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A PLAN FOR MULTIPLE USE OF THE COASTAL ZONE

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A Proposal of the

Interagency Committee on Multiple

Use of the Coastal Zone

National Council on Marine Resources

and Engineering Development

Washington, D.C.

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THE COASTAL ZONE AND ITS PROBLEMS

The Coastal Zone is a vital, fragile, and unique part of the Nation. Its high values are being threatened by irreversible changes -- largely man-made. Action is needed to bring about a more orderly use of the Coastal Zone for the increased benefit of all the people.

The Coastal Zone has been described by Vice President Humphrey, Chairman of the Marine Council, as the most important part of the marine environment. He said, "It's where the people and the seas meet."

The Coastal Zone is the interface of land and sea, the land adjacent to the Sea, and the sea and the seabed adjacent to the land. The Coastal Zone is also the Great Lakes, part of the marine environment by law.

This juxtaposition of land and water results in high real estate value and complex and fragile ecosystems, which are a combination of the terrestrial and the marine.

The Coastal Zone is the place of estuaries, where fresh and salt water mix and where the resultant mixture is far richer than either sea water or fresh water alone. Nutrients are carried into estuaries

from both the landward side and the seaward side. The result is an amazing productivity of living resources.

The Coastal Zone is a place where more people live than any other place. The 31 States which border on the oceans and the Great Lakes contain 75 percent of our Nation's population. The 413 counties which border on the ocean and the Great Lakes contain 40 percent of our people.

The Coastal Zone is the edge of sovereignty where the rights of the Nation give way to freedom of the seas. As the Nation's frontier, the Coastal Zone is the locale for a good part of our National Defense installations.

The Coastal Zone is where land and sea transportation have their interchange in the ports and harbors whose vitality is essential to the National well being.

The Coastal Zone is an area of special importance for the extraction of oil and other minerals. Most current new oil production is off-shore, at the bottom of the near sea.

The Coastal Zone is the place on which much of the commercial and sport fisheries of the Nation depend and also the place where a large part of the operation is.

The Coastal Zone is a preferred place to play for millions of our people, including many of those who live far away from it. They go there to enjoy sun bathing and swimming, fishing and boating along the edge of the sea and in the Great Lakes. There they need to be housed, fed and provided with other services in the booming recreation business.

The Coastal Zone is unique in many respects. One of these is the degree to which the value of privately-owned land and other resources is dependent upon the close juxtaposition of non-marketable common resources held in trust for the use of all citizens. The submerged land, the water, the wildlife, and the fisheries resources of the Coastal Zone are not private but publicly-owned -- by the States. These same common resources are the National attractions for the multitudes of recreation seekers, prospective residents, and many other users of the Coastal Zone. The value of riparian real estate, tourist accommodations and industrial sites reflects the quality of these common resources associated with them.

The Coastal Zone is unique because of the degree to which activity in one area of the Coastal Zone affects uses at great distances from where the action takes place. For example, destruction of part of an estuarine system by a real estate development may damage fish

populations used by others many miles away, perhaps even in other States.

The Coastal Zone is unique because of the difficulty in determining boundary lines between private and public ownership of land and water. In many cases, the lines between public and private property are ill defined or impossible to define.

The Coastal Zone is so important to the Nation, and has such unique characteristics that it deserves the special attention of the Federal and State governments.

At the present time, the changing use of the Coastal Zone is governed largely by the decisions of private industrialists, developers, and promoters. With a few exceptions, there are no overall plans, established by Government at any level, to deal in an orderly fashion with the onslaught of demand for this piece of the Coastal Zone for a residential development or that piece of the Coastal Zone for a refinery. Again with a few exceptions, these things are happening generally in a vacuum of expression of the public interest of the Nation or the public interest of the States on these irreversible changes taking place in the splendid resource of the Coastal Zone.

In a good many cases, the only means of public control over private initiative to alter the Coastal Zone is the county zoning board.

County governments normally are keen for development which will result in increased tax revenues and more jobs. The wider public interest -- Statewide and Nationwide -- generally has no means of expression.

In some areas of the Nation, effective State action has been taken to express a wide public interest in what happens in the Coastal Zone. One of these is in Massachusetts, where State law gives the Commonwealth Commissioner of Natural Resources broad powers to limit development of private coastal property if such development might interfere with the Commonwealth's production of fish, for example.

