, internal combustion with thermal reactor, internal combustion with catalytic reactor, internal combustion with fuel reformer, and internal combustion with thermal coating. Evaluations will continue on any additional entries received under FCCIP.

Water Quality

The water quality research and development program embodies: (1) research on the effects of water quality on waters uses and on animal and aquatic life; (2) research on the processes which influence the movement, dispersion, and fate of water pollutants; (3) the development of new and improved sampling and analytical methods and instrumentation for measuring water quality and effluents; and (4) the development of new and improved technology for abating and preventing water prollution. The effects and processes research is oriented toward development of water quality and effluent standards. The analytical methods and instrumentation development is directed toward providing new and improved techniques for water quality and effluent monitoring and surveillance of standards compliance. The purpose of the control technology development is to provide effective and feasible methods for complying with water quality standards and regulations for the abatement and prevention of water pollution. Like the air research and development program, this is a "foundation" program providing the scientific knowledge and the technology for carrying out an effective national water pollution control program.

Great Lakes research – The United States is entering into an agreement with Canada on the control of pollutants discharged into the Great Lakes. In this agreement, the parties will both agree to programs which will make progress toward alleviation and prevention of water quality degradation in the Great Lakes. However, it is recognized that these measures will encompass only programs which can be carried out under present knowledge and available technology; this, the programs will not be capable of addressing many of the complex water quality problems afflicting the Lakes – problems such as some aspects of eutrophication and agricultural pollution.

In order to develop a continuing program that will ultimately lead to an attack on the array of water quality problems which affect the Great Lakes, it will be necessary to carry out an expanded program of research and investigation. Concerning eutrophication, a major source of water degradation throughout the Lakes, there are several areas of required investigation. The most important of these are a determination of the nutrient contributions of agricultural sources and the development or identification of feasible control techniques for these and other nonpoint discharges of nutrient pollutants. A systematic study of the water quality and pollution discharges in the upper Great Lakes is also needed. Finally, a series of planning and demonstration studies is needed to find solutions for a variety of difficult water quality problems, for the appropriate abatement actions are not now apparent.

A total of $4,000,000 is required for fiscal 1973 to address these research and investigation needs. Of this amount, $300,000 will fund the Upper Great Lakes Study and $200,000 the agricultural pollution study, both of which are in support of the U.S.-Canada agreement. $200,000 will fund EPA participation on the International Joint Commission with Canada. $1,600,000 of the total will be applied to agreements with state and local agencies to develop water pollution control plans and demonstrate new water pollution control methods and techniques. $1,700,000 of the total is to conduct eutrophication studies of the Great Lakes. The purpose of these studies is to determine sources other than point sources of nutrient pollutants and to set forth a solid program for pollution abatement and control for the future.

Effects and processes research – EPA has been involved in research to provide data and pertinent information for the establishment of water quality criteria that will provide a sound scientific basis for setting standards for such stream uses as public water supply, recreation, fish and wildlife propagation, agricultural supply, and industrial purposes. These uses are applicable to freshwater, saltwater, and estuarine areas. In-depth studies have been carried out to determine such parameters as the physical, chemical, biological, microbiological, pesticidal, and radiological effects on water quality when usage involves the areas mentioned above. Related to the effects of various pollutants in water are questions concerning the types, movement, and ultimate fate of pollutants in fresh surface, ground, marine, and large lake waters. Serious deficiencies exist in techniques for tracing pollutants and how they interact within the total ecosystem. This information is needed to relate the concentration and form of pollutants to the size, character, composition, and location of their sources in order to establish effective water quality standards, treatment, and control requirements.

The body of scientific data accumulated in 1972 and prior years has established a significant base from which critical water quality standards can be derived. This is not to say that the total problem has been solved, since the requirement definitely exists for much more research before the Nation can feel it has control of its life-giving waters. This research will be accomplished in 1973 at a minimum reduction in funding from the 1972 level.

Analytical methods – Abatement and control of water pollution through a combination of research, standard-setting, and enforcement is dependent upon the knowledge of exactly what chemical and/or biological pollutant is causing the damage. The means must be available to rapidly detect, identify, measure, and trace these pollutants so as to achieve their effective control. Sensors, and the necessary instrumentation to utilize these sensors, must be developed to detect the presence of pollutants and automatically make all pertinent measurements.

In the past, most of this program has been accomplished through in-house efforts. A decrease of $465,400 in fiscal 1973 has been made possible by a modification in policy to seek greater involvement of the private sector in instrumentation development; the rationale being to shift the responsibility for instrumentation involving treatment and control to the eventual users.

Effluent guidelines – Permits issued by EPA under the Refuse Act permit program (RAPP), will include effluent guidelines which specify the maximum quantity of effluent which may be released. Such guidelines must reflect perferred pollution control technology. Existing contracts are developing reports on the state-of-the-art of control technology for selected industries as a basis for developing effluent guidelines.

An increase of $1,950,000 was requested for fiscal 1973 to expand activities which provide the base of information upon which preferred pollution control technology can be defined. This includes those programs which characterize industrial control problems and the technological capabilities, both existing and under development, for their solution. The studies also will be used to define research and development needs for improving current technology.

Control technology – The objectives of water pollution control technology are to support the regulatory and standard setting activities of EPA and to develop and demonstrate new engineering technology to achieve more efficient water pollution control. This program is providing new techniques, processes and procedures for technically and economically improving present waste water treatment systems, and developing and demonstrating new techniques and processes for treatment and/or control of water pollution. This involves development of technology to reduce water-borne pollution emanating from municipal, combined sewer, industrial, agricultural, and other sources such as oil and hazardous materials and mining wastes.

A decrease of $4,927,600 is planned for fiscal 1973 reflecting a policy to place greater reliance on the private sector for development of new and improved wastewater treatment control methods. EPA will continue to carry out a base program in 1973 reflected in such on-going research, development, and demonstration projects as full-scale demonstrations of phosphorous removal, oxygen aeration, electrochemical chlorination and other processes for up-grading municipal waste treatment technology; demonstrations of processes to remove color from Kraft pulp mill wastes, chemical-biological treatment of joint municipal-industrial wastes and treatment of dye stuff and various organic wastes for industrial waste sources; research on controlling animal feedlot pollution, salinity

pollution, and land run-off drainage for agricultural wastes; a reverse-osmosis process for neutralizing acid mine drainage and a self-sealing permeable plug for closing mine entries to control acid mine pollution; and research on removing organic contaminants in the treatment of drinking waters.

Cold climate treatment technology will be addressed to completing the demonstration of and preparing the mandated report to the Congress on sanitary waste handling facilities for Alaska villages. However, the agency will expect (1) to obtain higher levels of participation by industry in cost-sharing demonstration projects, and (2) greater amounts of private research and development to meet the effluent requirements imposed by Refuse Act waste discharge permits and stipulations set forth in federal and state enforcement actions. This decrease will be primarily embodied in the industrial, advanced waste treatment, oil and hazardous materials, and mining control technology activities.

Water Hygiene

The water hygiene research and development program provides for research on the effects of water quality on human health and the development of analytical methods for assessing the quality of drinking and recreational waters and development of water treatment methods for noxious components of water for which current methods are ineffective. The objective of the program is to provide the scientific knowledge necessary for establishing drinking water standards and standards for recreational water use.

Pollution processes and effects — Considerable research remains to be done in expanding the body of scientific knowledge on the effects of water pollutants on human health in order to develop a sound base for establishing and revising drinking water standards and water quality standards for recreational and shellfish growth. To date, primary attention has been devoted to research on the health effects of bacterial constituents in drinking and recreational water. Too little attention has been given, however, to viruses and chemical constituents. With the increase in the amount and variety of chemicals, effective methods must be devised to remove these chemicals from water sources.

It was proposed for 1973 to maintain the water hygiene health effects at the same level as 1972, except for a small decrease of $41,000 which reflects nonrecurring equipment costs. Accordingly, epidemiological and short- and long-term toxicological research emphasizing the study of viruses, organic chemicals and toxic metals will be continued. Concomitantly with this work, the development of new and improved analytical methods, including rapid methods for identifying and measuring organic contaminants, will be continued.

Solid Wastes

EPA's research and development efforts in the solid wastes area concentrate on developing economically and environmentally sound methods of solid waste disposal including the perfection of sanitary landfilling and incineration; the development of an implementation plan for the disposal of hazardous materials; and improved understanding of solid waste problems and solutions by analyzing the sensitivity of waste management costs to institutional, system management, and technological change. Furthermore, as provided in the Resource Recovery Act of 1970, resource conservation studies and demonstration projects will be conducted to determine means for recovering materials and energy from solid wastes. The resource recovery demonstrations will be limited to those localities with proven markets for recovered materials and energy.

Pollution control technology — The solid waste program is shifting its emphasis from technology development to the upgrading of current solid waste management practices by assisting state and local agencies to overcome the problems of high cost and environmentally offensive disposal practices. Efforts will be directed toward evaluation and demonstration of municipal collection and storage systems, alternate transportation and waste reduction systems, and methods to control gas and water pollution associated with landfills. Support will be given to from 18 to 20 demonstrations of solid waste management systems at the state and regional level, emphasizing new institutional and financial arrangements.

Efforts in 1972 included research, development, and demonstration of new and improved technology for the collection, transportation, processing and disposal of municipal solid waste. Included are projects for the demonstration and evaluation of automated collection equipment, investigation of alternate waste transportation systems, evaluation of new combustion techniques, development of improved materials separation technology as an aid to resource recovery, and the demonstration of effective sanitary landfill management practices under a variety of climatic and geographic conditions. Also being undertaken are projects for development and demonstration of methods to recover energy and/or materials from solid wastes. These include demonstration of a pilot-scale material recovery plant which separates paper fiber, ferrous metals, and glass from municipal refuse and converts it into reusable, recyclable materials; demonstration of recovery of energy from the use of groundup refuse as a supplement to boiler fuel for producing steam-generated electricity; and demonstration of a system that utilizes hot gases directly to generate electricity.

In 1973, under the revised program strategy of applying existing proven technology and management practices to upgrade community systems, efforts to develop new technology will be reduced. However, selective increases are planned to initiate the demonstration of solid waste management systems. Another selective increase will support studies mandated by Section 205 of the 1970 Resource Recovery Act. These will be designed to improve knowledge of and ability to influence demand for resources that would result from recovery technology before investing heavily in new technical development. Studies required by the Act include a comprehensive analysis and evaluation of the feasibility of various tax and other economic incentives or disincentives, subsidies, depletion allowances, capital gains benefits, etc., to promote the recycling of solid waste materials and/or the

reduced generation of solid wastes. Studies contemplated for 1972 will consider means to create demand for waste-based raw materials and other waste materials and products through fiscal mechanisms and the economic and environmental impact of "virgin" versus waste material utilization. Five to 10 case studies of local market opportunities for recovered wastes will be initiated. Also planned for 1973 is continuation of two of the resource recovery technology demonstrations initiated in 1972 and initiation of two additional ones. These demonstrations will involve two to four year projects supported by federal grants authorized under Section 208 (1970 Resource Recovery Act). Each participating municipality will provide up to 50 percent of the cost of the demonstration. The emphasis will be on some form of energy recovery; at least one system will feature material recovery of municipal waste or a special waste, such as incinerator residue or abandoned vehicles.

Pesticides

EPA conducts an extensive research program on pesticides in the environment to determine more precisely the effects on human, animal, and aquatic life. A variety of clinical and behavioral studies are needed to determine the effects of various chemicals on particular organs, metabolic reactions, reproduction, and behavioral responses. Laboratory toxicological studies involving such activities as bioassays of aquatic animals and organisms also are necessary to determine both acute and chronic toxic effects of pesticides on freshwater and saltwater life. This effort is vital in providing knowledge of the levels and pathways of pesticide contamination and in supporting such other related programs as pesticide lable registration, especially since too little is known about the toxic hazards of most pesticide chemicals upon living matter. The program also includes research on new and improved pest control methods to further the search for environmentally safe alternative control techniques. This work is carried out in cooperation with the Department of Agriculture and the National Science Foundation.

Pollution processes and effects – EPA's pesticide programs include pesticide-label registration, residue tolerance setting, and technical assistance to state, local, and other federal agencies.

An increase of $65,200 was requested for 1973 to provide for an increase in personnel to strengthen the intramural research aspects of the program. Otherwise, a continuing-level program was proposed for 1973. This will include the continuation of controlled animal exposure studies using primates and rats as test animals. A variety of clinical and behavioral studies will be continued to determine the effects of various chemicals on particular organs, metabolic reactions, reproductions, and behavioral responses. Bioassays with aquatic animals and organisms will also be continued to determine both acute and chronic toxic effects of pesticides on aquatic life. This work will include studies with both freshwater and saltwater ecosystems.

Pest control methods – Increasing awareness of the adverse environmental impact of using chemicals to control pests has shifted the emphasis of research and development to seek alternative strategies for pest control management. It is apparent that safer and better methods must be developed for controlling pests if the possible side effects of such chemicals entering the environment are to be prevented.

An increase of $900,000 was requested to provide for expanded on-going research and demonstration of pest control management techniques. This work will be carried out jointly with the National Science Foundation and the Department of Agriculture and would involve the participation of university specialists in carrying out contract-supported research on new and improved pest control methods. Some of these possibilities are chemicals that disrupt pest behavior; specific insect diseases and viruses; development of crop plants resistant to insect attack; management of predatory and parasitic insect populations that feed on insect pests; and use of insect attractants to bring insects to traps or to poisons in containers.

Radiation

The radiation research and development program supports research on human exposure to and the health effects of both ionizing and non-ionizing radiation. This work is carried out in support of EPA's radiation standards-setting programs.

Effects research – Under the reorganization plan establishing EPA, the agency assumed federal authority to set generally applicable environmental radiation standards. In this role, EPA must conduct research on the health impact of radiation from all sources and monitor radiation in the environment.

Proliferation of nuclear power plants requires EPA to provide maximum assurance of safe population exposure to the principle radionuclides such as tritium, krypton, plutonium, and strontium released from nuclear power reactors and fuel reprocessing plants. Present standards for maximum exposure have not been experimentally evaluated. In addition, populations are extensively exposed to electromagnetic radiation from the communications industry. No standard exists for exposure of the general population to these non-ionizing radiations, especially at chronic low-dose levels. Research on molecular, biochemical, genetic, and functional changes induced by electromagnetic radiation exposure must be conducted to provide an adequate base of health effects data for appropriate regulatory action. The knowledge obtained in this program through community and biomedical studies will relate toxicological information to radiation exposures of the population and will provide health effects information for the setting and appraisal of radiation standards.

In 1972, studies were conducted to determine the effects of exposure to Iodine 131 from fall out and therapeutic doses, to radon and to Cesium 137 in milk. Fundamental research studies were conducted on the adverse effects of radiation on cells and on the environmental pathways by which strontium and tritium – two hazardous radionuclides emitted by nuclear reactors and nuclear fuel reprocessing plants – may reach man. Investigation is being conducted on the possible synergistic or additive effects of environmental agents such as viruses, heavy metals such as methyl mercury and cadmium, and

chemicals like DDT and NTA on the effects of radiation. Enhancement or mitigation of radiation effects by these agents must be determined in the establishment or modification of radiation protection guides and standards. Potential nuclear testing activities are under investigation. An understanding of the behavior of selected radionuclides in man's food chain and in his environment is required if adequate nuclear testing criteria and radiation protection standards are to be established. In addition, dose exposure of communities located adjacent to large sources of radionuclides and electromagnetic radiation will be defined and long-term effects of human exposure to ionizing radiation will begin to be documented through epidemiological studies of populations with known high-level exposure.

Noise

The noise research and development program encompasses research on human exposure to noise and on the effects of noise on human health and well-being. These efforts are directed toward providing the scientific base which could eventually be used for establishing noise standards. The program also includes research on methods to control noise so as to provide the means for abating and preventing noise pollution.

Pollution effects — In accordance with the Noise Pollution and Abatement Act of 1970, EPA has established a noise program to investigate and study noise and its effect on the public health and welfare. Standards for noise emanating from many processes and products may be established in the near future. Except for hearing loss, the needed health effects information for these standards is inadequate. Behavioral effects are less well documented and the full impact of noise upon stress-related disorders, including cariovascular diseases is unknown. Noise standards based solely upon hearing loss would ignore the potentially costly health effects.

In 1972, an effort was completed to discover, assemble, and organize all existing information on the adverse effects of noise.

An increase of $205,000 was requested for fiscal 1973 to initiate research on human exposure to noise and the effects of noise on human health and well-being. Efforts will be directed toward developing the scientific information necessary for ultimately establishing noise standards. On-going efforts will continue on three noise effects studies initiated in 1972: (1) community noise scale development; (2) an individual exposure study; and (3) an economic impact study.

Pollution control technology — Sources of noise must be identified and classified in order to develop a basis for establishing criteria for overall noise abatement and control. Such criteria are necessary to support EPA's responsibility under Section 402 (c) of the Clean Air Act, as amended, to provide guidance and technical assistance to other federal agencies in their noise control efforts. Noise sources may be generally classified as construction equipment and operation, transportation vehicles and aircraft, other equipment powered by internal combustion engines, building equipment and appliances, and industrial plants. Little is known of the atmospheric and climatological effects upon attenuation of noise; especially low frequency noise. Research must be conducted to seek new approaches to control noise both at its source and in the propagation path between the source and the receiver. The thrust of this effort will be accomplished through such means as measurement of noise and vibration generation levels, design and application of noise suppression devices and design modification to noise producing sources.

In 1972, a literature search to determine the state-of-the-art of noise control technology was completed.

During 1973, studies will be undertaken to determine the extent to which presently available noise abatement and control technology is being applied to alleviate the sources of noise. Investigations also will be carried out to determine the technology that will be required to develop effective means of suppressing noise at its source and in its path to the receiver.

Interdisciplinary R & D

The interdisciplinary research and development program embodies those research activities which cut across media and categorical lines to provide solutions to multi-media problems. This program includes ecological and economics research, technology forecasting, technology transfer, and basic research on the effects of toxic materials. These activities are focused on providing the basic information and analytical tools necessary for developing effective, comprehensive environmental protection strategies.

Implementation research — The core of EPA's role in combating environmental pollution is the development of standards, regulations, and abatement strategies. As more highly technical standards and complex regulations are issued by EPA, the task of determining the appropriate emissions and ambient reduction to minimize environmental damage becomes more difficult. An important ingredient in EPA environmental pollution control planning strategies is the cost and effect of such pollution. Only limited in-depth work has been done utilizing a systems approach to evaluate the environmental and ecological impacts of pollution. In addition, another important aspect involves consideration of the impact of future environmental technological development.

An increase of $1,137,900 was requested to expand the on-going implementation research program and provides for development of: (1) improved analytical methods required to perform cost/benefit and cost/effectiveness studies related to standards research and ecological impacts of human activities; (2) increased standards research by expanding the Regional Air Pollution Study of St. Louis to determine the least-cost strategy for meeting air quality standards and determining the feasibility of integrating the standard setting procedures for each media; (3) analysis to determine the relative benefits and costs of pesticides regulations; (4) increased research efforts in the ecological impact area in support of agency reviews of environmental impact statements by developing reproducible measures of environmental quality and methods for efficient data collection and analysis; and (5) research in greater depth on the cost and benefits of environmental improvements, to support the cost of Clean Air

and Water reports, with improved methodology and interpretation of data on cost and benefits.

Environmental studies research – Environmental management and policy has historically focused on specific, limited problem areas and on the direct, short-term effects of pollutants upon the physical and biological environment. Little attention has been given to developing the tools for long-range forecasting of environmental quality or for evaluating the impact of environmental actions upon society as a whole.