In California, the State established the San Francisco Bay Conservation and Development Commission to prepare "an enforceable plan for the conservation of the water of the San Francisco Bay and the development of its shoreline." The State provided the Commission with power to regulate changes in the San Francisco Bay during the period of report preparation. The final report will be completed within a few weeks and the plan will be up for adoption at the next session of the California Legislature.

Beyond this, State plans in many places are being made under the so-called 701 grants from the Department of Housing and Urban Development. However, these funds have generally been not concerned

and waters in the Coastal Zone where such a plan does not now exist.

It is assumed that a State government would not need to be told, by the Federal government, for example, that it would need to reserve a certain amount of its coastal wetlands from development in order to support fish and wildlife resources. Each State has a strong fish and wildlife department of its own to argue for such objectives.

The San Francisco Bay plan of the Bay Conservation and Development Commission expresses the idea that is proposed in this report. The Commission suggests a particular type of use or a non-use for every segment of the Bay, and a means by which the State of California would see that the plans are honored.

The objective here is to have that kind of program accomplished for all the Coastal Zone by each of the Coastal States.

NATIONAL GOALS

The National interests in the Coastal Zone are fourfold:

1. To encourage and sustain free enterprise, but at the same time prevent some free-enterprise uses from destroying or seriously damaging other uses that may be essential to the Nation's life and existence.
2. To preserve a proper balance between development and preservation.
3. To protect the non-market (commonly owned) values.
4. Support the Federal responsibilities in the Coastal Zone, such as aids to shipping and national defense, preservation of fish and wildlife resources, prevention or abatement of water and air pollution, provision of channels and protection of navigation.

In short, the broad national goal is to provide for the beneficial use of the Coastal Zone.

In order to achieve these goals, the Committee on Multiple Use of the Coastal Zone proposes a plan designed to retain the good features

of the present way of dealing with the Coastal Zone while establishing needed new approaches. The proposal is designed to accomplish four things:

1. Establish a planning and decision-making process that will rely on expertise and knowledge of States and yet be responsive to National needs.

2. Provide a structure for the consideration of multi-state issues in the Coastal Zone in the administration of the land and water resources of that Zone.

3. Provide a mechanism for Federal incentives, and Federal support without destroying or superseding State autonomy and responsibility which will encourage the States to develop and carry out programs of planned use of the Coastal Zone in the National interest.

4. Establish a uniform data-gathering, storage, retrieval, and dissemination system for the Coastal Zone.

Two areas of the Coastal Zone are distinctive: One of these is Chesapeake Bay; the other is the Great Lakes. Chesapeake Bay is

distinctive because it is such a rich estuary -- where opportunities remain to take action to preserve its great natural values.

The Great Lakes are distinctive because they are great bodies of fresh water and because they are International waters.

Because of this distinctiveness, special measures are proposed in this document for dealing with them.

A PROPOSED PROGRAM FOR THE COASTAL ZONE

The general solution for the problems of multiple use of the Coastal Zone proposed here is based on the proposition that the State governments of the Nation are the places in the Federal system where plans for and management of the Coastal Zone should be centered. The Federal government and the local governments should be organized to support the State governments in carrying out this responsibility.

It is recommended that Federal legislation be prepared and passed which would include the following:

1. A policy declaration by the Congress setting forth the National goals for the Coastal Zone, outlining the importance of sound multiple use and the need to maintain the balance between preservation and development. The declaration should emphasize the key role of the States.

The States are large enough to have -- or to develop -- the needed breadth of view and expertise, yet small enough to the problems to see them realistically. Except for Chesapeake Bay and the Great Lakes, Coastal Zone problems are predominately, but not

exclusively, intrastate. The States hold in trust the fish, wildlife, water, and other common property resources within their boundaries, and are engaged in many of the activities described here. They also have the necessary field enforcement personnel and mechanisms to carry out any necessary surveillance and enforcement. Hence, the primary responsibility for Coastal Zone management should be vested in the individual States.

2. Authorize Federal grants to the coastal States to develop and implement plans for their coastal areas which would spell out approved uses of Coastal Zone land resources and water resources already subject to State jurisdiction. The authorizations should point out the desirability of State governments adopting plans, policies, programs, and taking any necessary State legislative steps to influence the multiple use of the Coastal Zone to bring about optimum benefit to the people of the States and of the Nation. This Congressional outline could well include general guidelines or suggestions that some parts of the Coastal Zone be set aside for preservation, some for residential development, some for industrial development, some for recreation, etc.

Federal funds should be allocated to the offices of the Governors of the respective States for planning and for implementing. The amounts should be 90 to 100 percent of that needed to accomplish the program. Furthermore, they should be made with as few restrictions, within the general National guidelines, as possible.

The powers of State Governors to control their own programs are often restricted because State funds are tied down to matching the hundreds of Federal grant-in-aid programs. Also, the administering Federal agencies in many cases deal directly with an agency of the State, by-passing the State executive office. Grants-in-aid normally have extensive guidelines which restrict the initiative of State executive offices. This has caused one critic to say recently "Federal grant moneys control the minds of recipients."

The grant program proposed here is specifically designed to avoid any justification for such criticism. This proposal assumes that State governors and their staff are just as well qualified -- or better qualified -- than people in the Federal government to develop initial guidelines for their own Coastal Zone planning.

3. Establishment of a new Federal agency or designation of an existing agency to have powers to: make planning grants to States, review such

plans when made, arrange for coordination of plans between States, and perform other functions needed for the full attainment of the goals.

The Federal agency administering the proposed Coastal Zone program would simply offer to each of the 35 State Executive Offices [1/] grants for developing and implementing a plan for the optimum land use of its Coastal Zone. The first grants would doubtless be utilized to develop a plan for that part of each State's Coastal Zone where problems are the most severe.

Planning by the States

Major parts of the Coastal Zone planning effort would be: (1) evaluate the compatibility by the States of proposed programs and carefully to program the nature and time of the actions of the several State agencies active in the Coastal Zone, as well as significant actions of the private sector; (2) continually assess the mix of uses of the Coastal Zone resources and the effects of the changing mix on the physical, biological, economic and socio-political systems; (3) evaluate and recommend the nature and extent of State, interstate

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1/ Includes the District of Columbia and the Territories and possessions of the United States.

and local responsibility for exercising direct management of the resources and their multiple uses; (4) work toward the formulation and guides to and minimum standards for the natural regions of the Coastal Zone; (5) participate in multi-state regional planning and decision-making aimed at identifying and securing the National interest in such regions and the several States responsibilities therein; (6) engage in joint State-Federal review and evaluation of prepared plans, plans-in-the-making and the planning and decision making process to secure a meshing of State-Federal interests, responsibilities and program impact; (7) suggest and/or carry out needed research to provide additional information and/or solve problems uncovered in the planning process, and (8) propose legislation or executive action as necessary to achieve an orderly multiple use of Coastal Zone resources.

Implementation by the States

Plans are worthless without a means of assuring compliance. Thus there must be a means of giving legal stature to the results of planning. This may be accomplished by a system of zoning, permit requirements, or both. Zoning provides a generalized method of controlling land use and assuring compliance to a plan, but in coastal lands it may not provide, in itself, sufficient control.

Furthermore, zoning provisions sufficiently restrictive to protect common property resources may constitute a taking, and thus be invalid in the absence of compensation.

In conjunction with zoning provisions, and particularly in the interim before plans can be developed, it would be necessary for the States to institute a system of permits for all alterations which may affect the public interest. Review of permit applications will enable many otherwise incompatible uses to be accommodated through modification of proposed plans, without significantly altering the plan's objectives.

Regulation of Coastal Zone development by the States cannot be carried out in governmental offices. The Coastal Zone must be under continuous surveillance, and field law enforcement officers must have the authority to enforce regulatory provisions and to protect against trespass upon public lands. Considerable legal expertise must also be developed, and must be available for prosecution (or arbitration) of apparent violations.

Another part of the States' responsibility for implementation would be to inform and educate the appropriate constituencies, both public and private, on the status and future activities and plans affecting the Coastal Zone.

It is possible -- even likely -- that many States will need to enact new legislation to implement orderly Coastal Zone programs. The Federal government should assist in this activity, on request, offering model State laws.

Implementation also costs money, like planning. The Federal government should be prepared to assist the States financially in carrying this burden, to match the National interest in sound, multiple use of the Coastal Zone.

Research and Education

Because so little is really understood about the coastal environment, the foundation of knowledge must be expanded, and that knowledge must be used. Basic research, to provide broad perspective, is important, but emphasis must be given to research to solve problems, melding many disciplines, to serve as a basis for decision-making. The knowledge thus gained must be exposed to the public, and must also be used by State and assisting Federal personnel preparing plans for the Coastal Zone.