Environmental studies research is concerned with developing a comprehensive view of the environment so that, through research, environmental management and policy may be improved. The long-range focus of the program will be directed toward the development, evaluation, and use of forecasting methodologies. Also involved will be study of the implication of institutional change on the environment and the impacts of environmental actions on the society at-large, including its institutions.

An increase of $585,700 was requested to expand the environmental studies research program that was initiated during late 1972. In 1973 the program will start a number of activities in areas such as long-range impacts on the environment, institutional and policy research, and alternative futures.

National Center for Toxicological Research – The National Center for Toxicological Research (NCTR) is being developed jointly by the Food and Drug Administration and EPA as a national facility to study the long-term effect of low doses of chemical toxicants. Past research efforts associated with chemical toxicants and their effects on man and the environment have been oriented toward investigation of highly concentrated doses. Concern has arisen in the scientific community regarding the possibility that much more severe damage to man and the environment may be occurring through low dose exposure to chemical toxicants over a long period of time. Research must be undertaken to evaluate such cumulative, low-dosage effects.

During 1971 and 1972, EPA participated with the FDA in converting the facilities made available by the phase-out of biological warfare efforts at the Army's Pine Bluff Arsenal. Demilitarization of this facility should be completed early in 1972. In 1973, testing will be initiated to study the biological effects of potentially toxic chemical substances found in man's environment. Research projects will be undertaken to: (1) determine the adverse health effects resulting from long term, low-dose exposure to chemical toxicants; (2) determine the metabolic processes for chemical toxicants in animal organisms; (3) develop improved methodologies for evaluating the safety of chemical toxicants; and (4) develop scientific research data that will facilitate the extrapolation of findings from animals to man.

Technology transfer – The successful completion of a research, development, and demonstration project does not necessarily mean that the end item or process will automatically find its way to proper application in controlling pollution. This program is specifically designed to bridge that gap. It will complement and facilitate conformance with the Refuse Act permit conditions, new enforcement standards, construction grant regulations, and other regulatory requirements which themselves serve as strong inducements to adoption of new technology. This program to date has been limited to the field of municipal wastewater pollution control.

An increase of $518,200 was requested to provide for expanded development of design manuals and guidelines, technical bulletins and seminars for use by consulting engineers, designers, inspectors, state and local engineers, and others directly involved in placing pollution abatement technologies in operation. The additional funds also will enable EPA to expand this effort into an integrated program for transfer of technology in all environmental pollution control fields. This increased emphasis will be directed to the development of process design manuals for industrial waste treatment processes and a technology transfer program for both air and solid waste pollution.

Program Management and Support

This activity encompasses overall management of and support for the Research, Development, Demonstration and Monitoring program activities administered by the assistant administrator for research and monitoring. The resources involved are utilized for program management and support. Program management covers the managerial functions necessary to overall direction and administration of EPA's research and monitoring (R&M) program. This includes program policy, strategy development, program review, and headquarters-level direction of program activities. These program management resources are not involved with the direct supervision of specific program activities, those functions being covered by resources within the respective program areas. Further, these program management resources do not encompass the functions of EPA management which are covered by agency and regional management, described in a later section.

Program management resources provide for staffing of the immediate offices of the assistant administrator for research and monitoring, deputy assistant administrator for research, deputy assistant administrator for monitoring, deputy assistant administrator for program operations, and divisions of this office.

These resources also cover: (1) R&M headquarters division directors and branch chiefs and their immediate staffs, (2) directors of the four National Environmental Research Centers (NERC's), (3) the director of the Western Environmental Research Laboratory, (4) directors of the various research laboratories associated with the NERC's and (5) the immediate offices of these directors and the general support staffs at these locations. Also included are the regional R&M liaison staffs located at each of the agency's ten regional offices.

During 1972, the research and monitoring programs inherited by EPA were functionally integrated. In addition, the approximately 20 laboratories inherited by the agency were organizationally coordinated by naming National Environmental Research Centers and assigning other laboratories to these centers as associated laboratories.

Abatement and Control

Air

The air abatement and control program encompasses those activities required under the Clean Air Act, as amended (with the exception of activities related directly to research and development and enforcement). Abatement and control activities include development establishment, and implementation of ambient air quality standards, stationary source standards, and mobile standards. Because development and implementation of standards is part of a joint federal-state-local effort, most of EPA's abatement and control efforts are oriented toward support of state and local efforts. The bulk of the resources under this program are in the form of grants to state and local air pollution control agencies; EPA activities in monitoring and surveillance are in direct support of state and local programs; EPA provides techincal assistance to state and local agencies in development and operation of their programs; and EPA provides or supports training to improve the skills of state and local air pollution control personnel as well as to increase the availability of air pollution control manpower. Also, under this program, EPA assists other federal agencies to bring their facilities into conformance with prevailing air pollution standards and helps ensure that the programs, projects, and other activities of federal agencies produce a minimum air pollution impact.

Standards, guidelines, and regulations – Under the Clean Air Act, EPA is responsible for protection of air quality. Two general types of standards are required – ambient standards, which establish limits for the levels of specific pollutants or classes of pollutants that may be allowed to occur in the air, and emission, or pollution-source standards, which establish limits on the discharges of pollutants into the air. Establishment of these standards involves review of available research and other technical information relative to health, economic, and other effects of various pollutants; determination of allowable levels; and promulgation of specific enforceable standards.

The Clean Air Amendments of 1970 required that EPA establish primary and secondary national ambient air quality standards for individual air pollutants which adversely affect public health and welfare and which result from emissions from numerous and diverse mobile and stationary sources. The primary standards are for the protection of public health, whereas the secondary standards are for the protection against adverse effects on vegetation, animals, materials, weather, visibility, and personal comfort and well-being.

Following promulgation of the standards, the states are required to develop and submit for federal approval implementation plans to obtain compliance with the primary standards within three years after federal approval and compliance with the secondary standards within a reasonable period after federal approval. Where the states fail to submit such plans or fail to submit approvable plans, EPA is required to develop and promulgate such plans or appropriate portions thereof.

Primary and secondary standards were established April 31, 1971, for six pollutants – sulfur oxides, particulate matter, carbon monoxide, photochemical oxidants, hydrocarbons, and nitrogen oxides. Control of other pollutants will be achieved through establishment and implementation of performance standards for new stationary sources, hazardous emission standards, mobile source emission standards, and control of motor vehicle fuel additives. These standards are being developed in accordance with the Clean Air Act Amendments of 1970, which require (1) that national performance standards be set for control of air pollution from new facilities in designated classes of industries; (2) that emission standards be set for hazardous air pollutants to which no ambient air quality standard is applicable; (3) that emission standards be set for motor vehicles and aircraft; and (4) that fuels and fuel additives be registered and regulated. The amendments further specify that a series of special studies and reports to Congress be developed in connection with these standards.

New source performance standards for the first five designated industries – steam electric power plants, municipal incinerators, cement plants, nitric acid plants, and sulfuric acid plants – were promulgated early in 1972. Hazardous emission standards for asbestos, beryllium, and mercury also will be promulgated. In 1972, studies of the feasibility of emission standards for mobile sources were continued and expanded. Aircraft studies were extended in 1972 to characterize aircraft emissions, evaluate aircraft movements and to translate emissions into ambient air quality levels near airports. The emphasis on development of new standards will continue through 1973. A second group of new source standards will be issued early in the fiscal year, and a third group of standards are expected to be promulgated by February 1973. Standards for aircraft emissions also will be set in 1973. Fuel additive studies will be extended so as to permit establishment of controls at the earliest possible date.

State air implementation plans were required to be submitted by January 31, 1972, in accordance with Section 110 of the Clean Air Act. Plans for all but two states have been received and are being reviewed. A program of technical assistance in plan development is expected to result in plans which will be approvable in most cases. Where plans or segments of plans are not acceptable, EPA will continue to assist states. The agency will develop and promulgate plans for a state only as a last resort.

Plan reviews and approvals will continue throughout the latter part of 1972 and into 1973. Requests for extensions, postponements, and development of essential revisions to reflect new knowledge and improved control techniques will be evaluated and necessary assistance will be provided throughout 1973.

The 1973 increase represents a technical adjustment which will permit continuation of the 1972 level of effort in development and implementation of pollution source standards which include new source performance standards, hazardous emission standards, and motor vehicle and fuel standards and regulations.

Air quality monitoring – The ambient air quality monitoring program currently operates 300 federal monitoring stations. These stations are complemented by 2,000

state and local stations to form an integrated federal state-local system which presently covers approximately 40 percent of the urban population. This network is gradually being expanded. In addition to operation of these stations, the program supports the state and local programs by verifying sampling results, calibrating instrumentation to ensure consistent results, and monitoring pollutants for which the state and local agencies have no monitoring analytical capability.

During 1972, data gathering for Priority I air quality control regions will be completed and monitoring established for the first group of hazardous air pollutants covered by standards. Program expansion through 1973 will ensure that states and localities have the capability to monitor pollutants covered by national ambient air quality standards by the end of 1974, and will provide an independent assessment of where air quality control regions stand with respect to attainment of standards.

The emergency episode control program assists state and local authorities during air pollution episodes, and takes immediate action when State and local authorities fail to act in an air pollution episode of imminent danger to human health. The EPA Emergency Operations Control Center receives advance warnings of potential air pollution episodes so that abatement actions can be initiated to avoid build-up of pollutant concentrations. Currently, air quality data is measured in 50 cities and transmitted to the center by telephone. This capability is gradually being expanded and by the end of 1973 will include an additional 15 cities for a total of 65. Information on the development of atmospheric inversions is obtained through NOAA. However, these forecasts cover too broad an area of the country for forecasting on one-city episodes and Environmental Meterlogical Support Units (EMSU's) are being established to provide local forecasting capability. Currently there are 14 EMSU's in operation and it is planned to have 18-21 in operation by the end of 1973.

Stationary source surveillance – Standards surveillance includes progress monitoring on state implementation plans and review of state administration of new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAP). Implementation plans will be reviewed through quarterly reports from states on air quality, semiannual reports on total progress in executing implementation plans, reviews of specific state actions, and general field investigations of air quality control regions.

Primary emphasis during 1972 was on initiating a surveillance program to follow the progress of states in carrying out implementation plans to meet ambient air quality standards and to acquaint affected industries and state and local regulatory personnel with the requirements of the new standards.

In 1973 compliance reports will be routinely reviewed where states have been delegated enforcement responsibility, with follow-up field investigations as necessary. Delegating responsibility to states will enable the agency to carry out a selective surveillance program, rather than comprehensive, high frequency surveillance of all sources affected by standards. The emphasis will be on verification of the surveillance work done by state and local agencies and the affected sources.

Mobile source surveillance – Mobile source monitoring evaluates the performance of emission controls of new and in-use vehicles for determination of conformance with federal standards. Detection of noncompliance in a class or model of vehicles can be used to undertake enforcement action against a manufacturer to correct the deficiency through recall or other procedures.

During 1972, the program will consist primarily of a combination of prototype testing and in-use testing of 1972 model year vehicles. In 1973, EPA will implement the total three step mobile source compliance program: prototype testing, assembly line testing, and in-use testing and recall. Assembly line testing provides for a continuous evaluation of whether vehicles in production comply with applicable regulations, thus complementing prototype testing and certification. Addition of the 1973 model year to the in-use testing program provides the follow-up essential to ensure that in-use vehicles stay in compliance with standards and is essential to implementation of the recall program.

An increase of $648,900 was requested for fiscal 1973 to initiate assembly-line testing of new 1973 model-year vehicles. An additional increase of $1,117,300 was requested to expand performance testing of in-use vehicles to 1973 model-year light-duty vehicles.

Control agency support – As authorized under Section 105 of the Clean Air Act, EPA provides control program grants to state, regional, and local air pollution control agencies. Control program grants provide the necessary financial stimulus to state and local governments to establish and develop air pollution control programs. Grant support to control agencies progresses in various developmental stages, from planning through development, improvement, and maintenance. To the extent possible, EPA provides matching funds to state and local agencies as required to support workable control programs. The Clean Air Act Amendments of 1970 liberalized the matching authorization from 2:1 to 3:1 for program improvement grants and from 1:1 to 3:2 for maintenance grants. Still another change in the legislation authorizes the assignment of temporary federal employees to agencies in lieu of grant funds. This new authority provides added flexibility for alleviating the manpower resource gap.

During 1972, $42.9 million in federal grants were made available to match an estimated $56.8 million provided by 208 state and local control agencies. Of the 208 control agencies supported, there were 55 state agencies, and 153 local agencies.

In 1973 assistance will be provided not only through control program grants and state assignee personnel, but also through basic ordering agreements which allow states to utilize the services of federal contractors; and special purpose grants for motor vehicle inspection programs and/or demonstrations of air quality implementation plan execution (which will demonstrate such new techniques as transportation control systems and land use planning). The actual form of assistance provided will be tailored to meet the needs of individual agencies. Approximately the same number of agencies will be provided control pro-

gram grant assistance as in 1972. Approximately 18-25 special purpose grants for motor vehicle inspection programs and/or demonstrations of implementation plan executions will be awarded in 1973.

An increase of $8,613,000 was requested to increase grants to state, local, and regional air pollution control agencies, increase the number of temporary federal employees assigned to control agencies, provide for basic ordering agreements, and initiate special purpose grant demonstrations.

Technical information and assistance – EPA provides technical assistance to state, local, and other federal agencies for the control of air pollution. These activities encompass development of the technical bases for developing implementation plans, comprehensive environmental protection and pollution control plans, and surveillance and monitoring systems, and for the performance of other pollution abatement and control activities. This work includes identification of sources, estimates of emissions, and identification of appropriate control technologies for use in developing control strategies.

EPA also reviews worldwide literature and assembles technical news and information concerning the scientific and engineering advances and innovations in the field of air pollution control. This technical information is disseminated to government agencies, industries, research groups, and universities.

Federal activities – The purpose of this program is to ensure that other federal agencies' activities produce a minimum air pollution effect and do not violate prevailing standards. Executive Order No. 11507 required that, by December 31, 1972, all installations owned or leased by the Federal Government be in compliance with or have under way remedial actions to bring them in conformance with established federal, state, and local air and water pollution control standards.

In furtherance of this requirement, EPA compiles, stores, and processes data on air pollutant emissions of federal installations, develops and issues guidelines, and provides consultation and technical assistance to federal facilities and agencies.

In 1972 and 1973, EPA will continue a source and emission inventory of federal installation; develop a bank of source and emission data and render it operational; provide consultation and technical assistance to federal facilities and agencies; and assist OMB in review of federal agency air pollution control plans.

Environmental impact statements – The National Environmental Policy Act of 1969, amplified by Executive Order 11514, requires all federal agencies to prepare environmental impact statements for review by other agencies. EPA reviews environmental impact statements for air pollution implications.

In 1972, EPA reviewed 1,500 environmental impact statements from the air pollution point of view.

Training grants and fellowships – To help meet national needs for professional air pollution control manpower, EPA provides grants to universities to support air pollution control training for undergraduate and graduate students and provides fellowships for graduate study in air pollution control-related courses of study.

In 1972, grants supported 40 university programs to train 200 undergraduate and 375 graduate students in air pollution control. Fellowships will support 68 graduate students at 55 universities.

In 1973, grant support will be reduced to 20 university programs which will train 25 undergraduate and 300 graduate students while fellowships will support 85 graduate students at 70 universities.

Direct training and planning – EPA develops and conducts short-term orientation and technical training courses for state and local air pollution control agency personnel as well as for personnel from private industry and other Federal agencies. EPA also develops and provides training materials for use by state and local air pollution control agencies in the conduct of their own training and performs surveys and analyses to define present and future air pollution control manpower needs.

In 1972, EPA conducted orientation and technical training courses, training 2,000 State and local agency personnel, 300 personnel from industry, and 800 from other federal agencies. A study of manpower needs in 264 State and local air pollution control agencies was scheduled to be completed.

In 1973, orientation and technical training will continue at about the same level. A study to relate the task analysis to the training curriculum will be conducted to ensure that training is responsive to current needs. Other projects to be initiated include a salary study of air pollution control personnel and a staffing guide that can be used by local governments to improve their agency effectiveness.

A system of course fees will be applied to the direct training program in 1973. Receipts will be deposited in the U.S. Treasury as general revenues since there is no authority to use such funds for direct program support. Consequently, the orientation and technical training program will continue to depend on appropriated funds.

Water Quality

Water quality efforts are directed toward assisting the states in carrying out water quality improvement programs. EPA provides both financial and technical support so that planning and implementation can be undertaken by the states.

Control agency grants support development and maintenance of basic water pollution control agencies. Planning grants support development of basin planning at state, regional, and local levels. Technical assistance and information is provided on the full spectrum of water pollution problems, including applied technology, water quality monitoring, standards development, and program management. Training programs assist in development of adequate skilled manpower ranging from plant operators to plant designers and managers.

Direct federal activities include such programs as assistance to other federal agencies in meeting water quality standards, reviewing environmental impact statements, issuing performance standards for marine sanitation devices, and operating a program for prevention of oil spills. The spill prevention program also includes development of

regional and State contingency plans to complement the national contingency plan.

Complementary activities include water quality monitoring and reporting; collection and dissemination of water quality and technical data; monitoring of specific types of pollution sources; studies of the economic impact of pollution control requirements upon industry; and participation in federal water resource planning and similar programs which help provide the base for development of criteria and standards, indicate the need for enforcement action, and otherwise support water quality programs.

This activity also includes administration of the construction grants program.

Standards, guidelines, and regulations – EPA is responsible for establishment of standards and guidelines for protection of the environment. These include water quality standards for interstate waters. In addition, legislation was proposed to extend the water quality standards program to include all intrastate waters, navigable waters, groundwaters, and an increased coastal zone. Environmental standards establish limits for the levels of specific pollutants or classes of pollutants that may be allowed to occur in the environment. Accordingly, they differ from effluent or source standards which establish limits on the discharges of pollutants into the environment. The establishment of environmental standards involves review of available research and other technical information relative to health, economic, and other effects of various pollutants; determination of allowable levels; and promulgation of specific enforceable standards.

Under existing legislation, water quality standards are being established for the interstate and coastal waters of the 50 States, Puerto Rico, Virgin Islands, District of Columbia, and Guam. These jurisdictions have developed and adopted standards and submitted them for EPA approval – thus establishing federal-state standards. Pursuant to the definitions of the Act, the standards consist of a designation of water uses, a prescription of water quality criteria to protect these uses, and an implementation plan delineating abatement requirements, abatement schedules, and other actions that the states will use to bring about compliance with the standards. In 1972 and 1973, work will continue in setting and obtaining adoption of standards.

Standards and guidelines also are required for the specific problem of preventing and controlling spills of oil and hazardous materials. In accordance with the Federal Water Pollution Control Act, as amended, during 1972 and 1973, the oil and hazardous materials program will promulgate and implement regulations for methods and procedures to remove discharged oil.

A broad monitoring and surveillance program is carried out to gather essential data on water quality nationwide. A basic water quality monitoring system, using a federal network plus state and local stations, gathers routine data on general water quality levels. Pollution source monitoring systems provide data on specific municipal and industrial discharges. The water quality network is supported by laboratory units to perform sample analyses and by computerized data storage and retrieval systems to handle the data developed. The data developed is utilized in development of environmental criteria and standards, for identification of needed abatement actions, for planning, and for other purposes. The data is also made available to State and local pollution control agencies and other Federal agencies to be utilized for similar purposes.

Water quality monitoring – The water quality monitoring program currently operates 420 monitoring stations and supports, through reimbursements, the operation of an additional 455 stations by the Geological Survey. These federal stations are complemented by state monitoring networks. Also, in addition to operation of monitoring stations, the water quality monitoring program supplements and supports state efforts by introducing new technology, providing verification of data and analytical quality control, and monitoring pollutants outside of state capability. The program further provides for storage and retrieval of both federal and state data in a computerized data system called STORET.