There is presently little research and education in Coastal Zone problems as such. In order to cover the broadest aspects of this

complex resource base, its multiple use, and its interactions, it is important that there be developed a National expertise -- a body of knowledgeable people who can understand these interrelationships. It is suggested that the Federal government and the States encourage State and private universities and the Sea Grant Program to include the Coastal Zone in their programming. One objective would be to develop a curriculum similar to that of public administration, but oriented to the land-sea interface in all its ramifications.

Relations with River Basin Commissions

River Basin Commissions, set up under the Water Resources Planning Act, may have an important role in the proposed Coastal Zone program.

They are established on the request of States in a watershed or other region to develop, cooperatively with the Federal government, comprehensive plans for the use of water and related land resources. Governors represent the States on such Commissions.

Doubtless, Governors in Coastal States which are party to such River Basin Commissions would wish to utilize them in connection with developing plans for management of their Coastal Zone which

are regionally oriented. On the other hand, the Governors may wish to utilize other existing coordination mechanisms, such as Federal-interstate Committees (Atlantic Coast and much of the Gulf Coast), long-established Commissions (Louisiana Coast), and primarily State oriented Steering Committees (Puerto Rico, Texas, California, Alaska and Hawaii).

In any event, each State would be asked to take into consideration the plans and needs of adjoining States where the areas under study adjoin or are closely interrelated in any way.

Land Acquisition

In order to provide adequate public access to coastal waters, and protect common property resources which might otherwise be lost (and which provide the foundation upon which many private uses are based), it will be necessary for the States to acquire significant acreages of coastal lands and waters. The power of eminent domain and sufficient funds must be granted to the appropriate State authority for this purpose. In some cases, an interest less than the fee may suffice. Leases, easements, rights-of-way, and other instruments should be investigated and employed where appropriate.

Another purpose of land acquisition by the State would be to reserve particular areas of the Coastal Zone for particular types of future use, when acquisition is the most feasible way of implementing a State Coastal Zone plan. For example, if a State Coastal plan were to call for a certain area to be designated for future industrial sites, the State might need to buy the land and hold it for that later use, selling it to an industrialist at that later time.

The Coastal States should be assisted by the Federal government in funding necessary land acquisition.

Compensating the "Losers"

A State plan for the management of the Coastal Zone should, if it is valid, designate areas where development should not take place. As a consequence, those areas will not, in the short term, be able to gain as much new tax revenue and new jobs as if development were allowed.

A key element to a successful operation of the proposed Federal system for the Coastal Zone should be a way of compensating local governments in such cases for foregoing developments and providing them with new jobs, in lieu of jobs that might have

otherwise been provided at, say, a new petrochemical plant. Financing of such measures should be a joint State-Federal responsibility.

Consistency of Federal Grant-in-Aid Programs With State Coastal Zone Plans

To assure the integrity of State Coastal Zone plans, it will be necessary to provide that all Federal grant-in-aid programs be consistent with those plans. There is a great number and a wide variety of grant-in-aid programs in all parts of the Federal government. The total grant-in-aid budget for F.Y. 1969 is $20.3 billion, and consists of approximately 450 separate programs. Many of these programs have direct or indirect impingement on the use of the Coastal Zone. They could wreck a State's Coastal Zone plan unless consistent with it.

An Executive Order should be issued requiring that all agencies administering Federal grant-in-aid programs obtain verification from the individual State Governors that the grants will not conflict with the provisions of the State's Coastal Zone plans.

Responsibilities of Federal Agency Administering Coastal Zone Program

As stated, there needs to be some agency of the Federal government to administer this Coastal Zone program. This might be the Water Resources Council, the agency designated to administer marine affairs of the Federal government, or some other Federal agency. That agency will need to devise a formula to proportion out the planning grants to the coastal "States" (including Puerto Rico and the District of Columbia, and possessions). The formula might be, for example, 40 percent by length of coastline, 20 percent by population of the coastal counties, and 40 per cent by the reciprocal of the State's per capital income. A ceiling figure might be required to prevent some States like Alaska from obtaining a disproportionately large share. These planning grants should last for a specified period, say five years.