The STORET system consists of a central computer and computer programming and operation capability located in Washington, D.C. Thirty-nine field offices (including EPA's regional offices and several state water pollution control agencies) are connected to the system by teleprocessing units. These units provide the field offices with storage and retrieval of inventory and monitoring data and perform various computations to facilitate analyses of these data. The system was expanded in 1972, principally to provide an additional capability for processing industrial waste inventory information from the estimated 40,000 waste discharge permit applications. A part of this improvement will involve completion of coding of additional hydrologic maps. Such coding is necessary to reference the location of waste sources and monitoring stations, thus facilitating storage and retrieval of data. Teleprocessing units are being added for an additional six state water pollution control agencies. Other refinements include the addition of water use and standards data which will eventually enable the system to make automatic comparisons of water quality data with standards for specific locations.

Fiscal 1972 efforts were aimed at improving and expanding the water quality monitoring network. Sampling frequency and pollutant coverage were increased. Planning for future expansion of both federal and state portions of the network is under way. These improvements and planning efforts will be continued in 1973. Sites for additional stations will be located and appropriate sampling equipment designed.

Pollution source monitoring – The pollution source surveillance program has two major parts: a municipal waste inventory and an industrial waste inventory. Both activities are directed toward collecting information and data on sources of pollution and their discharges into or impact on the environment. This information is used for evaluating pollution problems and pollution control needs, for assessing pollution control practices and compliance with established control regulations or standards, and for planning pollution control programs and estimating pollution abatement costs. Each of these activities also serves one or more special purposes.

The municipal waste inventory contains statistics on 20,000 municipal waste treatment plants. These statistics include the location, size, and design characteristics of each facility; the quantity and character of the waste effluents discharged; and the abatement requirements and compliance schedules imposed by water quality standards implementation plans, pending enforcement actions, and other regulations. In short, the inventory provides a concise but comprehensive characterization of municipal waste treatment systems. The inventory is continuously updated with information collected from the state water pollution control agencies. Data from the construction grants program, from water quality standards and enforcement activities, and from other sources are added to the inventory as it becomes available.

The industrial waste inventory was initiated in 1971. The inventory contains information on the size and type of the industrial plants and their pollution control facilities, on the quantity and quality of their waste discharges, and on abatement needs and pending abatement requirements and schedules. Data are being collected in two ways: through questionnaires mailed to individual manufacturing plants and, eventually, through information received in applications for permits under the Corps of Engineers waste discharge permit program. In 1971, 10,000 questionnaires were mailed and the processing of these and the start-up of the permit system initiated. In 1972, the processing of questionnaires was continued and the processing of information from an estimated 40,000 applications received under the waste discharge permit program was initiated.

During 1973, efforts will continue to expand the pollution source inventory and improve its coverage. Inventories will be conducted on discharges from agricultural, mining, and similar sources not adequately covered by the existing system, and instrumentation requirements are being determined.

An adjustment is made in providing for continuation of the 1972 level of effort in monitoring selected pollution sources to ascertain compliance with water quality standards and investigating water pollution problems.

Planning grants – Financial assistance is provided through planning grants so that states may meet construction grant requirements by developing water quality management plans for basin and/or metropolitan regional areas.

The principal emphasis for planning programs in 1972 was on preparation for an expanded construction grant program. With the doubling in the amount available for construction grants, planning at the state level must be greatly accelerated to meet legal requirements, as well as to assure that the funds are used effectively. This, in turn, will require assistance and consultation in the development of state plans, and careful review of completed plans to assure that they are adequate and provide proper guidance and priorities for the use of construction grant funds.

This emphasis will continue through 1973. After the surge of activity required in 1972 to catch up with the increased funding, efforts will be shifted toward development of plans which not only guide current investment, but also begin to look to the future. Capability for more substantive, future-looking planning must be developed at the state level. This will enable states to produce the plans which will be required to meet national water quality objectives by 1976.

Federal planning – Federal planning includes development of comprehensive river basin pollution control and abatement plans as required by Section 3 (a) of the Federal Water Pollution Control Act, participation in interagency water and related land resources planning, and review and evaluation of water quality management plans being developed by state and local agencies to qualify for waste treatment facilities construction grants. The primary emphasis is currently on water quality management plans, which are necessary to the expanded construction grant program.

No grant for the construction of waste treatment works can be made unless the project is included in (1) an effective basin-wide pollution abatement plan and (2) a regional or metropolitan plan, if applicable, pursuant to 18 CFR 601, published July 2, 1970. Interim procedures may be used prior to July 1, 1973, in order to reconcile lead time for planning with existing schedules.

During fiscal year 1972, planning activities were concentrated on assisting state and local planning agencies to stimulate the development of adequate basin, regional and metropolitan plans, evaluating completed plans, and reviewing construction grant project applications to assure that they are consistent with existing plans or interim plans.

In 1973 efforts will be focused primarily on stimulating development of fully acceptable plans prior to July 1, 1973. Assistance will be provided to state, interstate and local planning agencies which are responsible for basin, regional and metropolitan plans. Completed plans will be evaluated, and guidance provided to help correct any deficiences. Accepted plans will be monitored for accomplishment. Construction grant applications will be evaluated for consistency with accepted plans.

Water Resources Council – An increase is requested to provide reimbursement to the Departments of Housing and Urban Development, Commerce, and Transportation, and the Atomic Energy and Federal Power Commissions to cover their participation in the Water Resources Council planning studies. EPA is serving as the "collector" agency for funding the participation of these agencies. The studies involved are Long Island Sound, Southeastern New England, Platte River, and the Pacific Northwest.

Control agency grants – As originally authorized under Section 7 of the Federal Water Pollution Control Act, EPA provides matching grants to state and interstate water pollution control agencies. These grants, which are allocated to states by formula, are to help support the establishment and maintenance of water pollution control programs.

During 1972, the grant program will help support 59 agencies (51 state, three territorial, and five interstate). The federal contribution will represent about 25 percent of total costs for these agencies' programs, the state share consisting of about $43,800,000. The manpower resources

of these agencies will increase from 2,936 man-years to 3,478 man-years.

During 1973, the same agencies will continue to receive federal support. The increase will be distributed more or less proportionally among them, enabling an increase in total staff man-years from 3,478 to 3,800. The federal contribution will increase to about 30 percent of total costs of the state and interstate programs, with the state share rising to about $45,000,000.

Technical information – EPA provides technical assistance to other federal, state, and local agencies for the control of water pollution. These activities encompass assisting the states in setting and enforcing standards (including stream uses, criteria, and implementation and enforcement plans), developing comprehensive environmental protection and pollution control plans, developing and operating surveillance and monitoring systems, and performing other pollution abatement and control activities. This work principally involves field investigations and special studies to determine the sources or causes of pollution and the most appropriate abatement measures. It also encompasses technical advice and consultation and the provision of laboratory services.

Other technical assistance activities include development of interstate compacts and uniform laws, performance of estuarine and oceanographic studies, and the development of international agreements for control of border pollution, pollution of the seas, and other problems of a multi-national nature. The estuarine and oceanographic program encompasses the collection, assimilation, and dissemination of water quality, water use, and associated data pertaining to estuarine and coastal zones and the Great Lakes. This information is utilized by EPA and is available to state, local, and other federal agencies for coastal zone management planning, for assessing the water quality impact of proposed coastal-zone development activities, and for other purposes.

EPA also reviews worldwide literature and assembles technical news and information concerning scientific and engineering advances and innovations in the field of environmental protection. This technical information is disseminated to government agencies, industry, research groups, and universities.

Fiscal 1972 and 1973 efforts will largely be focused on updating and expanding guidelines and data which are integral to the technical assistance program. The national Technical Advisory Committee Report, *Water Quality Criteria,* was published in 1968 and provided the basis for development and establishment of the current federal-state water quality standards for interstate waters. Since that publication, new scientific knowledge on water quality requirements and tolerances has been acquired. Also, weaknesses in coverage and comprehensiveness of the report have been identified. For these reasons, this report is being updated and expanded to provide the basis for upgrading presently established water quality standards where necessary, and to provide the basis for establishing standards for intrastate waters, navigable waters, an increased coastal zone, and groundwaters. This is pursuant to the Administration's proposed legislation to strengthen and extend the federal standards-setting authority of Section 10 of the Federal Water Pollution Control Act, as amended.

Water pollution arising from animal feedlot operations, forestry and logging practices, irrigation return flows, and rural runoff have not been studied on a systematic, nationwide basis. Because these sources are being found to have a substantial adverse impact on water quality, it is necessary to make a concerted effort to minimize these impacts. Accordingly, a comprehensive inventory and study of these sources, their effects, and possible remedial measures, preparatory to developing a national program for their control, was initiated in 1972.

The estuarine and oceanographic information system will also be expanded in 1973, especially in coverage of the Great Lakes. Particular attention will be devoted to consolidation and automation of information on dredging and filling and to collection of information on other physical modifications and salt water intrusions. Assistance to states for developing coastal zone management plans will be greatly expanded and a small-scale coastal pollution monitoring network will be initiated.

Updated water quality criteria will be used in 1973 to help states revise and strengthen water quality standards, and extend standards to all intrastate waters, navigable waters, groundwaters, and an increased coastal zone, if authorized by pending legislation. Studies on critical water quality problems initiated in 1972 will be continued and the information derived from them made available for use in pollution abatement and control programs. Assistance to states on all phases of program development will be continued at a high level to support the national emphasis on water pollution abatement and control.

An expanded program of field investigations in the Great Lakes will be conducted to assess compliance with water quality standards and waste discharge permits. These investigations will involve sampling of waste discharges and the waters of the Great Lakes. This work is directed toward meeting the agency's commitment under the U.S. – Canada Agreement for accelerated effort to abate and control water pollution in the Great Lakes.

Federal activities – EPA supports other federal agencies in ensuring that their activities produce a minimum water pollution effect and do not violate applicable standards. Executive Order No. 11507 requires that, by December 31, 1972, all installations owned or leased by the Federal Government be in compliance with or have under way remedial actions to bring them into conformance with established federal, state, and local air and water pollution control standards.

The EPA program includes an inventory of federal waste water treatment facilities, development of guidelines, and consultation and technical assistance to Federal facilities and agencies in development of their water pollution control programs and on-site reviews of federal facility wastewater treatment plants.

In 1973, EPA will continue development of the inventory of federal waste water treatment facilities and practices, provide consultation and technical assistance involving about 5,000 Federal facilities, perform 500 on-site reviews of federal wastewater treatment facilities, assist

OMB in review of water pollution control plans from at least 20 treatment facilities, and assist OMB in review of 12 federal agency water pollution control plans.

Environmental impact statements – The National Environmental Policy Act of 1969, implemented by Executive Order No. 11514, requires all federal agencies to prepare environmental impact statements evaluating the potential effects on the environment of their proposed actions and projects and to submit the statements to OMB for review by other agencies. EPA reviews environmental impact statements for their water pollution implications.

In 1972, EPA reviewed about 1,000 environmental impact statements and will be able to handle about the same number in 1973.

Training grants and fellowships – EPA provides grants to universities to support water pollution control training for graduate students and provides fellowships for graduate study in water pollution control-related courses of study.

In 1972, grants supported approximately 100 university programs training 30 undergraduate and 1269 graduate students. Fellowships supported 90 graduate students at 45 universities.

In 1973, grants will support approximately 54 university programs which will train 30 undergraduate and 765 graduate students while fellowships will support 22 graduate students at 18 universities. These activities are being scaled down in 1973 in keeping with an EPA policy to encourage more assumption of responsibility for environmental graduate training by non-federal sources so that EPA may direct its funds to other forms of training with greater immediate impact in meeting pollution control manpower needs.

EPA also provides grants to educational institutions to provide undergraduate training in various technical aspects of water pollution control. In 1972 these grants supported training for 120 undergraduates at four educational institutions. In 1973 this training will continue at about the same level.

EPA provides grants to states and educational institutions for short-term training of waste water treatment plant operators to help meet the increased need for upgraded skills in this area, generated by the construction grants program. In 1972, EPA provided grants to 25 states to update the skills of approximately 3,000 presently employed water and wastewater treatment plant operators. In addition several "national impact" grants were made to educational institutions to provide short-course training for 150-200 persons in advanced wastewater treatment, and 50 state and local projects will train instructors in teaching methodology. Several small miscellaneous grants were made to continue on going correspondence course programs, curriculum development and decision-maker training, and to provide for training of operators in federally operated water treatment facilities in cooperation with other federal agencies.

In 1973, operator training will continue at about the same level of effort as in 1972.

The above programs are augmented by MDTA funds managed by EPA through interagency agreements with the Departments of Labor and HEW. These programs will provide funds to update the skills of approximately 600 presently employed operators and provide "entry-level" training for approximately 600 currently employed operators to 700 in 1972 and "entry-level" training (both operator and technician) for 810 operator/technicians compared to 1,160 persons in 1972. Public Service Career funds (provided by D.O.L.), utilized in 1971 and 1972 to train approximately 1,000 persons in the water treatment and public works field, were discontinued as of June 30, 1972.

The total operator/technician training effort will be substantially reduced in 1973 due to the cutback in MDTA funds.

Direct training and planning – EPA develops and conducts short-term managerial and technical training for personnel from state and local water pollution control agencies as well as personnel from other federal agencies and private industry; provides guidance to those agencies and develops and provides training in the conduct of their own training; and develops and implements, in cooperation with state and local water pollution control agencies, a system for forecasting manpower and training needs and planning programs to meet these needs.

In 1972, EPA conducted approximately 40 managerial and technical training courses, training 900 state and local agency personnel and 700 personnel from industry and other federal agencies. EPA will initiate a water pollution control manpower study to provide estimated needs for each state.

In 1973, EPA will conduct managerial and technical training at about the same level as in 1972 and will complete the manpower study.

A system of course fees will be applied in 1973 to EPA's direct training. Receipts will be deposited in the U.S. Treasury as general revenues since there is no authority to use such funds for direct program support. Consequently, managerial and technical training in water pollution control will continue to depend on appropriated funds.

Construction grants administration – EPA monitors federal grants awarded to municipal agencies for the construction of waste treatment works. To provide effective management, construction grants administration staffs are maintained at EPA's headquarters and regional offices. These staffs handle the review and processing of grant and contract payments, the review and processing of grant applications and construction plans and specifications, the authorizing of bid advertising, the review of bids and contract awards, periodic inspections, and the collateral responsibilities dealing with prevailing wage, anti-kickback, contract work-hours standards, and civil rights requirements. These staffs also certify the adequacy of projects for eligibility for sewer loans and grants awarded by the Economic Development Administration and the Department of Housing and Urban Development.

In addition to grant processing, EPA has increased its efforts to assure that treatment facilities constructed with federal assistance are properly located and planned, are well designed according to the best available technology, are adequately operated and maintained, and are actually

or potentially part of a viable, financially self-supporting operating system. Increased emphasis is being placed on optimum waste treatment works design and incorporation into each project of measures for efficient operation and maintenance.

During 1972, Technical Bulletins were developed to supplement guidance now provided through the "Federal Guidelines for the Design, Operation, and Maintenance of Waste Water Treatment Facilities." These Technical Bulletins will provide more detailed information in specific areas. The topics to be covered will include plant staffing requirements, new advances in technology, and ways to overcome deficiencies in present design practices. Emphasis will be placed on assuring that the technology being developed in the agency's research, development, and demonstration programs is translated as rapidly as possible into actual use. Increased emphasis is also being placed on analyzing and providing operation and maintenance data to communities, consulting engineers, and industrial firms for use in improving the design of plant equipment and in modifying operating practices so that sewage treatment facilities can be operated as close to maximum efficiency as possible. The Technical Bulletins and related documents will be issued to supplement existing operation and maintenance guidelines. In-house expertise in solving operation and maintenance problems has been increased and is available to assist local and state personnel with exceptionally difficult cases.

During 1973 the thrust to develop Technical Bulletins will be continued for both treatment technology and operation and maintenance. The federal design guidelines and operation and maintenance guidelines will be revised and updated early in 1973 to reflect the changes that have occurred. New procedures for plant inspection and surveillance will be implemented and a system for plant performance rating developed and implemented.

Water Hygiene

The Water Hygiene Abatement and Control program is predominantly directed toward providing direct and indirect assistance to state and local agencies to aid them in providing municipal water supplies meeting drinking water standards and protecting the sanitary quality of recreational waters. Assistance is provided through several channels: water resource planning, technical and consultative assistance, training and review of the impact of federal activities, and federally licensed, permitted, or sponsored activities. The purpose of the program is to foster responsibility on the part of state and local agencies in providing safe drinking water supplies and protected, high quality recreational waters.

The program also provides certification of water supplies used by interstate carriers pursuant to the Public Health Service Act and Interstate Quarantine Regulations. This activity is carried out in cooperation with the Food and Drug Administration which has responsibility for regulating and enforcing the use of safe water supplies by interstate carriers.

Standards, guidelines, and regulations – The drinking water certification program provides for classification of all 660 drinking water supplies in the United States which serve interstate carriers including airlines, railroads, and bus lines. Certification enables carriers to utilize these water supplies and indicates that these water systems are in conformity with EPA drinking water standards as developed under provisions of the Public Health Service Act and Interstate Quarantine Regulations. Such standards are related to prevention and control of the spread of communicable diseases. The certification of these water supply systems is coordinated with the Food and Drug Administration which is responsible for maintaining an inventory of water supply points used by interstate carriers and for inspecting such points.

During 1972, EPA will classify all 660 drinking water supplies serving interstate carriers. Classification is based for the most part on information supplied to EPA by state agencies. To supply supplemental data, however, EPA will conduct surveys of approximately 100 of these drinking water supplies. This same level of activity will be continued during 1973.

Monitoring and surveillance – EPA updates and maintains an inventory of municipal water supply facilities which provides a record of all municipal water supply systems in the United States serving a population of 25 or more. This inventory is used to provide a national assessment of municipal water supply systems and for information used in water resource and water supply planning studies by EPA, state, local, and other federal agencies.

During 1972, a computerized storage and retrieval system was developed to facilitate handling of the inventory data. In addition, collection and processing of the data was initiated.

During 1973, the major updating effort will be completed and operation of a continuous update process will be initiated.

Planning – Water supply planning is directed toward assuring adequate water supplies now and in the future for metropolitan areas, small towns, and rural areas. Primary emphasis in 1972 was given to studies of metropolitan water supply systems and the quality of raw water used by these systems. An inventory of information on these systems was developed. This, in turn, was followed by a pilot study of institutional arrangements for providing drinking water to consumers. These studies will be completed in 1973.

Consultation and assistance to state and local planners and development of health aspect appendices for water resource studies will continue at about the same level during 1972 and 1973.

Control agency support – This program covers assistance provided to state agencies in evaluating state water hygiene programs as well as the adequacy of municipal water supply systems within the states. This effort is an outgrowth of the selected survey of water supply systems which was conducted throughout the country in 1970-1971 and which revealed deficiencies in many systems. The work is intended to identify and correct any such deficiencies in the programs and water systems of selected states and to develop procedures by which state agencies can better detect and prevent deficiencies from occurring in the future.

In 1972, effort was directed primarily to assistance to the State of Vermont, provided through the assignment of EPA personnel. Support to the Vermont program is

expected to be completed early in 1973; however, assistance will be shifted to other areas of need. This work will continue through 1973 with no increase in funding.

Technical information and assistance – Technical support is provided to state and local water supply agencies on a wide variety of problems ranging from sample analysis to total program evaluations. Detailed assistance is provided on specific program, operating, and technical problems. Such assistance covers drinking water treatment technology and its application, laboratory analysis, spot training for specific problems, and consultation on complex problems. Broad assistance is provided through detailed evaluations of state water hygiene programs, including analyses of legal authority, program structure, staffing, laboratory facilities, and water supply inspection programs. The findings and recommendations from these evaluations are provided to the state water hygiene agencies and direct staff assistance is provided, on request, to aid in carrying out the recommended improvements.

Assistance was provided to all states and territories within the limits of available resources during 1972. Detailed state evaluations was completed in 10 states, with follow-up assistance as needed.

The same level of assistance is planned for 1973. A total of 10 state evaluations are planned. Consultative and other technical assistance will be provided to agencies, as requested.

Federal activities – Environmental impact statements prepared and submitted by other federal agencies on proposed projects or activities are reviewed and comments prepared relative to the probable impact of the project or activity on municipal water supplies and/or recreational water uses. This activity involves not only the review of final impact statements but also the review of draft statements. It also encompasses provision of technical assistance and advice to other federal agencies on factors to be considered in evaluating environmental impacts and preparing statements.

In addition to impact statements, application for federal licenses and permits are submitted to EPA for review and comments, and in some cases certification, prior to issuance by the licensing or permitting agency. EPA provides such reviews and provides assistance to the states in reviewing and certifying such applications relative to impact on municipal water supplies and recreational water uses.

During 1972, 545 environmental impact statements were reviewed and comments prepared. Assistance or consultation was provided on approximately 258 of these projects. An additional 1,082 license or permit applications were reviewed, with comments.

The number of environmental impact statements and license and permit applications to be reviewed in 1973 will continue at approximately the 1972 level.

Manpower planning and training – The 1971 survey of water supply systems revealed many systems with serious deficiencies in operation and maintenance resulting from inadequately trained operating personnel. To address these problems, EPA provides short-term, skill-improvement training for personnel of agencies having water supply responsibilities. In addition, assistance is provided to state and local agencies in evaluating their training needs, in developing training programs, and in developing training courses and aids and materials.

During 1972, approximately 400 people received training through the presentation of 25 short courses. In addition, training aids and films were developed and made available for training courses sponsored by state and trade association personnel. These activities will be continued through 1973, with the course content being upgraded and expanded and the number of training aids and films increased. A system of course fees will be applied in 1973 to EPA's direct training programs. Receipts will be deposited in the U.S. Treasury as general revenues since there is no authority to use such funds for direct program support. Consequently, direct training in water hygiene will continue to depend on appropriated funds.

Solid Wastes

Included under the solid waste abatement and control program are the development of guidelines, operation of an information data system, and provision of assistance in the form of training, planning, and technical advice. The purpose is to illustrate and encourage the use of the most advanced practices of solid waste management and technology and to assist in creating institutional change at the local level to improve labor productivity and provide sound local financing support for waste management.

This program assists state, local, and private agencies by: developing guidelines for use in establishing model codes, ordinances, and statutes; collecting and disseminating information on municipal solid waste management practices; providing planning assistance to improve solid waste management systems; providing technical support in the form of technical literature, data, and advice; providing solid waste management curriculum material and professional and operator training; developing and applying mandatory guidelines for improved solid waste management practices at federal facilities; and developing an inventory of waste management practices at Federal facilities and providing them with technical assessments and assistance.

Standards, guidelines, and regulations – The Resource Recovery Act of 1970 requires that EPA develop solid waste management guidelines. These guidelines are published in the Federal Register and are made available to state, local, and private agencies to be used to develop model codes, ordinances, and statutes for assisting and promoting improved solid waste management. The guidelines are mandatory for federally operated and licensed solid waste management activities. Demonstration grants for resource recovery and improved solid waste management systems must conform to guidelines established under the Act.

During 1972, guidelines for sanitary landfill operation and incineration were completed for publication in the Federal Register. Another activity scheduled for 1972 was development of state-of-the-art reports on the financing, management, and operation of rural collection and disposal systems. Also, studies were initiated to support state-of-the-art reports for transfer/transportation systems and storage and collection for high rise buildings.

In 1973, the documents initiated in 1972 will be completed. In addition, a document on hospital waste storage and collection will be completed.

Monitoring and surveillance — The solid waste monitoring and surveillance program consists of a National Solid Waste Data Network (NSWD) that collects and disseminates information on various aspects of municipal solid waste management, including collection and disposal practices and capital and operating costs. Solid waste management is typified by a lack of uniform continuous, and reliable basic data. The NSWD was created to rectify this situation. The objective of this data network will be to obtain an accurate characterization of community solid waste handling programs and a data base to share with state and local agencies.

In 1972, the network was expanded from three to 12 Standard Metropolitan Statistical Areas (SMSA's) and provided additional accuracy in data elements and include information on the amortization of capital expenses in solid waste management systems.

For 1973, the network will continue to collect data from the 12 SMSA's. In addition, the information obtained from these metropolitan areas will be integrated with technical assistance, planning, and systems management demonstrations to concentrate an array of technical and management tools on specific solid waste management problems. This concept is essential to the goal of assisting communities and institutions to upgrade solid waste practices through improved management and technologies. In support of the above concept, data on special studies will be collected for dissemination including information on one-man collection systems, transfer stations, and incinerator operation.

Planning grants — The overall objective of the solid waste planning grant program is to improve solid waste management by assisting state, interstate, regional, and local agencies in developing meaningful, comprehensive plans for achieving solutions to solid waste management problems. The solid waste management plans describe present and projected solid waste conditions, establish control objectives, and set forth a schedule of action for meeting these objectives. State and interstate plans are broad-gauged, establishing general strategy, while local and regional plans are more specific and operationally oriented. Although not a legal requirement, plans are submitted to EPA for evaluation and approval.

During 1972, 36 State and interstate projects were supported. Three State and interstate plans were scheduled for completion in 1972. Under authority provided by the Resource Recovery Act of 1970, planning grants are also awarded to provide for local and regional planning. The local and regional plans are oriented to operations dealing directly with the special solid waste problems of a particular locality and the practical aspects (equipment, facilities, personnel, procedures, and organization) of the solutions. In 1972, 18 local and regional projects were supported. Four local and regional plans were scheduled for completion in 1972.

During 1973, an estimated 26 State and interstate planning projects will be supported. About 10 state and interstate plans are scheduled for completion. In addition, approximately 60 local and regional planning grants will be awarded with about 30 to be completed.

Technical information and assistance — Technical assistance on all aspects of storage, collection, processing, disposal, and resource recovery is provided to states, local agencies, and individuals to bring about improvement of solid waste management systems and solutions to operational problems. Technical information is also assembled, published, and disseminated to public and private agencies, organizations, and individuals to acquaint them with new and existing technology and management practices.

During 1972, approximately 2,500 requests for assistance were responded to. Responses ranged from technical letter reports discussing solutions to a specific problem to comprehensive reports of field studies discussion problem solutions that apply to many locations. An estimated 1,800 open dumps were eliminated or converted to sanitary landfills under the Mission 5,000 program. This program has as its objective the closing or conversion to sanitary landfills of 5,000 open dumps.

For 1973, the number of assistance requests will rise, but more significantly, assistance efforts will be targeted on areas which have a capacity to implement improvement. Under the Mission 5,000 program, some 2,800 open dumps are expected to be closed or converted to sanitary landfills.

The increased resources will be used to provide additional expertise at the regional level to bring the technical assistance activities closer to the concerned agencies, groups, and individuals. Emphasis will be given to attaining institutional changes necessary to upgrade current municipal solid waste systems through application of available technology and better management. Technical assistance will be integrated with other solid waste management programs such as planning and systems demonstrations in developing comprehensive assistance packages directed toward the solution of problems at specific localities.

Federal activities — As required by the Resource Recovery Act of 1970, a program is being conducted to implement improved solid waste management practices at federal facilities. This Act requires federal agencies to comply with applicable federal guidelines for solid waste management at their installations. Technical assistance to upgrade solid waste management practices and achieve solutions to specific problems is provided to those facilities. Selected facilities are designated on a priority basis for survey and monitoring to insure compliance. In addition, in keeping with the National Environmental Policy Act of 1969, federal agency environmental impact statements are reviewed in terms of their solid waste implications.

During 1972, solid waste disposal and incineration guidelines were developed and adapted to federal facilities. Technical assistance will be provided by headquarters and regional office staffs in response to about 250 significant inquiries.

For 1973, activity will be focused on implementing the solid waste disposal and incineration guidelines that were adapted to federal facilities during 1972. An estimated 230 significant requests for technical assistance will be

complied with in an effort to upgrade solid waste management practices and achieve compliance with guidelines.

A decrease in fiscal 1973 funding reflects a change in emphasis from conducting a comprehensive inventory of federal facilities and giving general assistance, to concentrating effort on implementing solid waste guidelines that are mandatory for federal agencies. Assistance in the form of responses to inquiries relating to specific engineering and management needs will be directed to this implementation effort.

Manpower planning and training – Success in solving solid waste problem is to a great extent dependent upon the availability of qualified solid waste collection, disposal, and processing systems personnel. Training and manpower programs directed to meeting this need include support for those embarking on professional careers in solid waste management as well as for state and technical institutions to establish training programs for operator and technical personnel. Short-course training and curriculum development by EPA training staff are oriented to federal, state, local, and private agency personnel who are either just beginning their environmental careers or who need to upgrade their solid waste management skills. Also, a modest manpower planning activity is carried on to give direction to the training effort and maintain a profile of solid waste management training needs.

During 1972, graduate training in solid waste management was supported by grants to 12 universities. Additional grants went to 12 states for the training of operator and supervisory personnel for local solid waste systems. Direct training of 1600 in-house and professional and specialist solid waste management personnel was planned for 1972. This total represents about 30 short-course presentations of three to four day duration covering aspects of municipal solid waste management and technology. In addition, a new safety training package for solid waste collection personnel was added to the curriculum. The manpower study required by the Resource Recovery Act of 1970 was completed in 1972.

For 1973, graduate training at universities will be supported at a reduced level. This activity is being scaled down in 1973 in keeping with an EPA policy to encourage more assumption of responsibility for environmental graduate training by nonfederal sources so that EPA may direct its funds to other forms of training with greater immediate impact in meeting pollution control manpower needs. Grants to states in support of solid waste operator and supervisory personnel training will be continued. Direct training activities will continue at a level comparable with 1972. A system of course fees will be applied in 1973 to EPA's direct training programs. Receipts will be deposited in the U.S. Treasury as general revenues, since there is no authority to use such funds for direct program support. Consequently, direct training in solid wastes will continue to depend on appropriated funds. New courses will be developed for professional and specialists solid waste personnel including a course on new collection equipment, incinerator and sanitary landfill operation, and a new solid waste management series directed to municipalities covering organization concepts, labor relations, and financing mechanisms.

A decrease in funding impacts largely on graduate training and manpower planning, with small reductions in state agency and in-house training. These decreases are partially offset by an increase in course development and training to be implemented through contracts with solid waste professional and technical organizations. A reduction for solid waste manpower planning results from completion in 1972 of the manpower study required by the Resource Recovery Act of 1970. Slight reductions will not notably affect the level of activity planned for state agency support and in-house training. The increase for course development and training will be used to develop new courses for both solid waste operators and management personnel that can be presented by either EPA staff or through professional and technical solid waste organization as to have maximum impact on day-to-day solid waste operations.

Pesticides

EPA's pesticides abatement and control program is predominantly directed toward regulation of pesticides through registration of pesticide products under authority of the Federal Insecticide, Fungicide, and Rodenticide Act and the setting of pesticide residue tolerances under authority of the Food, Drug, and Cosmetic Act. These activities are closely supported by EPA's pesticide research and enforcement programs, both of which are discussed in other sections.

Other elements of the program are the monitoring and surveillance of environmental levels of pesticides, studies of effects of pesticides of human health, and investigation of pesticide accidents. These activities provide much of the information needed to effectively carry out the registration and tolerance petition programs.

Finally, the program includes provision of technical assistance and information of state and local regulatory and health agencies and other Federal agencies, and provision of training and training assistance to improve the knowledge and technical capabilities of federal, state, and local personnel involved in pesticide activities.

Product registration – The Federal Insecticide, Fungicide, and Rodenticide Act requires that all pesticide products moving in interstate commerce be registered with EPA. The product registration program implements this provision of the Act. Applicants for registration must submit data showing the ingredients of their product, the purposes for which it is to be used, including the pests which it is intended to control and the crops or other areas on which it is to be applied, the directions for use of the product, and safety precautions to be followed to prevent accidental injury or environmental damage. A copy of the proposed labeling is required and results of safety and efficacy tests may also be required. Applications are reviewed to determine whether the product is safe and efficacious and meets the other requirements of the law and applicable regulations. If products satisfy all requirements, they are registered. Scientific data is continuously reviewed, as is information developed by the enforcement, monitoring and surveillance programs to determine if products in use comply with requirements, and if they pose environmental hazards. Improvements in

use directions or safety precautions are instituted as necessary. Products causing environmental hazards may have their registrations cancelled or, in cases of imminent hazard, suspended.

During 1972, the product registration program made progress in improving the rate of review for registration applications. In February 1971, approximately 5,000 applications were on hand with a median age of 60-90 days. By December 1971, the number of applications on hand had been reduced to about 2,200, with a median age of less than 60 days. During the year, about 27,000 registration applications, including renewals, amendments, and temporary permits, were processed.

The results of some 5,500 product sample analyses were reviewed and reported to the enforcement group in 1972. During 1973, it is proposed to further improve both the time of review (toward a goal of 45 days) and the depth of review of applications. The expected number of applications of all types in 1973 is 25,000.

Some 6,000 product sample analyses will be assessed by the technical staff for possible enforcement action. Another 2,000 analyses will be reviewed prior to product reregistration.

It is intended in 1973 to initiate a system of registration fees to collect approximately $3,000,000. Although a schedule of fees has not yet been developed, it is anticipated that a system of differently priced fees for different classes of applications will be instituted and that the individual fees will represent a relatively minor cost to the applicant when compared to the sales revenues of the products marketed under the respective registration.

Tolerance setting – Pesticide chemicals intended for application on human food or animal feed crops must have tolerances for residues established under the provisions of the Food, Drug, and Cosmetic Act. Tolerance levels are established for pesticide chemicals in or on specified raw agricultural commodities to protect consumers from toxic effects. Tolerance petitioners must provide evidence that the proposed tolerance level is safe and that it will not exceed levels expected to be found when the product is used as directed. A method for detecting the residue must also be provided. EPA reviews the petitioners' data to determine its compliance with the law and applicable regulations and publishes the tolerance in the Federal Register.

During 1972, the average number of registrant petitions under review was 150. As with processing of registration applications, emphasis was given to improving review and handling capabilities and reducing overall processing time.

During 1973, it is expected that the average level of all types of tolerance petitions received will be 200. In addition, approximately 20 previously issued tolerances will be re-examined in the light of current scientific knowledge of the environmental effects of pesticides.

Tolerance petition fees very according to the number of tolerances and commodities involved and range between $3,000 and $4,500. There are other fees for temporary tolerances, withdrawals of petitions within six months, etc. During 1972, fees were projected to aggragate to $309,000. These receipts were credited to a Revolving Fund and are used to defray a part of the cost of the tolerance petition program. The remaining costs of the program, $1,048,000, were covered by appropriated funds.

It is proposed to increase the schedule of fees for petitions in 1973 to enable the collection of $1,109,000. It is further proposed to discontinue the waiver of fees for petitions submitted by federal and state agencies, universities, and nonprofit organizations.

Community studies – The community studies program encompasses epidemiological and toxicological studies to determine the health effects to human population groups exposed in various ways to pesticides. The objectives of the studies are to identify the sources and magnitude of pesticide exposure in various areas and to study and assess the cause and effect relationships between exposures and health reactions for different groups of people. The results of these studies provide necessary scientific knowledge for the review of product registration applications and tolerance petitions and provide information for EPA's technical assistance activities.

During 1972, the community studies program supported, through contracts, studies by 14 state universities, medical schools, and health departments. In-house efforts were devoted to coordination of these studies and analysis and assessment of these results. New studies on mutagenesis, sputum cytology, and retrospective morbidity and mortality were undertaken.

During 1973, it is proposed to expand the community studies program to cover a larger population base and to collect more information to improve the statistical validity of the results. The number of studies will be increased from 14 to 16 and two of the ongoing studies will be expanded in scope and effort.

An increase of $601,000 was requested in 1973 to carry out the expanded program. This expansion will increase the amount and quality of results produced by the program and will provide EPA with a better information base on which to review registration applications and tolerance petitions and on which to advise and assist state, local, and other federal agencies in addressing pesticide pollution problems and designing and conducting pest control programs.

Monitoring – The pesticides monitoring program includes a residue profile program to study and monitor pesticides residues in soils, crops, air, human tissue, and estuaries throughout the country; the investigation of pesticide accidents; and the chemical and biological analyses of pesticide products available on the market and pesticide chemicals currently or potentially incorporated in pesticide products. The residue profiles program provides data useful to the registration and tolerance petition program and also necessary for making national, regional, and local assessments of pesticide levels and their possible impact on the environment. The accident investigation program is a joint federal-state program to report and investigate accidental poisonings and spills and other incidents involving pesticides. Information generated by this program will be used to improve procedures for use, handling, transportation, and storage of pesticides to improve safety and prevent future accidents. The sample analysis program analyzes pesticide products obtained in the marketplace to be sure that they are quantitatively

and qualitatively in compliance with the statements made in their registrations and are otherwise in compliance with the law. Current efforts include chemical analysis and safety and performance testing. This program also provides chemical and biological analyses of pesticide products and chemicals in direct support to the registration and tolerance petition programs.

During 1972, in the residue profiles program, soil samples were collected from 36 states and 15 urban areas and are being analyzed for pesticides and heavy metals. Ambient air was sampled at 36 sites in 31 states. Estuarine shellfish, silt, water, and planketon were collected from 159 sites in 14 states. The joint federal-state accident investigation program was operational in four regions early in the year. In 1972, about 275 incidents were investigated. In the sample analysis program, about 5,500 product samples were analyzed to determine if their active ingredients, safety in use and handling, and biological effectiveness comply with the statements made in their registration and with other provisions of the law.

In 1973, it is proposed to expand the accident investigation program to all ten regions and to handle up to 2,000 incidents during the year. It is further proposed to improve the capability of the sample analysis program and to analyze approximately 6,000 samples. The residue profiles program will be maintained at its 1972 level.

To carry out the proposed 1973 monitoring programs, an increase of $363,800 was requested. Of this, $175,000 will be devoted to expansion of the accident investigation program and the remainder to the sample analysis program.

Technical assistance – EPA provides technical information and assistance to state, local, and other federal agencies concerned with pesticide problems. Forty-eight states have enacted some form of regulatory legislation concerning pesticides. EPA attempts to obtain uniformity of registered pesticide uses through liaison with state regulatory agencies. State health agencies are also provided with support, either by contact or by detailed personnel, in dealing with health problems and other problems related to pesticides. Technical assistance is given to other federal, state, and local agencies engaged in the operation or management of pest control programs to aid them in identifying the potential environmental impacts associated with use of various chemicals and application methods. Finally, EPA collects and disseminates information on pesticides to interested federal, state, and local agencies and to scientists with a research interest in pesticides.

During 1972, 14 States agencies were assisted through contracts or by detail of EPA personnel. Additionally, consultative assistance was given to state, local, and other federal agencies, on request, to the extent of the agency's current capabilities. With respect to dissemination of information, two technical periodicals were published and approximately 2,000 requests for literature searches or reprints of scientific articles are being handled.

In 1973, it is proposed to strengthen the technical assistance program through placing a pesticide generalist in each of the ten regional offices. The same functions performed in 1972 will be pursued, but involvement of the regional offices will greatly strengthen the program by improving contact and familiarity with the problems being faced. In addition, the technical information system will be expanded to include registration and tolerance data on a current basis, as well as the monitoring and research information currently being produced.