The Federal agency would review State plans when prepared and make reports on them. Review (not approval or disapproval) would consist of: (1) General appraisal and evaluation; (2) Identification of disagreements between States and among other State functions; review should see that programs to be undertaken by States are compatible with other components of State development planning currently under way, such as transportation, water quality control, etc.; (3) Consideration

of compatibility with ecological, hydrologic, and geologic characteristics of the system being planned for; and (4) needed elements of coordination and consistency with National guidelines and plans.

The Federal agency would also conduct studies of its own in the Coastal Zone, and publicize the results for the benefit of the States. These studies would cover a wide range of disciplines. They would, of course, make maximum use of studies and reports of other Federal agencies operating in the Coastal Zone.

An important part of this proposal is to make Federal personnel available to Coastal States to help develop Coastal Zone plans and possibly to help administer them. This would work something like the present programs for making Federal government expertise available to foreign countries. The Federal agency administering the Coastal Zone program would place Federal experts in the Coastal States to work under State supervision in working out Coastal Zone plans. That Agency would reimburse other Federal agencies for the salary and expenses of the personnel as assigned. As in the foreign assistance programs, the detail of Federal people would be on a temporary basis.

The Federal government has a large number and wide range of skilled professional personnel in its employ. No one coastal State

can hope to match it. It makes sense to provide the coastal States with these skills.

The Federal agency administering the Coastal Zone program would also have responsibility for the coordination and assemblage of information. It would catalog the many investigations of the physical, biological, and economic systems of the Coastal Zone conducted by or under contract to Federal agencies. University, State, and independent research and other data materials would be included.

The Federal agency administering the Coastal Zone program would also attempt to head off inter-State conflicts and would call conferences to adjust differences between plans of adjoining States that might be in conflict.

The agency would spearhead meetings between State and Federal representatives, on a regional basis, to develop guidelines and objectives which the States and the Federal governments deem to have regional and national significance.

The Committee on Multiple Use of the Coastal Zone, or some similar committee, should continue for the purpose of effecting coordination between the Agency here proposed and other Federal agencies involved in Coastal Zone activities.

Costs

The estimated costs for the first five years of the proposed Coastal Zone program are as follows:

Year	Millions of Dollars
1	2.7
2	5.4
3	8.9
4	8.9
5	8.9
Total	34.8

The year 2 estimate would consist of:

$3.5 M	planning grants (at about $100 K per coastal state or territory)
.1	administration
1.8	Federal assistance (salaries and expenses of Federal personnel assigned to assist states)

The year 3 and subsequent year estimates would include the above items plus $3.5 M for grants to the States for assistance in implementing the Coastal Zone plans.

The planning grants would be continued because of the necessity for continually updating plans being used to enforce specified kinds of land and water use. Not included in the estimates above are costs for land acquisition. They are difficult to estimate. They could run as high as $20 M a year.

For perspective, it is estimated that Federal agencies now spend $627.9 M in Coastal Zone activities, per year.

CHESAPEAKE BAY

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Chesapeake Bay is perhaps the most unique and valuable portion of the Coastal Zone of the United States. Competent biologists have stated that the Chesapeake Bay is the most productive area in the world for aquatic organisms. ?

This queen of all estuaries demonstrates the amazing productivity which results from mixing sea water and fresh water, characteristic of estuaries everywhere.

Chesapeake Bay is important to the Nation as a whole and especially to the people of the middle Atlantic States.

It is important from a great many standpoints. It is the locale of some of the most important defense establishments of the United States. It is highly significant for ocean transportation, and its big ports are busy with the handling of cargo to and from all parts of the world. The Bay produces huge crops of shellfish and finfish for the market. In recent years, the commercial catch of seafood has been on the order of half a billion pounds annually, valued at around $65 million. ? $350 in '66

The numbers of finfish landed by sport fishermen in the Bay

No! - Some species, but not total.

may exceed the commercial catch. Many sport fishermen from the eastern half of the Nation come to the Bay to fish. Moreover, the fish produced in Chesapeake Bay support sport and commercial fisheries along much of the Atlantic Coast outside of the Bay. ?

The waters of the Bay and its shores have great natural beauty. This is attractive to those who wish to make permanent residence in the area as well as to the tourists and vacationists. As the advertisement says, "It is the land of pleasant living."

Chesapeake Bay is the scene of increasing industrial importance. The largest steel-making plant in the World is located in Baltimore.

The population of the immediate Chesapeake Bay area was approximately 3.8 million in 1960. By 1985, this figure is expected to double.