Training – The pesticide training program provides technical training to state, local, federal, and industry personnel in pesticide residue analytical techniques. State and local pesticide control personnel are also given training in the epidemiology and public health impacts of pesticides. Course materials are developed to improve the technical expertise and safety practices of pesticide applicators.

During 1972, approximately 150 laboratory personnel were given technical training in pesticide residue analytical techniques at EPA's Perrine Laboratory, Fla. Approximately 1,000 state health agency personnel and others attended training sessions given by the agency at several locations. Two pilot level courses for state personnel were given at Chamblee, Ga., to test the training curricula developed by EPA for training pesticide applicators in the importance of and in methods for protecting the environment.

During 1973, this program will continue at its current level. A system of course fees will be applied in 1973 to EPA's direct training programs.

Radiation

A primary focus of the radiation abatement and control program is toward EPA's responsibilities for establishing the basic policies which guide all Federal radiation protection activities and for setting specific standards which limit discharges of radiation into the general environment. This effort is closely supported by the Radiation Research and Development program.

Other elements of the program contribute to the guidelines and standards effort and toward improvement of state, local, or other federal radiation control programs. They include environmental radiation monitoring, provision of technical assistance to other governmental agencies, review of federally supported or licensed activities involving environmental radiation, and support of training programs.

Standards, guidelines, and regulations – EPA has two primary responsibilities associated with radiation protection guidance and standards. The first of these involves the formulation of basic federal policies on radiation protection and the development of Radiation Protection Guidelines which are to be followed by all federal agencies concerned with radiation control. This was the function exercised by the Federal Radiation Council prior to establishment of EPA. The second responsibility is for the establishment of environmental protection standards which limit radiation levels in the general environment outside the boundaries of nuclear power plants or other radiation producing installations.

During 1972, work in the area of basic radiation protection policies centered around a major review of the scientific bases for existing guidelines. This review under-

taken in response to growing concern about the potential hazards associated with the expanding nuclear energy industry. An EPA posture with respect to environmental standards was developed which took into account health risks, currently available control technology, and cost/benefit considerations in setting limitations applicable to specific classes of radiation sources or facilities.

During 1973, the extensive investigation of existing radiation policies and guidelines will be concluded and attention will be directed to specific radiation policy questions as they occur. The development of environmental protection standards will be continued by initiating the assessment of the entire nuclear fuel cycle, particularly the nuclear fuel reprocessing plants. Efforts will also be increased to identify the information necessary currently under development by the AEC. This particular reactor concept, while having a great potential for meeting long-range energy requirements, is unusually complex and will present unique problems in terms of environmental protection requirements.

Monitoring and surveillance – A major component of EPA's radiation monitoring and surveillance activity is the conduct of the National Environmental Radiation Monitoring program. This program involves state and local as well as federal effort. It is aimed at obtaining baseline data on existing levels of environmental radiation; assessing changes in these levels and relating these changes to their probable sources; and determining if these levels are within established guidelines and standards. In a related area, EPA conducts on-site inspections of individual radiation facilities to determine if the discharges of radioactive materials or radiation levels resulting from their operations are within prescribed standards. Finally, the agency supports state and local and other federal radiation protection programs by carrying out field surveys and investigations of potential radiological health problems.

During 1972, the effort involved in the National Environmental Radiation Monitoring Program included the operation of four environmental surveillance networks which cover milk, water, food, and tritium as well as analysis and publication of resultant data. State and local input into the program was further strengthened through contractual arrangements with additional states to provide more timely data, and by improvement in analytical and quality control methods used in connection with state data. The inspection of nuclear facilities and other facilities using radioactive materials has been initiated and work is focused on the organization of inspection teams, development of inspection procedures, and establishment of arrangements with AEC, states, and facility operators for access to individual facilities. Finally, field survey work was conducted to determine radiation levels resulting from the prior use of uranium mill tailings in construction of residential and commercial structures. Detailed surveys were made in the Grand Junction, Colo., area to help establish the extent of this potential problem, and survey work is being initiated in eight other western states where these materials have been used in a similar manner.

In 1973, the National Environmental Radiation Monitoring Program will be continued by operating the necessary surveillance networks. Additional contracts with state agencies will be made to receive surveillance data related to specific radiation sources. Preliminary work on the inspections program will be completed and full-scale inspections will be initiated. The field investigations on the uranium mill tailings problem will continue until detailed survey work can be completed in all nine western states where the problem is evident.

Technical information and assistance – EPA maintains a small staff in nine of its ten regional offices to provide continuing liaison and assistance to state and local environmental radiation programs. This assistance includes a variety of functions such as promotion of effective state control programs through evaluation of on-going activities and development of needed improvements; development of federal/state/local radiological emergency plans; and arranging for provision of technical assistance and consultation on specific problems.

During 1972 and 1973, regional technical assistance will be continued as described above at essentially the same level in each year. However, in 1973, greater attention will be given to providing for regional office review of environmental impact statements covering nuclear power plants and other major radiation sources.

Federal activities – As a part of its overall responsibilities for review of environmental impact statements submitted by other federal agencies, EPA conducts detailed evaluations of proposals for the design, construction, and modification of radiation producing facilities which are to be operated by Federal agencies or are subject to federal regulation. In order to provide the technical base necessary to conduct these environmental assessments, EPA also conducts a series of engineering studies aimed at providing a better understanding of the design and operation of devices and systems for containment, treatment, and disposal of radioactive wastes.

During 1972, approximately 75 environmental impact statements were reviewed. Of this number, about 30 were directly related to the nuclear power industry while the remainder cover such diverse radiation producing activities as underground weapons testing, aerospace applications, methods for shipment of radioactive materials, and facilities and equipment used for research in the physical and biological sciences. In the related program of engineering studies, effort included investigations of three operating reactors and a fuel reprocessing plant. These studies were expected to provide more detailed information on the radioactive wastes discharged by these types of plants and on the exposure levels that they create in the surrounding environment. They also provided information required for development of procedures for inspection of radiation facilities.

Based upon projections provided by AEC and prior experience with other federal agencies, it is expected that the total number of environmental impact statements submitted to EPA for evaluation in 1973 will increase to 100. Of this total, approximately 65 will be related to nuclear power plants, and these will be of greater complexity as a result of the recent court decision covering the Calvert Cliffs nuclear plant. That decision requires that the scope of impact statements for nuclear facilities be extended to include all environmental considerations rather than being limited to radiation effects. In addition,

impact statements on nonionizing radiation sources are expected to increase. Two of the four engineering studies covering pressurized water reactors will be completed in early 1973 and an additional study will be initiated on the waste disposal problems associated with the liquid metal fast-breeder reactor.

Training grants and fellowships – The training grants program is directed toward assuring the availability of adequate numbers of professionally and technically trained personnel to staff state and local radiation control programs. To this end, EPA makes grants to academic institutions to support both graduate level study and the training of technicians. These grants cover the costs of faculty salaries, equipment and similar costs and, in some instances, tuition and stipends for selected students.

During 1972, grants for graduate level study were made to 13 institutions which in turn will provide for the training of approximately 173 students working toward MS and Ph.D. degrees. These students followed programs of study which have application to radiation protection programs and include fields such as health physics and nuclear engineering. Technician training programs were supported at three academic institutions and provide for the training of about 90 students working toward associate or bachelor level degrees. These persons were trained for entrance level professional positions in radiation protection programs or as subprofessionals to be employed in radiation monitoring and analytical activities.

In 1973, assistance provided for graduate training will be reduced so that eight institutions and 56 students will be supported. This reduction is in keeping with an EPA policy of encouraging nonfederal sources to assume a greater share of the responsibility for graduate training in environmental disciplines so that EPA may direct its resources to other forms of training which have a greater immediate impact on pollution control manpower requirements.

EPA provides short course training to persons already employed in radiation control activities in state, local, and other federal agencies and in the private sector. These courses are conducted by EPA staff in EPA facilities and are intended to improve the skills and knowledge of trainees in specific subject areas.

During 1972, 20 short courses were offered at EPA field locations with 500 students attending. They cover such subjects as radiation protection guides, radionuclide analysis, radiation surveillance, and reactor safety. During 1973, it is proposed to conduct the same number of courses for approximately the same number of trainees. Beginning in 1973, a system of course fees will be applied to EPA's direct training programs.

Noise

Current authorities provide for the abatement and control of objectionable noise through investigations aimed at identifying and classifying the sources and causes of noise as well as by developing recommended plans and programs to control the effects of noise on public health and welfare. The investigations required to plan control programs relate to current and projected levels of community noise, effects of noise on human health, the social and economic impacts of noise, the effects on wildlife, and laws and regulatory schemes for noise abatement.

Current authority also requires EPA to provide technical assistance and guidance to federal agencies to ensure effective control of noise resulting from federal activities. To this end, EPA assists in the incorporation of noise control measures in the conceptual and design phases of Federal projects by the issuance of guidelines. Assistance is also provided by reviewing and evaluating noise control plans of federal agencies, recommending abatement actions, and advising on control measures and available technology.

Planning. – In 1972, this activity involved investigations and studies of noise and its effects on the public health and welfare, and the holding of eight public hearings in major U.S. cities. A report on these studies, as required by the Noise Pollution and Abatement Act of 1970, was submitted to the President and the Congress on December 31, 1971.

Federal activities – Title IV of the Clean Air Amendments of 1970 requires that any federal agency carrying out or sponsoring any activity resulting in noise determined by the administrator to be a public nuisance or to be otherwise objectionable shall consult with EPA to determine possible means of abating such noise.

An increase of $825,000 was requested to provide technical assistance to federal agencies in the identification of objectionable noise and the taking of appropriate measures for its abatement. Emphasis will be placed on developing systems of communication and cooperative relationship among the federal agencies for the purpose of noise control. Federal agencies require assistance in initiation of noise abatement implementation activities, with emphasis on preventive engineering techniques in the conceptual and design phases of plans and projects. In addition, the current state-of-the-art of noise control technology at federal agencies will be evaluated by on-site assessments of noise abatement programs and practices and review of the adequacy and effectiveness of control measures. Technical studies will be initiated to develop the data base necessary for determining the adequacy of noise guidelines and to provide knowledge on the availability of noise control technology. An inventory of federal installations will be carried out to assemble data on protective measures currently in use and present Federal agency noise control capabilities.

Interdisciplinary Abatement and Control

Under the provisions of the Tax Reform Act of 1969, industries which install new pollution control facilities are entitled to accelerated cost amortization benefits upon proper certification from the states and the Environmental Protection Agency. Before certifying a facility, EPA must review the application for accelerated amortization and determine whether the facility complies with technical and legal requirements. EPA findings are forwarded to the Internal Revenue Service which makes final determinations on eligibility.

Certification for tax amortization – To encourage the construction and installation of pollution control facilities, Congress included a provision in the Tax Reform Act

of 1969 to allow for accelerated amortization of the costs of such facilities. Upon certification from the state in which the installation is located and the Environmental Protection Agency, such facilities may be amortized over a 60 month period, with attendant tax benefits. Prior to certifying any such facility, EPA must review the application for accelerated amortization to assure that necessary technical and legal requirements have been met.

In order to qualify for rapid amortization, a facility must first be certified by the state as being in conformance with the state program or with requirements for air or water pollution abatement and control. Upon state certification, the application is submitted to EPA for review. The EPA review consists largely of an examination of the facts presented in the application, including plans and specifications for the facility. To the extent possible, EPA relies upon the state certification to avoid overlapping in-depth reviews and on-site inspections. Decisions to make inspections and site visits are based on such factors as questions on the volume and toxicity of the discharge, the amount of money at stake, and indications that a State may be ignoring obvious violations of applicable air or water quality standards.

Following EPA certification, applications are forwarded to the Internal Revenue Service.

The certification program was initiated in 1972. Regulations and guidelines for processing applications for accelerated amortization were developed and published and applications distributed.

In 1973, the emphasis will shift to processing applications and issuing certifications. Several hundred applications are expected to be received and processed, requiring the same overall level of effort and funding as in the current fiscal year.

Enforcement

Air

The air enforcement program is directed toward achieving compliance with designated standards for both stationary and mobile sources of air pollution under the provisions of the Clean Air Act, as amended. The stationary source enforcement program is being undertaken in cooperation with the states and includes enforcement of state implementation plans, new source performance standards, and national emission standards for hazardous air pollutants. The mobile source enforcement program is primarily a federal effort directed toward achieving compliance with motor vehicle emission standards, fuel standards, and aircraft emission standards.

Stationary source enforcement — Responsibility for enforcement of standards applicable to stationary sources of air pollution is shared by EPA and the states. Implementation plans prepared by the states were submitted in January 1972 and must be approved or disapproved by EPA by May 1972. Plans not approved will be modified and promulgated by EPA not later than July 1972. EPA is providing support, assistance, and incentives to the states to enable them to exercise primary responsiblity for enforcing implementation plans and achieving compliance with national ambient air quality standards. EPA will only assume enforcement responsiblity for plans, or portions thereof, where states fail to act. Responsiblity for enforcing new source performance standards and emission standards for hazardous air pollutants rests with EPA but may be delegated to the states. In December 1971, new source performance standards were promulgated for five sources: power plants, incinerators, cement plants, nitric acid plants, and sulfuric acid plants. It is anticipated that standards for an additional 18 sources will be promulgated in 1973. EPA plans to delegate enforcement responsibility for new source performance standards to approximately half the states by 1973. Construction lag times will preclude initiation of a significant number of enforcement actions related to new source performance standards through 1973. In June 1972, EPA will promulgate hazardous emission standards. It is anticipated that pollutants covered will include asbestos, beryllium, and mercury. EPA will continue to exercise primary responsibility for enforcing hazardous emission standards, delegating this responsiblity to only a few states during 1973.

Primary emphasis during 1972 was directed toward program planning and development. This was accomplished through establishing an enforcement staff nucleus in each regional office to develop an effective enforcement program capability and provide limited support and assistance to the states. Enforcement activities related to new source performance standards and emission standards for hazardous air pollutants included identifying tasks and developing programs to ensure that affected sources understand and comply with the standards; preparing for review of preconstruction plans of new sources as specified by the Clean Air Act; and developing guidelines for delegating enforcement authority to the states. EPA initiated approximately 25 notices of violation, 10 abatement orders and conferences, and two court actions in 1972.

In 1973, EPA will continue to work closely with states in enforcing implementation plans and new source standards and hazardous emission standards where responsibilities have been delegated. In early 1973, it is anticipated that EPA will receive, review, and issue approximately 3,000 waiver requests from sources unable to comply with emission standards for hazardous air pollutants by September 1972. It is expected that 5,000 citizen complaints will be reviewed and 650 performance tests will be performed in support of state or federal actions. In addition, preconstruction plans for sources subject to new source performance standards or hazardous emission standards will be reviewed; start-up tests for such sources will be observed; and routine periodic source inspections will begin. It is anticipated that approximately 200 notices of violation, 100 abatement orders and conferences, and 20 court actions will be initiated to achieve compliance with standards in 1973.

The requested increase will provide for increasing the size of EPA regional staffs from 31 to 95 so that they can provide the necessary support and assistance to the states and to ensure compliance in the event of state failure to enforce. Activities will include helping states to set up enforcement programs, evaluating state/local capabilities, conducting field investigations and performance tests on stationary sources, responding to citizen complaints, and providing direct case development

support to encourage and facilitate state enforcement activities. Increased funding will provide for a substantial increase in the number of enforcement actions planned for 1973.

Mobile source enforcement – Standards for motor vehicle emissions, aircraft emissions, and fuels have been promulgated by EPA under the provisions of the Clean Air Act, as amended. A program geared to the enforcement of those standards is being designed and developed in 1972. Mobile source enforcement activities include preventing the introduction into commerce of uncertified new domestic and imported motor vehicles, instituting recall proceedings where in-use vehicles fail to meet standards, preparing prosecutions where tampering with emission control systems is apparent, and enforcing federal regulations on fuel and fuel additives. The program also includes collecting evidential data and assisting in preparation of cases requiring court action.

Major emphasis in the mobile source enforcement program during 1972 was directed toward the design and development of programs to serve as a basis for enforcement of mobile source emission standards in the future. Enforcement actions in 1972 included approximately seven investigations of possible violations, five hearings on extensions and waivers, three recalls, and one civil action.

The design and development of the mobile source enforcement programs will be continued in 1973. In addition, resources will be utilized to implement a monitoring system to detect and prevent the introduction of uncertified new domestic and imported vehicles into commerce; to initiate operation of a recall program for in-use vehicles; to implement a program to prohibit tampering with emission control devices; to initiate enforcement of lead fuel standards; to participate in program design and regulations development for assembly line testing, record keeping requirements, and right of entry procedures; and to prepare the annual report on aircraft compliance. Enforcement actions anticipated for 1973 include approximately 680 investigations of possible violations, eight hearings on extensions and waivers, 20 recalls, and 10 civil actions.

The requested increase in funding for mobile source enforcement will be utilized to implement the monitoring system, recall program, tampering program, enforcement of lead standards, regulations development, and report on aircraft compliance, as discussed above. The increase also will permit expansion in the number of enforcement actions.

Water Quality

The water enforcement program includes both the issuance of permits under the Rivers and Harbors Act of 1899 and the pursuance of enforcement actions under the Federal Water Pollution Control Act, as amended. The goal of the water enforcement program is to achieve compliance with water quality standards through a combined program of limiting discharges from point sources through the permit program, supplemented by enforcement actions in cases of noncompliance with water quality standards. Enforcement actions utilized include enforcement conferences, 180 day notices, and civil and criminal court actions.

Water enforcement – Under the provisions of the Federal Water Pollution Control Act, as amended, enforceable federal/state water quality standards have been promulgated for all navigable and interstate waters in the United States. Standards include implementation plans delineating abatement requirements, abatement schedules, and other actions necessary to bring about compliance. Enforcement of standards is shared by the federal and state levels of government. EPA provides technical and enforcement assistance to all state enforcement agencies. Direct enforcement of standards is ordinarily only undertaken by EPA in those states which do not have strong enforcement programs or where states fail to take action in cases of significant noncompliance through informal conferences and hearings with suspected violators. Enforcement actions utilized to bring about compliance with water quality standards include enforcement conferences, 180 day notices, and civil and criminal court actions. Court actions are also utilized to bring about compliance with Refuse Act permit conditions. The program also includes the conduct of field investigations and development of evidentiary data in support of enforcement actions.

During 1972, major emphasis in the water enforcement program was placed on decentralizing responsibility to the regional office level for actions against single sources of water pollution. It was anticipated that this shift in responsibility away from headquarters would lead to a more responsive and streamlined enforcement program. In 1972, the investigation of mercury discharges was completed and abatement achieved in all but a very few cases which became the subjects of enforcement actions. In addition, significant effort was undertaken to abate pollution in shellfish areas where the marketing of shellfish in interstate commerce is adversely affected. It was estimated that enforcement actions initiated in 1972 would include 10 new enforcement conferences, 10 reconvened conferences, and approximately 200 single source actions.

During 1973, the water enforcement program will be intensified to bring about compliance in river basins throughout the country on a priority basis. Major emphasis will continue to be focused on abating pollution in shellfish areas and in the Great Lakes. Enforcement actions in support of the Refuse Act permit program will be increased. It is anticipated that EPA will initiate approximately 10 new enforcement conferences, 10 reconvened conferences, and 275 actions against single sources of water pollution during 1973.

The requested increase in funding in 1973 will enable EPA to initiate approximately 75 additional enforcement actions against single sources of water pollution. These actions will include civil and criminal enforcement of Refuse Act violations and 180-day notices against those in violation of water quality implementation plans and enforcement conference schedules. The increase in the number of enforcement action will be utilized to bring about compliance in those river basins selected on a priority basis with the most critical water pollution problems in the country.

Refuse Act permits – The Refuse Act permit program, initiated in 1971 under authority of the Rivers and Harbors Act of 1899, is a cooperative effort involving

EPA, the states, the U.S. Army Corps of Engineers, and the Department of Justice. It involves the receipt and review of permit applications from industries discharging or proposing to discharge wastes into navigable waterways, the drafting of conditions designating the grounds on which permits will be issued, and the issuance of permits where conformance to industrial effluent and water quality standards can be demonstrated. Under this program, industries which discharge wastes into navigable streams or tributaries thereof are required to file applications for permits with the Corps of Engineers. Completed applications are forwarded to EPA and the states, who recommend conditions under which permits will be issued. These conditions usually require some treatment of industrial wastes. Permits are issued by the Corps of Engineers based on the conditions and recommendations received from EPA and the states.

Full-scale processing of permit applications was initiated during 1972. The Corps of Engineers received approximately 20,000 completed applications, most of which were expected to be forwarded to EPA for review before the end of the fiscal year. It was estimated that EPA would draft conditions for approximately 2,700 applications in 1972. Other activities undertaken during 1972 include providing assistance to states in the development of their certification programs, working with industries to assist them in meeting permit conditions, and developing effluent guidelines on an industry-by-industry basis.

Those activities described above will be continued in 1973 when it is anticipated that EPA will draft conditions for approximately 20,000 additional permit applications. The 1973 program also will provide the purchase of laboratory equipment and supplies and expansion of the data storage and retrieval system.

The requested increase in funding in 1973 will provide for the purchase of laboratory equipment and supplies and expansion of the data storage and retrieval system. Laboratory needs include boats, sampling devices, testing agents, containers, and sophisticated equipment required to measure industrial discharges. These purchase will total $2,000,000 and will provide equipment and supplies needed by EPA to monitor and evaluate discharges emanating from permitted facilities to determine compliance with permit conditions. The sum of $1,412,000 is required to expand the data storage and retrieval system to permit manipulation of technical data contained in permits or permit applications in a variety of ways and to provide a mechanism for more effective management and control of the Refuse Act permit program. This system will: (1) provide comprehensive effluent information which can be utilized as a data base for effluent guidelines; (2) permit EPA to monitor compliance with effluent standards and implementation schedules; (3) permit charting of progress toward cleanup through analysis; (4) provide information on waste abatement practices across industries and firms within industries; and provide many other meaningful data comparisons.

Pesticides

EPA's pesticides enforcement program includes surveillance and inspection activities to determine compliance with the provisions of the federal Insectide, Fungicide, and Rodenticide Act and initiation of voluntary recall, seizure, and criminal prosecution actions in case of noncompliance.

Pesticides enforcement – Surveillance and inspection of domestic and imported pesticides products serves as the basis for EPA's enforcement actions under the postmarket regulatory provisions of the federal Insecticide, Fungicide, and Rodenticide Act. Surveillance of registered pesticide products is carried out through surveying and inspecting all types of establishments which handle, distribute, and sell pesticides; examining required records maintained by such establishments; collecting and evaluating product samples; monitoring temporary permits; and carrying out inspector visits to manufacturer and distributor locations to determine the disposition of returned products. When violation of the Act is alleged, notices of violations are issued and compliance can be achieved through voluntary recall and removal of the product by the manufacturer or through seizure of the product by EPA. For other than minor violations, notices can lead to criminal prosecution under the Act. Voluntary recall and seizure actions can also be utilized where pesticides registrations are cancelled due to threats to public health or welfare.

During 1972, the pesticides enforcement program was reoriented toward a stronger regional office role than has been the case in previous years. Whereas, regional staffs were formerly solely concerned with surveillance and product collection activities, under the program currently being implemented, regional offices also will be responsible for initiating seizure actions and violations notices and preparing evidence for possible prosecution. More emphasis will be placed on pesticides enforcement activities than previously has been the case. There were some 5,500 product samples collected, 50 voluntary recalls, 1200 violation notices, 36 seizures, and 25 criminal prosecutions in 1972.

In 1973, efforts to strengthen the regional enforcement program will be continued. It is anticipated that there will be 6,000 product samples collected, 50 voluntary recall actions, 1200 violation notices, 50 seizures, and 100 criminal prosecution in 1973.

Facilities

This activity covers two categories of work: the construction and equipping of new facilities and the repairs and improvements of existing facilities occupied and maintained by EPA. To date, EPA and its predecessor agencies have constructed and now operate seven new facilities, mostly water quality laboratories.

The 1972 appropriation included $28,000,000 for construction and equipping of the National Environmental Research Laboratory at Cincinnati, Ohio. The schedule called for invitations for construction bids in June 1972, award of the construction contract in October 1972, and completion of construction by August 1975. Initial occupancy is programmed to begin in September 1975. Slippage in the previously projected initial occupancy date has been occasioned by the need to modify initial construction plans and specifications to provide a facility which will adequately meet the agency's laboratory needs, plus some delay in completing land title transfers. Based

on current cost estimates, no additional funds are required in 1973 to proceed with this schedule.

EPA is engaged in a comprehensive study of its future laboratory needs, both immediate and longer term. This study is considering requirements for both (1) research laboratory facilities to fit within the consolidated framework of the National Environment Research Centers and satellite laboratories established in the early part of 1972 and (2) technical support laboratory facilities attached to the 10 regional offices. Further, the study is considering the desirability of consolidating or otherwise modifying existing facilities and is considering the most appropriate ways for acquiring any new facilities identified as being needed by the study. Following completion of the study, the agency intends to present a comprehensive plan delineating future funding needs for new facilities. Finally, the study is considering the need for proceeding with design and/or construction of those facilities for which funds have been previously appropriated.

Agency and Regional Management

This activity provides for the general management of EPA which includes overall direction, through the administrator and immediate staff, and administrative support to the program activities.

Agency management consists of three major organizational groupings which constitute the top level policy and management team of the Environmental Protection Agency. The first of these groupings include the administrator, the deputy administrator, and their immediate staffs. The second cluster includes those staff elements reporting directly to the administrator which are concerned with agency level policy functions. Specific organizational elements are: the Office of Legislation; the Office of International Affairs; the Office of Civil Rights and Urban Affairs; the Office of Public Affairs; and the Office of Federal Activities. The third cluster involves the centralized agency planning, analysis, and administrative management functions assigned to the assistant administrator for planning and management. Specific organizational elements are: the Office of Planning and Evaluation; the Office of Resources Management; the Office of Administration; and the Office of Audit.

Although the manpower requirements for EPA management have remained essentially constant, the fund requirements have increased some $3.5 million for 1973 to support economic and cost analyses by the Office of Planning and Management. This increase will be used for:

(1) Expansion of studies assessing the impact of pollution abatement control costs on the national and regional economies and on specific industries. Economic modeling and industry studies will be undertaken to measure the effect of pollution control costs on national and regional employment, prices, trade, and on industrial plant closings and community impacts.

(2) Assessment of the capacity, timing, and cost implications of industries supplying and constructing pollution control facilities. Studies will analyze equipment requirements and the ability of suppliers to fulfill these demands of air and water pollution abatement control equipment plus the capacity of the construction sector to put public and private facilities in place. These studies will provide the basis for better estimates of the cost of controlling pollution and could lead to phasing decisions or incentive programs to facilitate compliance at a minimum cost.

(3) Assessment of the nature of the private sector compliance with environmental regulations or standards. Studies will encompass technological progress, process changes, the identification of determinants of compliance, and the use of incentives to foster the development of more cost effective methods of pollution abatement control.

The regional management activity provides for a regional administrator and his immediate staff in each of the 10 regions. Regional administrators are responsible for directing the various environmental protection activities within the boundaries of their respective regions.

As in agency management, staffing of the regional offices is being accomplished in an evolutionary manner. During this process, the agency has evolved a regional management structure that is self-contained and will permit regional administrators to operate more independently and effectively. Within the revised organizational concept, the regional administrators have been assigned additional functions such as grant administration, intergovernmental relations, and equal employment opportunity. Also, they will have greater involvement in program management. The Regional Administrators will play a greater role in the formulation of programs and projects vis-a-vis an execution role.

CONSTRUCTION GRANTS

This appropriation covers the federal grants that are made available to municipal, intermunicipal, state, and interstate agencies for the construction of waste treatment works and major interceptor sewers under Section 8 of the Federal Water Pollution Control Act, as amended.

Federal grant assistance for the construction of municipal waste treatment works has been authorized since 1956; since that time, through January 31, 1972, $3.4 billion of assistance has been provided for 12,412 projects having a total cost of $12.3 billion. Over this period both the percentages of federal grants and the annual amount of monies authorized and appropriated has been increased in several steps. The current percentages of federal assistance range between 30 and 55 percent.

In 1971, EPA assessed planned construction of municipal waste treatment facilities using a survey and an economic projection technique. This analysis showed that cities and other local jurisdictions are planning investments for such facilities totalling from $14.5 – $18.1 billion during the time period 1972 through 1976.

In addition, EPA has undertaken an economic analysis to determine the capability of the construction industry to absorb federal, state, and local funds for municipal facilities construction. Based on the results of the municipal survey and the economic analysis, it has been determined that total investment needs during 1973 will amount to approximately $4 billion. It is estimated that the continuing federal share will result in a federal funding requirement of $2 billion. Accordingly, this amount of funds was requested for 1973.

It is to be recognized that this request is necessary based on assumptions as to the program and appropriation authorities that would be embodied in legislation to amend the Federal Water Pollution Control Act, as amended. Section 8 of the Act, which authorizes construction grants, expired on June 30, 1971. Several bills for amending the Act would not only extend, but substantially modify the expired Section 8 authorities. Because it was not possible to predict the final provisions that would be enacted out of the pending bills, the budget request for 1973 assumed the provisions of the Administration's bill and the implementation of these provisions in addressing projected needs for municipal waste treatment facilities as indicated above.

SCIENTIFIC ACTIVITIES OVERSEAS

The EPA Special Foreign Currency Program is designed to contribute to the solution of environmental problems which confront all nations. Research and research-related activities carried out under the program offer opportunities for cooperation between the U.S. and the excess foreign currency countries. Further, the program enables EPA to develop productive relationships between American environmental scientists and their counterparts abroad. In the excess currency countries, research opportunities exist for the development of new knowledge and insights that are not readily attainable in the U.S., reflecting such conditions as indigenous ecological conditions and research costs that generally are substantially lower abroad. To assure that projects will enhance environmental research efforts in both this country and abroad, all proposals are reviewed by appropriate EPA technical experts. These reviews include the assessment of program relevance, soundness of methodology, and capability of the foreign investigator.

Air program — Projects developed by scientists concerned with air pollution problems are directed toward filling gaps in technology by supplementing domestic financial resources and by utilizing the skills and expertise of scientists abroad.

Major projects funded with 1972 appropriations included Indian efforts in the research and applications of coal-beneficiations, and statistical analyses and processing of air quality data; Polish efforts on coal-cleaning and on the current and historic relationships of stable and radioactive lead; and a Yugoslavian study on the health effects on populations living near mines and smelters.

With 1973 funding, a Polish scientific group will seek to apply present research methods for the measurement of polycyclic hydrocarbons in the development of routine methods of measurement for ready utilization. The National Chemical Laboratory in Poona, India, will investigate gas solid reaction mechanisms and kinetics providing a basis for optimization of the manganese oxide sorption process for removing SO_2 from flue gases. A second Indian project will develop an external catalytic control system for reducing NO_x emissions from power plants. This control technology development represents an area in which there has been little U.S. activity.

Present technology for controlling noxious or unpleasant odors is inadequate. A proposed project in India for development of catalytic material for afterburners will be of substantial assistance in producing an economical control technology.

Means for implementing findings from research will include studies directed to developing analytical methods for an environmental early warning system such as the investigations of new techniques for rapid and accurate analysis of atmospheric aerosols with particular emphasis on heavy metal aerosols, and evaluation of new analytical techniques such as the use of X-ray fluorescent and elastic alpha scattering analysis to increase the rate of chemical analyses of effluents while improving accuracy and reducing costs.

The thrust of these studies in Poland and Yugoslavia is to improve techniques for application to routine monitoring of samples to determine, on a continuing basis, the kinds of pollutants entering the environment.

Water program — All nations are faced with two common problems: (1) developing standards and techniques that will assure a water supply suitable for drinking and other beneficial purposes, and (2) developing technology for the renovation of wastewaters for reuse. One aspect of the former problem is presently being investigated in Israel in a project on health effects of nitrates in drinking water. A project in Yugoslavia is investigating the incidence of blood oxygen deficiencies in children exposed to drinking water with high nitrate content.

Studies undertaken with 1972 funds include Indian research on the long-term physiological effects of continued use of poor quality water, and on the isolation of enteric viruses from water; the Tunisians will investigate the effects on water quality resulting from irrigation return flow; and the Yugoslavians will study the role that drinking water quality may play in certain kidney diseases, and the long-term public health effects and benefits of reservoirs and dams.

For 1973, a proposed study in Pakistan is being planned to examine a reported condition in which pathogenic organisms are present in water without the accompaniment of coliform bacteria. If verified, this discovery could necessitate a revision of the evaluative criteria for drinking water safety. A microbiological study to be conducted in India would develop procedures and methods for detecting leptospires, organisms causing blood disease, in natural bathing waters and for correlating their presence with fecal coliform. A study in the UAR is being developed to examine the concentration and pathology of the diarrhea and dysentary associated shigella organism in drinking water.

Projects in the field of water pollution will be conducted in Poland and Yugoslavia to investigate approaches to joint municipal/industrial treatment of waste waters, mine drainage pollution control, and the problems of silt, nutrients and pesticides run-off. A Polish project will support the initial research involving a laboratory or a small pilot plant investigation of a joint treatment facility for both municipal and either steel or pulp manufacturing wastes. The nature of steel and pulp manufacturing wastes has historically indicated that they not be included in municipal treatment. A second Polish project in mine drainage pollution control will significantly assist in the

development of procedures for abating a major source of water pollution in this country. Mine drainage represents a very difficult control situation because of both economic and technical practicality problems.

To supplement EPA's effort to solve the principal pollution problem of many of our states, two Yugoslavian efforts will investigate silt, nutrient, and pesticide pollution of waters as a consequence of rural surface drainage.

Solid wastes program – The Resource Recovery Act of 1970 placed new emphasis on recycling and called for studies of methods to encourage resource recovery. Two major studies were planned for initiation in this area, using 1972 funds. A Polish team will conduct research and development of an incinerator system to utilize mixed municipal refuse, low-grade coal, and waste-combustible fluids for steam production. Yugoslavian scientists will undertake research and development of materials purification systems for upgrading components of separated municipal solid wastes. These studies will provide information for the U.S. effort in solid waste management and will initiate relationships between U.S. scientists and their counterparts abroad.

With 1973 funds, Poland will analyze procedures and methods for disposal of organic industrial wastes. With the accelerating restrictions against discharge of these wastes into streams, industries are increasingly turning to land disposal methods, which often result in undesirable aesthetic effects and contamination of surface groundwaters. The analysis would develop appropriate procedures for mixing these wastes with soils for biological and/or chemical attenuation of the organic materials. India will engage in a project to evaluate the technology of the pyrolysis method of solid waste disposal and the technology of separating by-product gases and liquids. The project will emphasize the use of pyrolysis as a new industrial source for raw chemical materials.

Pakistan will conduct extensive research on the components of agricultural crop residues, leading to the development of new processing, either chemical or microbiological, to convert these residues into economically usable materials.

Pesticides program – Three studies were planned for the Indian government in 1972. They included an effort to epidemiologically survey the population in a nonindustrialized but heavy pesticide-use area; the development of a method to biologically monitor the presence of pesticides; and analyses and studies on the rate of movement and biodegradability of pesticides in irrigated agriculture.

A program to develop alternatives to conventional chemical pesticides will be emphasized for all excess currency countries having the interest and technical capability. This effort will be closely coordinated with existing domestic research in this Agency and the Department of Agriculture. In 1972, a major Polish effort to develop biological alternatives to chemical pesticides was planned.

In 1973, Indian government scientists will assess the pesticide residues in soil and food in areas of high and low pesticide usage. Other Indian laboratories will study the chemodynamics of pesticides with particular respect to the contributory effects of "run-off" and soil erosion. Polish doctors will research the cause-effect relationship, if any, between pesticides, their residues, and human disease.

Pesticides represent only one aspect of the toxic chemicals. Polychlorinated biphenols, mercury, and nitrates are a few examples of other man-made chemicals that are of increasing concern from a health point of view. Consideration of the problems posed by these environmental pollutants will be given in the research programs developed under the general category of pesticides and other toxic chemical residues.

Radiation program – Research activities abroad enhance domestic radiation protection progress in the development of protection criteria, standards and policies, methodology for measuring and controlling radiation exposure to man, and assessment and evaluation of the impact of new and developing radiation technology on man and the environment.

Included in the planned 1972 studies were Polish research on the biological incorporation of tritium and the bone deposition of bone seeking radionuclides. The Indians planned to conduct an epidemiological study of the residents of Kerala, South India, where high levels of naturally occurring background radiation exist, and to study the action of radiation and radiomimetic agents on biological systems.

Proposed studies using 1973 funds in Poland, Yugoslavia, and the UAR include subjects as the toxicity of radioiodine, solidification of radioactive xenon and krypton, and the influence of climate on absorption, distribution, and excretion of selected radionuclides, including those resulting from fly ash. Among other things, the krypton studies may determine the feasibility of collection and management of this gas which is associated with nuclear power plants and fuel reprocessing. A study to correlate inhalation of lead 210 and relatable physiological measurements will be undertaken in Poland.

Noise program – The first project in this area will be in Yugoslavia, with a study to be conducted with 1972 funds on the sleep disturbance effects of community noise. Studies are proposed in 1973 to conduct experiments and collect comparative data on community noise "climates" in Poland and Yugoslavia. Other studies will assess the effects of noise on health, including physiological stress, and an assessment will be made of the nature and epidemiology of indigenous community noise climates ranging from the quietest rural to the noisiest urban.

APPENDIX S

A Copy of the Proposed Land Use Policy
and Planning Assistance Act of 1972
and Related Papers

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

February 8, 1972

Dear Mr. Chairman:

On February 11, 1971, I forwarded to Congress on behalf of the Administration a proposed "National Land Use Policy Act of 1971". Hearings on that bill, H.R. 5504 and other similar legislation, have been held before your Committee, and we understand the Committee is in the process of preparing its report.

I cannot overly stress the importance of this legislation. Land is our most basic and most abused resource. As the President said in his environmental message last year, "The use of our land not only affects the natural environment but shapes the pattern of our daily lives. Unfortunately, the sensible use of our land is often thwarted by the inability of the many competing and overlapping local units of government to control land use decisions which have regional significance." The Administration's proposal represents a crucial step towards reshaping the patterns of land use in closer harmony with wise environmental concepts.

During the past year this topic has received a great deal of public attention. The Council on Environmental Quality released in December, 1971, a study of the latest developments in the land use laws of several States. The Congressional hearings stimulated useful public debate.

In his environmental message to Congress today, the President reiterated his concern with abuse of our land resources and stressed the need for early action to promote responsible land use practices. Because of the importance he attaches to that topic, and as a result of the public attention which it has received, the President proposed two amendments to broaden and

strengthen the Administration's proposal. The first would clarify the scope of State land use regulatory programs explicitly to include control over the siting of such key facilities as major airports, highways and recreation facilities. The second would provide sanctions against any State which failed to implement an adequate land use program.

The legislation submitted last year provided in part that to qualify for Federal funding the State land use program must include a method for exercising control over areas impacted by key facilities. Key facilities were defined as public facilities which tend to induce development and urbanization of more than local impact including major airports, highways and recreation facilities. Decisions as to the actual siting of such key facilities can, of course, dictate the uses to which the surrounding lands subsequently are put. Thus, we believe it desirable clearly to require that the States' land use programs include methods for exercising control over key facility site location, as well as major improvements and access features of such facilities.

Under our proposal of last year, the principal incentive for States to develop land use programs was the Federal matching grants for program development and program management. We now are persuaded that economic sanctions as well as grants should be provided to assure State action. Recognizing the significant effect which key facilities can have on broad land use patterns, the sanctions which we propose would reduce the amount of financial assistance under those Federal programs with the most far-reaching effect upon land use -- airport and highway construction and recreation facilities. The proposed reductions would apply to any State which has not developed an adequate land use program by June 30, 1975. Any funds withheld from States which have not implemented adequate land use programs would be diverted to States complying with the National Land Use Policy Act, since complying States would be better able to make sound decisions with respect to activities with major land use impacts.

Attached to this letter is proposed language which would accomplish the objectives set forth above. In

addition, in view of the passage of time since the proposal was introduced, the dates contained in certain sections (listed on the attachment) must be revised.

I urge that the Congress adopt these recommended amendments and act promptly to complete its consideration of this vitally important legislation.

The Office of Management and Budget has advised that enactment of H.R. 5504, with the amendments recommended herein, would be in accord with the program of the President.

Sincerely yours,

/s/ Rogers C.B. Morton
Secretary of the Interior

Honorable Henry M. Jackson
Chairman, Committee on
Interior and Insular Affairs
U.S. Senate
Washington, D.C. 20510

Honorable Wayne N. Aspinall
Chairman, Committee on
Interior and Insular Affairs
U.S. House of Representatives
Washington, D.C. 20515

Enclosure

A BILL

To establish a national land use policy; to authorize the Secretary of the Interior to make grants to encourage and assist the States to prepare and implement land use programs for the protection of areas of critical environmental concern and the control and direction of growth and development of more than local significance; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States in Congress assembled, That this Act may be cited as the "National Land Use Policy Act of ~~1971~~ 1972."

FINDINGS AND DECLARATIONS OF POLICY

Section 101. (a) The Congress hereby finds and declares that decisions about the use of land significantly influence the quality of the environment, and that present State and local institutional arrangements for planning and regulating land use of more than local impact are inadequate, with the result:

(1) that important ecological, cultural, historic and aesthetic values in areas of critical environmental concern which are essential to the well-being of all citizens are being irretrievably damaged or lost;

(2) that coastal zones and estuaries, flood plains, shorelands and other lands near or under major bodies or courses of water which possess special natural and scenic characteristics are being damaged by ill-planned development that threaten these values;

(3) that key facilities such as major airports, highway interchanges, and recreational facilities are inducing disorderly development and urbanization of more than local impact;

(4) that the implementation of standards for the control of air, water, noise and other pollution is impeded;

(5) that the selection and development of sites for essential private development of regional benefit has been delayed or prevented;

(6) that the usefulness of Federal or federally-assisted projects and the administration of Federal programs are being impaired;

(7) that large-scale development often creates a significant adverse impact upon the environment.

(b) The Congress further finds and declares that there is a national interest in encouraging the States to exercise their full authority over the planning and regulations of non-Federal lands by assisting the States, in cooperation with local governments, in development land use programs including unified authorities, policies, criteria, standards, methods and processes for dealing with land use decisions of more than local significance.

DEFINITIONS

Section 102. For purposes of this Act: (a) "Areas of critical environmental concern" are areas where uncontrolled development could result in irreversible damage to important historic, cultural, or aesthetic values, or natural systems or processes, which are of more than local significance; or life and safety as a result of natural hazards of more than local significance. Such areas shall include:

(1) Coastal zones and estuaries: "Coastal zones" means the land, waters, and lands beneath the waters in close proximity to the coastline (including the Great Lakes) and strongly influenced by each other, and which extend seaward to the outer limit of the United States territorial sea and include areas influenced or affected by water from an estuary such as, but not limited to, salt marshes, coastal and intertidal areas, sounds, embayments, harbors, lagoons, inshore waters, channels, and all other coastal wetlands. "Estuary" means the part of the mouth of a river or stream or other body of water having unimpaired natural connection with the open sea and within which the sea water is measurably diluted with fresh water derived from land drainage;

(2) shorelands and flood plains of rivers, lakes, and streams of State importance;

(3) rare or valuable ecosystems;

(4) scenic or historic areas; and

(5) such additional areas of similar valuable or hazardous characteristics which a State determines to be of critical environmental concern.

(b) "Key facilities" are public facilities which tend to induce development and urbanization of more than local impact and include the following:

(1) any major airport that is used or is designed to be used for instrument landings;

(2) interchanges between the Interstate Highway System and frontage access streets or highways; major interchanges between other limited access highways and frontage access streets or highways; and

(3) major recreational lands and facilities.

(c) "Development and land use of regional benefit" includes land use and private development for which there is a demonstrable need affecting the interests of constituents of more than one local government which outweighs the benefits of any applicable restrictive or exclusionary local regulations.

(d) "State" includes the 50 States of the United States, the Commonwealth of Puerto Rico, Guam, American Samoa, and the Virgin Islands.

PROGRAM DEVELOPMENT GRANTS

Section 103. (a) The Secretary of the Interior (hereinafter referred to as the "Secretary") is authorized to make not more than two annual grants to each State to assist that State in developing a land use program meeting the requirements set forth in section 104 of this Act. Such grants shall not exceed 50 percent of the costs of program development. Prior to making the first grant, the Secretary shall be satisfied that such grant will be used in development of a land use program meeting the requirements set forth in section 104. Prior to making a second grant, the Secretary shall be satisfied that the State is adequately and expeditiously proceeding with the development of a land use program meeting the requirements of section 104.

(b) States receiving grants pursuant to this section shall submit to the Secretary not later than 1 year after the date of award of the grant a report on work completed toward the development of a State land use program. A State land use program meeting the requirements of section 104 of this Act shall satisfy the requirements for such a report.

(c) The authority to make grants under this section expires three years from date of enactment.

PROGRAM MANAGEMENT GRANTS

Section 104. Following his review of a State's land use program, the Secretary is authorized to make a grant to that State to assist it in managing the State land use program. Successive grants for this purpose may be made annually to any State resubmitting its land use program for review by the Secretary.

Grants made pursuant to this section shall not exceed 50 percent of the cost of managing the land use program. Grants authorized by this section shall be made by the Secretary only if, in his judgment:

(a) the State's land use program includes:

(1) a method for inventorying and designating areas of critical environmental concern;

(2) a method for inventorying and designating areas impacted by key facilities;

(3) a method for exercising State control over the use of land within areas of critical environmental concern and areas impacted by key facilities <u>including a method for exercising State control over the site location and the location of major improvements and major access features of key facilities</u>;

(4) a method for assuring that local regulations do not restrict or exclude development and land use of regional benefit;

(5) a policy for influencing the location of new communities and a method for assuring appropriate controls over the use of land around new communities;

(6) a method for controlling proposed large-scale development of more than local significance in its impact upon the environment;

(7) a system of controls and regulations pertaining to areas and developmental activities previously listed in this subsection which are designed to assure that any source of air, water, noise or other pollution will not be located where it would result in a violation of any applicable air, water, noise or other pollution standard or implementation plan;

(8) a method for periodically revising and updating the State land use program to meet changing conditions; and

(9) a detailed schedule for implementing all aspects of the program.

For purposes of complying with paragraphs (1)-(7) of this subsection (a), any one or a combination of the following general techniques is acceptable: (i) State establishment of criteria and standards subject to judicial review and judicial enforcement of local implementation and compliance; (ii) direct State land use planning and regulation; (iii) State administrative review of local land use plans, regulations and implementation with full powers to approve of disapprove.

(b) In designating areas of critical environmental concern, the State has not excluded any areas of critical environmental concern to the Nation.

(c) In controlling land use in areas of critical environmental concern to the Nation, the State has procedures to prevent action (and, in the case of successive grants, the State has not acted) in substantial disregard for the purposes, policies and requirements of its land use program.

(d) State laws, regulations and criteria affecting areas and developmental activities listed in subsection (a) of this section are in accordance with the policy, purpose and requirements of this Act; and that State laws, regulations and criteria affecting land use in the coastal zone and estuaries further take into account:

(1) the aesthetic and ecological values of wetlands for wildlife habitat, food production sources for aquatic life, recreation; sedimentation control, and shoreland storm protection; and

(2) the susceptibility of wetlands to permanent destruction through draining, dredging, and filling, and the need to restrict such activities.

(e) The State is organized to implement its State land use program.

(f) The State land use program has been reviewed and approved by the Governor.

(g) The Governor has appropriate arrangements for administering the land use program management grant.

(h) The State, in the development, revision, and implementation of its land use program, has provided for adequate dissemination of information and for adequate public notice and public hearings.

(i) The State has: (1) coordinated with metropolitanwide plans existing on January 1 of the year in which the State use program is submitted to the Secretary, which plans have been developed by an areawide agency designated pursuant to regulations established under Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966;

(2) coordinated with appropriate neighboring States with respect to lands and waters in interstate areas;

(3) taken into account the plans and programs of other State agencies and of Federal and local governments.

(j) The State utilizes for the purpose of furnishing advice to the Federal Government as to whether Federal and Federally-assisted projects are consistent with the State land use program, procedures established pursuant to Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and Title IV of the Intergovernmental Cooperation Act of 1968.

FEDERAL REVIEW OF GRANT APPLICATIONS AND STATE LAND USE PROGRAMS.

Section 105. (a) The Secretary before making a program management grant pursuant to section 104. shall consult with the heads of all Federal agencies which conduct or participate in construction, development or assistance programs significantly affecting land use in the State, and shall consider their views and recommendations. The Secretary shall not approve a grant pursuant to section 104 until he has ascertained that the Secretary of Housing and Urban Development is satisfied with those aspects of the State's land use program dealing with large-scale development, key facilities, development and land use of regional benefit, and new communities meet the requirements of section 104 for funding of a program management grant.

(b) The Secretary shall take final action on a State's application for a grant authorized under section 104 not later than six months following receipt for review of the State's land use program.

CONSISTENCY OF FEDERAL ACTIONS WITH STATE LAND USE PROGRAMS

Section 106. (a) Federal projects and activities significantly affecting land use shall be consistent with State land use programs funded under section 104 of this Act except in cases of overriding national interest. Program coverage and procedures provided for in regulations issued pursuant to section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 and Title IV of the Intergovernmental Cooperation Act of 1968 shall be applied in determining whether Federal projects and activities are consistent with State land use programs funded under section 104 of this Act.

(b) After December 31, ~~1974~~ 1975, or the date the Secretary approves a grant under section 104, whichever is earlier, Federal agencies submitting statements required by Section 102(2)(C) of the National

Environmental Policy Act shall include a detailed statement by the responsible official on the relationship of proposed actions to any applicable State land use program which has been found eligible for a grant pursuant to section 104 of this Act.

FEDERAL ACTION IN THE ABSENCE OF STATE LAND USE PROGRAMS

Section 107. (a) Where any major Federal action significantly affecting the use of non-Federal lands is proposed after December 31, 1974, in a State which has not been found eligible for a program management grant pursuant to section 104 of this Act, the responsible Federal agency shall hold a public hearing in that State at least 180 days in advance of the proposed action concerning the effects of the action on land use taking into account the relevant consideration set out in section 104 of this Act, and shall make findings which shall be submitted for review and comment by the Secretary, and where appropriate, by the Secretary of Housing and Urban Development. Such findings of the responsible Federal agency and comments of the Secretary or the Secretary of Housing and Urban Development shall be part of the detailed statement required by Section 102(2)(C) of the National Environmental Policy Act (42 U.S.C. 4321 et seq.). This section shall be subject to exception where the President determines that the interests of the United States so requires.

(b) Section 15 of the Airport and Airway Development Act (P.L. 91-258, 84 Stat. 227) is amended by adding the following new subsection:

(d) Any State which has not been found eligible for a management grant under section 104 of the National Land Use Policy Act by June 30, 1975, shall suffer a reduction of 7% of its entitlement to Federal funds apportioned for airport development pursuant to paragraphs (A) and (B) of subsection (a)(1) and paragraphs (A) and (B) of subsection (a)(2) of this section, in fiscal year 1976. If that State has not been found eligible by June 30, 1976, it shall suffer a reduction of 14% in fiscal year 1977, and if not found eligible by June 30, 1977, shall suffer a reduction of 21% in fiscal year 1978. Any funds so withheld shall be included in the aggregate of airport and airway development funds and shall be made available to States found eligible for financial assistance under section 104 of the National Land Use

Policy Act according to the criteria prescribed for the apportionment of such funds, excluding for purposes of computation any State or States found ineligible for financial assistance under section 104 of the National Land Use Policy Act.

(c)(1) Section 104, title 23 of the United States Code is amended by adding the following subsection:

(f) Any State which has not been found eligible for a management grant under section 104 of the National Land Use Policy Act by June 30, 1975, shall suffer a reduction of 7% of its entitlement to Federal-aid highway funds exclusive of planning and research which would otherwise be apportioned to such State in fiscal year 1976. If that State has not been found eligible by June 30, 1976, it shall suffer a reduction of 14% in fiscal year 1977, and if not found eligible by June 30, 1977, shall suffer a reduction of 21% in fiscal year 1978. Any funds so withheld shall be included in the aggregate of Federal-aid highway funds and shall be made available to States found eligible for assistance under section 104 of the National Land Use Policy Act according to criteria prescribed for the apportionment of Federal-aid highway funds, excluding for purposes of computation any State or States found ineligible for financial assistance under section 104 of the National Land Use Policy Act.

(c)(2) Section 109(f), title 23 of the United States Code is amended by deleting "or control of" in the first sentence.

(d) Subsection 5(b) of the Land and Water Conservation Fund Act of 1965 (P.L. 88-578, 78 Stat. 897) is amended by adding after the second paragraph the following paragraph:

Any State which has not been found eligible for a management grant under section 104 of the National Land Use Policy Act by June 30, 1975, shall suffer a reduction of 7% of its entitlement under paragraphs (1) and (2) of this subsection in fiscal year 1976. If that State has not been found eligible by June 30, 1976, it shall suffer a reduction of 14% in fiscal year 1977, and if not found eligible by June 30, 1977, shall suffer a reduction of 21% in fiscal year 1978. Any funds so withheld shall be included in the aggregate of land and water conservation funds and shall be made available according to the criteria prescribed for the

apportionment of such funds, excluding for purposes of computation any State or States found ineligible for financial assistance under Section 104 of the National Land Use Policy Act.

AVAILABILITY OF FEDERAL EXPERTISE

Section 108. (a) The Secretary shall provide advice upon request to States concerning the designation of areas of critical environmental concern to the Nation.

(b) Federal agencies with data or expertise relative to land use and conservation shall take appropriate measures; subject to appropriate arrangements for payment or reimbursement, to make sure data or expertise available to States for use in preparation, implementation, and revision of State land use programs.

GUIDELINES

Section 109. The President is authorized to designate an agency or agencies to issue guidelines to the Federal agencies to assist them in carrying out the requirements of this Act.

ALLOCATION OF FUNDS

Section 110. (a) Funds for grants authorized by sections 103 and 104 of this Act shall be allocated to the States based on regulations issued by the Secretary which shall take into account State population and growth; nature and extent of coastal zones and estuaries and other areas of critical environmental concern and other relevant factors.

(b) No grant funds shall be used to acquire real property.

(c) A refusal by the Secretary to provide a program development or program management grant authorized by this Act shall be in writing.

MISCELLANEOUS

Section 111. (a) The Secretary shall develop, after appropriate consultation with other interested parties, both Federal and non-Federal, such rules and regulations covering the submission and review of applications for grants authorized by sections 103 and 104 as may be necessary to carry out the provisions of this Act.

(b) A State receiving a grant under the provisions of section 103 or 104 of this Act, the agency designated by the Governor to administer such grant, and State agencies allocated a portion of a grant shall make reports and evaluations in such form, at such times, and

containing such information concerning the status and application of Federal funds and the operation of the approved management program as the Secretary may require, and shall keep and make available such records as may be required by the Secretary for the verification of such reports and evaluations.

(c) The Secretary, and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access, for purposes of audit and examination, to any books, documents, papers, and records of a grant recipient that are pertinent to the grant received under the provisions of section 103 or 104 of this Act.

(d) Nothing herein shall be interpreted to extend the territorial jurisdiction of any State.

(e) Nothing herein shall be construed to imply Federal consent to or approval of any State or local actions which may be required or prohibited by other Federal statutes or regulations.

APPROPRIATION AUTHORIZATION

Section 112. (a) There are hereby authorized to be appropriated not to exceed $20,000,000 in each fiscal year, ~~1972~~ 1973 through ~~1976~~ 1977, for grants authorized by sections 103 and 104 of this Act, such funds to be available until expended.

(b) There are hereby authorized to be appropriated such sums as may be necessary for the Secretary of the Interior and the Secretary of Housing and Urban Development to administer the program established by this Act.

93-561 O - 72 - 7

SECTION-BY-SECTION ANALYSIS

The proposed bill would establish a National Land Use Policy to encourage the States to plan and regulate land use in certain critical areas.

Section 101 - declares Congressional findings that present State and local institutional arrangements for planning and regulating land use are inadequate and have resulted in haphazard land development and the loss of important environmental values. It is in the national interest to encourage and assist the States in strengthening the institutional framework for planning and controlling the use of non-Federal lands.

Section 102 - contains definitions. "Areas of critical environmental concern" are areas where uncontrolled development could result in irreversible damage to important values. Such areas include coastal zones and estuaries and other similar areas. "Key facilities" are public facilities which tend to induce develment of more than local impact, such as airports and highway interchanges. "Development and land use of regional benefit" means private development, the regional need for which outweighs a local conflicting interest.

Section 103 - authorizes the Secretary of the Interior to make two successive annual grants of up to 50% of the cost to States of developing a land use program. Prior to receiving the second grant, the State must submit a report of its progress in developing a program.

Section 104 - authorizes the Secretary to make grants of up to 50% of the cost to States of managing their land use program. Such grants will be made only if the State program, in the Secretary's judgment, meets certain specified criteria. It must include methods for inventorying, designating and exercising State control over areas of critical environmental concern and areas impacted by key facilities, including the site location of such facilities themselves, a method for assuring that local regulations do not restrict land use and private development of regional benefit, a policy for influencing the location of new communities, a method for controlling the use of land around new communities, a method for controlling proposed large-scale development of more than local impact

on the environment and a detailed schedule for implementing all aspects of the program. The program must not exclude areas of critical environmental concern to the Nation and must take into account the unique values and fragile nature of coastal zones and estuaries, particularly coastal wetlands. The program must also meet certain other organizational and procedural requirements.

Section 105 - requires the Secretary to consult with Federal agencies with activities or programs affecting land use before making a program management grant. The Secretary shall not approve such a grant unless the Secretary of Housing and Urban Development is satisfied that those aspects of the State land use program dealing with large-scale development and key facilities, development and land use of regional benefit, and new communities meet the requirements of section 104. The Secretary shall act on a program management grant application within 6 months after receipt of the State's land use program.

Section 106 - establishes a requirement for consistency of Federal projects and activities with State land use programs. It also requires that Federal agencies submitting environmental statements pursuant to the National Environmental Policy Act include a detailed statement of the relationship of the proposed Federal action to any applicable State land use program which has been found eligible for a management grant.

Section 107 - requires that where a State has not been found eligible for a management grant, any major Federal action significantly affecting the use of non-Federal lands proposed after December 31, 1975, must be preceded by a public hearing at least 180 days before the proposed action, followed by detailed findings upon which the Secretaries of the Interior or Housing and Urban Development will be allowed to comment, unless the President determines that the interests of the United States are to the contrary.

This section also amends the Airport and Airway Development Act (P.L. 91-258, 84 Stat. 227), the Federal Highway Act (23 U.S.C. § 104), and the Land and Water Conservation Fund Act (P.L. 88-578, 78 Stat. 897) to provide for annual incremental 7% cutbacks in airport development funds, Federal-aid highway funds, and land and water conservation funds, respectively,

beginning in fiscal year 1976, for any State which has not been found eligible for a management grant under section 104 by June 30 of 1975 or succeeding years.

Section 108 - authorizes the Secretary to provide advice upon request to States about areas of critical environmental concern to the Nation and directs Federal agencies to share pertinent expertise with the States.

Section 109 - authorizes the President to designate an agency to issue guidelines to assist Federal agencies carrying out the responsibilities under the Act.

Section 110 - authorizes the Secretary to allocate grant funds to the States on the basis of State population and growth, extent of coastal areas and areas of critical environmental concern and other relevant factors. No grant funds shall be used by the State to acquire real property.

Section 111 - authorizes the Secretary to develop, in consultation with other interested parties, rules and regulations covering the submission and review of grant applications and to require reports concerning the status and operation of the program. It requires that certain records be kept and authorizes the Secretary and the Comptroller General to audit and examine such records. It further provides that nothing in this Act shall extend State territorial jurisdiction or be construed to conflict with other Federal statutes or regulations.

Section 112 - authorizes the appropriation of $20 million in each fiscal year 1973 through 1977 for grants to States. It further authorizes the appropriation of such sums as necessary for the Departments of the Interior and Housing and Urban Development to administer the program.

KEY FEATURES OF SENATE PASSED LAND USE POLICY AND PLANNING ASSISTANCE ACT (JACKSON S.632)

REQUIRES 3 YEAR PLANNING PROCESS: FOCUSES ON CRITICAL INVENTORYING ENVIRONMENTAL AREAS, AREAS IMPACTED BY KEY FACILITIES, AND LARGE-SCALE DEVELOPMENT AREAS.

REQUIRES 5 YEAR PLANNING PROGRAM TO DESIGNATE AND CONTROL CRITICAL ENVIRONMENTAL AREAS AND LAND USES OF MORE THAN LOCAL SIGNIFICANCE.

FUNDING:	40M/YR FOR 2 YRS: 30M/YR FOR 3 SUCCEEDING YRS
FEDERAL SHARE:	2/3 FIRST 2 YRS: 1/2 THEREAFTER
SANCTIONS:	TERMINATION OF ASSISTANCE; HEARING BOARD CONCURRENCE
COORDINATION:	FEDERAL-STATE-LOCAL MECHANISMS REQUIRED FEDERAL PROGRAMS CONSISTENT WITH STATE PROGRAMS
ADMINISTRATIVE:	DEPARTMENT OF THE INTERIOR; PROGRAM REVIEW BY HUD & EPA
INFO SYSTEM:	FEDERAL LAND USE DATA AND INFORMATION; REGIONAL BRANCHES

REQUIREMENTS FOR STATES (S.632)

3-YEAR PLANNING PROCESS (SEC. 302)

INSTITUTIONAL

-STATE LAND USE PLANNING AGENCY

-COORDINATION OF STATEWIDE LAND USE DECISIONS

-INTER- AND INTRA- STATE LAND USE INFO EXCHANGE

CITIZEN PARTICIPATION

-PUBLIC HEARINGS

-OPPORTUNITIES FOR INVOLVEMENT

PLANNING

-INVENTORY

--LAND AND NATURAL RESOURCES

--ENVIRONMENTAL, GEOLOGICAL, PHYSICAL CHARACTERISTICS

--ECONOMIC AND POPULATION CHARACTERISTICS AND TRENDS

-ASSESSMENT OF FEDERAL AND NON-FEDERAL LAND NEEDS FOR:

RECREATION, AGRICULTURE, MINERAL DEVELOPMENT, FORESTRY, INDUSTRY AND COMMERCE, TRANSPORTATION, URBAN DEVELOPMENT, RURAL DEVELOPMENT, PUBLIC FACILITIES

-CRITERIA AND METHOD FOR DESIGNATION OF:

--CRITICAL ENVIRONMENTAL AREAS

--AREAS IMPACTED BY KEY FACILITIES

--LARGE-SCALE DEVELOPMENT

REQUIREMENTS FOR STATES (S.632)

5-YEAR PLANNING PROGRAM (SEC. 303, 304)

INSTITUTIONAL

-IMPLEMENTATION: DETERMINATIVE STATE AUTHORITY BY

-DIRECT STATE LAND USE PLANNING AND REGULATION

AND/OR

-STATE ADMINISTRATIVE REVIEW WITH POWER TO APPROVE OR DISAPPROVE

IN AREAS OF CRITICAL ENVIRONMENTAL CONCERN, AREAS IMPACTED BY KEY FACILITIES, AND AREAS OF LARGE-SCALE DEVELOPMENT

CITIZEN PARTICIPATION

-DISSEMINATION OF PROGRAM INFORMATION

PLANNING PROCESS

-UPDATE AND REVISE LAND USE PROGRAM

-INSURE THAT FEDERAL LANDS ARE NOT DAMAGED BY INCONSISTENT LAND USE PATTERNS IN ADJOINING AREAS

LAND USE PLANNING PROCESS AND PROGRAM REQUIREMENTS
(S.632)

I. Statewide Land Use Planning Process (Sec. 302)
(Developed within 3 complete fiscal years)

Institutional Requirements:

1. Establish a State land use planning agency and an advisory council of elected local government officials.
2. Establish a method for coordinating all State and local programs affecting land use.
3. Consider interstate aspects of land use issues.
4. Establish arrangements for exchanging land use planning information with State, local and Federal agencies.

Citizen Participation Requirements:

1. Conduct public hearings, prepare reports and solicit comments on the land use planning process.
2. Develop and continually revise opportunities for public participation in the planning process.

Planning Requirements:

1. Prepare and revise a statewide inventory of the State's land and natural resources.
   Compile and revise data on:
   - population densities and trends
   - economic characteristics and projections
   - environmental conditions and trends
   - urban and rural growth extent and directions
2. Project nature and quantity of land needed and suitable for:
   - recreation and aesthetic appreciation
   - conservation and preservation of natural resources
   - agriculture, mineral development and forestry
   - industry and commerce
   - energy generation and transmission; transportation
   - urban development for old and new urban areas
   - rural development
   - health, educational & other State and local public facilities
3. Prepare and revise an inventory of environmental, geological and physical conditions which influence land use desirability.
4. Prepare and revise an inventory of State, local and private needs for Federal lands.
5. Prepare and revise an inventory of governmental organization and financial resources available for land use planning.
6. Establish a method for identifying large scale development and land use of regional benefit.
7. Establish a method for inventorying and designating areas of critical environmental concern and areas impacted by key facilities.

Technical Assistance and Training Requirements:

1. Provide technical assistance and training for State and local agency personnel.

LAND USE PLANNING PROCESS AND PROGRAM REQUIREMENTS
(S.632) (Cont'd)

II. State Land Use Program Implementation - (Sec. 303, 304)
(Developed within 5 complete fiscal years)

Institutional Requirements:

1. Select methods of implementation which:
   a. encourage the employment of local land use controls.
   b. employ direct state land use planning and regulation; implementation by local governments with State review and approval/disapproval authority or a combination of both.
   c. provide an administrative appeal procedure
   d. provide for court determination of the need for compensation because of the diminished use of property.

Citizen Participation Requirement:

Assure proper dissemination of information about the state land use program and in the formulations of guidelines, rules and regulations.

Implementation Requirements:

Develop and show good faith in implementing methods which:
1. Assure that the use and development of lands in areas of critical environmental concern, areas impacted by key facilities, large subdivisions and other large scale developments are not inconsistent with the State land use program in their impact on the environment.
2. Assure that sources of air, water, noise and other pollution in critical areas are not in violation of applicable standards or implementation plans.
3. Revise the State land use program to meet changing conditions.
4. Conduct a coordinated program for the land and water resources of any coastal zone.
5. Prohibit land uses in areas identified as areas of critical environmental concern or designated for key facilities, development and land use of regional benefit, large scale development, or large scale subdivisions which are inconsistent with the State land use program as they pertain to such areas.

Additional Requirements:

1. Utilize the procedures of Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966, as amended, and Title IV of the Intergovernmental Cooperation Act of 1968 and directly participate in programs provided for by Section 701 of the Housing Act of 1954, as amended.
2. Obtain the review and approval of the program by the Governor.

MAJOR ISSUES

I. PUBLIC COMMITTMENT for land use planning and management of critical areas.

To increase awareness, among public at large and in state legislatures, of the need of and purpose for State land use planning and management.

II. Provision of State share of COST for establishment and implementation of a planning program.

Development of budget estimates for manpower and equipment, and enforcement costs. Provision of State's share by in-kind services or grants-in-aid from other Federal programs.

III. ESTABLISHMENT of a land use planning agency, advisory council and appeals mechanism to accomplish land use process and program.

Create institutions necessary to administer planning and management program. Role and jurisdiction of State planning agency, and relation to other State and local government agencies. Character and membership of advisory council, and content of administrative appeal procedure. Jurisdictional scope for judicial review of administrative decisions and appeals determination.

IV. Establish mechanisms for PUBLIC INVOLVEMENT

The high degree of public involvement anticipated requires development of mechanisms to insure citizen participation at various stages of the planning process, including, but not limited to, public hearings. Specifically, involvement in classification of and criteria for critical areas, alternative decision-making, and dissemination of program information to public. Timing and procedure for public hearings, and other involvement.

V. Establish State land use planning INFORMATION system

Data classification, and relationship between State data system and Federal land use information and data system. Must State inventory of land and natural resources be completed within three years? Is technology sufficient, and available? How much existing data is useful, and utilizable? Role and characteristics of Federal nationwide system. Mechanisms for exchange of information between local, State, regional, and interstate agencies.

VI. COORDINATE Federal-State-local decision-making

Role of local government and sub-state or regional planning agencies in development and implementation of State land use program. Coordination of land use planning and management with existing statewide and local planning programs, including functional planning (transportation, health, urban, water quality, economic, natural resources). Alternatives for

implementation (management function) include utilization of existing local controls, direct state regulation, or a combination of existing and additional mechanisms by State legislative initiative (level of additional State legislation required to implement State land use planning and management program.) Coordination of Federal requirements for grant-in-aid programs and planning assistance legislation. Establishment of additional Federal mechanisms at the regional level to administer land use legislation and related land-use programs.

The issues presented here are some major ones as suggested by requirements of the land use legislation. Additional issues will become apparent through State participation at the symposium, and future discussion.

NATIONAL LAND USE POLICY LEGISLATION

S. 632, Land Use Policy and Planning Assistance Act
Passed September 19, 1972

1. Purpose: To provide encouragement, and financial and technical assistance to States to conduct land use planning and regulation and to coordinate planning of non-Federal and Federal lands.

2. Administering agency: DOI through the Office of Land Use Policy Administration with approval of state planning process by HUD and EPA and advice from the Advisory Board on Land Use Policy.

3. Planning Process: Statewide land use planning process which inventories, designates and manages environmentally critical areas, areas impacted by key facilities and large-scale development.

4. Methods of implementation: direct state land use planning and regulation and/or implementation by local governments pursuant to State criteria with review and approval by State government.

5. Time frame: Three years to develop land use planning process through designated state land use planning agency; two years to complete development of land use program and implementation devices.

6. Funding: $40 million/year for first two fiscal years.
$30 million/year for next three succeeding fiscal years.

7. Funding Ratio: 66 2/3% Federal funds contribution for first two fiscal years.
50% Federal funds contribution thereafter.

8. Grant Criteria: Based on State's land resource base, population, pressures for growth, and financial need and other relevant criteria.

9. Coordination: Federal programs shall be consistent with State land use programs and State programs shall be coordinated with Federal and local governments.

10. Program Review: After 5 years, Secretary must review State program. If State declared ineligible for further assistance, President appoints Ad Hoc Hearing Board to approve or disapprove Secretary's findings.

11. Penalties: Assistance under the act cut-off.

12. Federal Land Use Information and Data Center with regional branches authorized.

13. - - - - - - - -

JACKSON INTRODUCES ADMINISTRATION BILL ENCOURAGING STATES TO DEVELOP PROGRAMS

A bill to establish a national policy encouraging states to develop land use programs (S 924) was introduced by Senator Henry M. Jackson (D-Wash) on behalf of the Administration February 20.

The proposed Land Use Policy and Planning Assistance Act of 1973 would establish a grant-in-aid program to assist states in development and execution of state land use programs.

The bill would establish federal requirements to give states guidance in land use programs and would authorize the Secretary of the Interior to administer the grant program, review state-wide land use processes, methods, and programs, and assist the coordination of federal activities with state land use programs. Planning and management of federal lands and adjacent nonfederal lands would be coordinated.

S 924 would authorize $170 million over five years for development and management of state land use programs. A total of $40 million would be available for each of the first two fiscal years and $30 million for each of the next three fiscal years.

The Secretary of the Interior would be authorized to make grants to each state to assist in development and management of a land use program. The grants would not exceed 66 and two-thirds percent of the cost.

The bill would provide sanctions if a state does not develop an acceptable land use program. If by June 30, 1976, a state does not have a plan, it would lose 7 percent of its airport funds, federal-aid highway funds, and land and water conservation funds in 1977. The state would suffer a 14 percent reduction in 1978 and a 21 percent reduction in 1979 if acceptable plans are not developed.

An acceptable plan would have to include establishment of a method for compiling and revising data related to inventorying areas of critical environmental concern, areas impacted by key facilities, and development of land use of regional benefit.

Areas of critical environmental concern would include wetlands, beaches and dunes, significant estuaries, shorelands, flood plains, areas of unstable soils and high seismic activity, rare or valuable ecosystems, significant agricultural, grazing and watershed lands, forests, and scenic or historic areas.

Key facilities would include major airports, major highway interchanges, frontage access streets and highways, major recreational lands and facilities, and facilities on nonfederal lands for development, generation, and transmission of energy.

An acceptable state plan also would have to include compilation of data related to population, economics, recreational needs, transportation projections and trends, environmental conditions, and needed governmental service.

Further, a plan would have to include a process for public education, local government participation in the planning process, and enforcement procedures.

Before approving grant eligibility, the Secretary would consult with heads of the Departments of Agriculture, Commerce, Defense, Housing and Urban Development, Transportation, and Health, Education, and Welfare and with the Atomic Energy Commission, Federal Power Commission, and Environmental Protection Agency.

APPENDIX T

A Copy of a Position Paper Entitled "Reorganization of State Government: Establishment of a State Land Use Agency--Reasons For, Primarily from a National Perspective," dated 12/20/72

12/20/72
STAFF DRAFT

Reorganization of State Government: Establishment of a State Land Use Agency - Reasons for, Primarily From a National Perspective

Perspective

National Land Use Planning Legislation

During October 17-27, 1972, the U. S. Department of the Interior sponsored four, regional, one and one-half day symposia for the primary purpose of obtaining State perspectives on issues, problems and needs in land use planning and management. Participants in these informal discussions consisted of a variety of planning officials from 49 States as well as Puerto Rico, the Virgin Islands and American Samoa.

Many of the discussions in these symposia related to national land use planning legislation, more specifically, the Land Use Policy and Planning Assistance Act of 1972, S. 632 as passed by the U.S. Senate on September 19, 1972.

The purpose of S. 632 is to provide encouragement and financial and technical assistance to States to conduct statewide land use planning and regulation. Penalties would be imposed upon those states that did not establish a land use planning process within a certain time period. This legislation is to be considered by the House this coming session.

With this legislation in mind, the participants of the symposia agreed that:

(1) Strong national legislation is needed now to support and encourage State action.

(2) Most States seek a mechanism for effective comprehensive plannning.

(3) National land use planning legislation should provide strong incentives for States which implement more than the minimum program.

(4) National land use legislation must contain strong sanctions coupled with strong incentives.

(5) National legislation should require State land use programs to include provisions for acquisition by condemnation and other means.

(6) There is an immediate need for a standardized national land use classification system.

(7) One of priority needs now is education programs for the general public as well as for government personnel.

(8) National land use planning legislation would result in government reorganization in many States.

Commission on Population Growth and the American Future

The President and Congress have created a Commission to examine the growth and distribution of our nation's population and the impact it will have on our future. Most of the Commission's recommendations (based on its two-year study) were in the area of population growth; some of their recommendations, however, concern how we could best influence population distribution--it's in this area that land use planning plays a vital role.

It is felt that the recommendation of this Commission will be far-reaching, so it behooves us to know what their recommendations were with respect to land use planning. The following is taken from page 216 of the Commission's report:

"The Commission Recommends that Governments Exercise Greater Control Over Land Use Planning and Development."

This could be achieved through: (1) early public acquisition of land in the path of a transportation system or for open space; (2) establishment of taxes and easements to influence the use of land and timing of development; (3) establishment of a state zoning function to oversee the use of the land; and (4) establishment of special zoning to control the development of land bordering public facilities such as highways and airports."

Proposal

It is felt that the discussions at the S.632 symposia and the recommendations of the Commission on Population Growth will have significant effects on national land use planning legislation in the future. With this in mind it is felt that the State of Maine should consider establishing a state land use agency (implementing and enforcing all laws pertaining to land use or land development) which would extend the principles of sound planning, zoning and subdivision control to those areas of the State where local governments do not initiate zoning at least as protective as State laws and regulations. Such an agency could better meet the requirements of any federal land use planning legislation, could better coordinate programs related with land use planning (e.g., establishing a standardized national land use classification system) and could be the central recipient of federal land use planning funds made available to this State.

Some of the laws that would be administered by this agency include, but are not limited to:

(1) The Land Use Regulation Act (Title 12, Chapter 206-A)

(2) The Shoreland Zoning Act (Title 12, Chapter 42-A)

(3) The Site Location of Development Act (Title 38, Chapter 3)

(4) The Wetlands Control Act (Title 12, Chapter 421)

(5) The Maine Mining Act (Title 12, Chapter 201)

(6) The Great Ponds Act (Title 12, Chapter 201)

(7) Minimum Lot Size (Title 12, Chapter 423)

(8) Bulldozing of Rivers, Streams and Brooks (Title 12, Chapter 314, Section 2205)

Any legislation to create such an agency would, of course, necessitate extending zoning to areas of organized municipalities not now covered by Site Selection and Shoreland Zoning. This would create a more effective and responsive body of land use law and would solve the problems of duplication of effort and resources,

overlapping jurisdiction, administration and enforcement, and applicant and public frustration. It would also make Maine more responsive to and in accordance with any federal land use planning laws.

APPENDIX U

A list of 8 alternative courses of action open to those who will decide how and where LURC will be placed in the reorganization of State Government

ALTERNATIVE COURSES OF ACTION WITH REGARD TO LURC AND REORGANIZATION

The following are alternative courses of action open to those who will decide how and where LURC will be placed in the reorganization of state government:

1. The creation of a Department of Land Use containing LURC and similar planning, zoning and development review laws and programs;
2. Placing LURC intact in a Department of Conservation as a Bureau of Land Use Regulation with similar planning, zoning and development review laws and programs;
3. Leaving LURC alone, until a study can be made of the planning, zoning and development review programs in state government and recommendations submitted to a future session of the Legislature;
4. Placing LURC intact in a Department of Conservation as a Bureau of Land Use Regulation with the additional responsibility of at least the Shoreland Zoning program;
5. Placing LURC intact in a Department of Conservation as a Bureau of Land Use Regulation;
6. Placing LURC intact in DEP as a Bureau of Land Use Regulation;
7. Dividing LURC in part and placing the permit and enforcement functions in DEP and zoning functions in the State Planning Office; or
8. Dividing LURC in part and placing the permit functions in DEP and the planning and zoning functions in the proposed Department of Conservation.

NOTE: The above alternatives are listed in the author's order of preference.

LURC
JSH
3/20/73