Chesapeake Bay, like many other estuaries, is faced with trouble -- man-made trouble. Presenting an address for Maryland Governor Spiro T. Agnew at the Governor's Conference on Chesapeake Bay on September 13, 1968, Congressman Rogers C.B. Morton of Maryland said:

> Man has changed the Bay's configuration by cutting new channels; man has changed the integrity of its shoreline by filling in marshes and wetlands. He has stood by to watch literally hundreds of acres a year of highland flop into the water -- highland that has been stripped of nature's ingenious protective bulkheads by those anxious to till the last inches of soil or to have a view unobstructed across the water. What they couldn't sell or couldn't use, factories from the Virginia Capes to the Appalachia of New York, Pennsylvania, and West Virginia have poured into the streams and into the Bay.
>
> * * *
>
> We must have more ships; we must have more power; we must have more chemicals; we must increase our farm production through the use of pesticides, insecticides, fungicides, rodenticides, weed killers, fertilizers, and all the rest. These things are part of the American scheme.
>
> In fact, we use more than 700 million pounds of synthetic agricultural chemicals, of 45 thousand varieties, in this country annually. I am sure the Chesapeake gets its share of the run-off. This volume is expected to increase tenfold in the next twenty years.

As might be expected, such a distinctive area as Chesapeake Bay -- with its conflicts and problems -- has been the subject of a tremendous amount of study and investigation. Federal agencies, State agencies, universities and foundations have been for many years looking into the problems of the Bay and getting scientific information about the Bay. Certainly there must be a great store of such information scattered about among these agencies and institutions.

One of the most useful actions taken to gain needed additional information and organize that already gathered in an orderly fashion was the authorization by the Congress in October 1965, of a Chesapeake Bay Study under the leadership of the Secretary of the Army and the Corps of Engineers. The authorization of this study is broad indeed. It includes navigation, fisheries, flood control, control of noxious weeds, water pollution, water quality control, beach erosion and recreation. The authorization directs the Secretary to construct, operate and maintain a hydraulic model of the Chesapeake Bay basin and associated technical Center.

The Corps of Engineers has established an Advisory Group for the Chesapeake Bay Study which includes representatives of many disciplines and many agencies and institutions. The Corps and the Advisory Group have prepared for the Committee on Multiple Use of the Coastal Zone of the Marine Sciences Council a preliminary plan of study for the Chesapeake Bay which is comprehensive in concept.

It is to be noted that the Corps of Engineers is subject to criticism in some quarters because of the estimated cost of building the hydraulic model and that it is being called upon to prepare

additional revised estimates of cost with a view to reducing the total. The construction of the model is supported by the best physical and biological scientists and economists on Chesapeake Bay as an efficient means of gaining additional information and organizing that which now exists. It is urged that the National Council on Marine Resources and Engineering Development reaffirm its strong support for the initiation of construction of this hydraulic model.

Among the most severe of the man-made problems of Chesapeake Bay are the institutional problems. The Bay lies in two States -- Virginia and Maryland. One of the arms of the estuary extends to the District of Columbia. Nearly half of the fresh water flowing into the Bay comes from New York and Pennsylvania via the Susquehanna River. The Chesapeake Bay is connected to the Delaware Bay by a ship canal. Consequently the actions of Delaware, New Jersey and Pennsylvania have some effect on Chesapeake Bay. In addition there are ten counties which border the Bay as well as Baltimore, Annapolis, Norfolk, Newport News, the other communities of Hampton Roads, and towns of lesser size.

Amazingly enough, there apparently has been no serious attempt

to devise an orderly way in which all of these jurisdictions can work together to manage a single resource -- Chesapeake Bay. Compare this to the Great Lakes, for example, which has four or five inter-agency, inter-governmental groups.

This might be challenged by States

In view of the huge new demands on the Bay which are certain to be imposed in the next few years, with attendant additional strain on the natural values of the Bay, it seems to be an appropriate time for the National Council on Marine Resources and Engineering Development to propose a better governmental management system for the Bay.

What is needed is an efficient inter-governmental management system to be established soon so that it will be ready to make use of the vast store of information which will stem from the hydraulic model and other studies by the Corps and its Advisory Group.

It is therefore recommended that the Marine Sciences Council endorse the establishment of an inter-governmental Commission for the Chesapeake Bay. Specifically, it is proposed that a three-man Commission consisting of representatives of the State of Maryland, the Commonwealth of Virginia and the United States

Government might be established and be given broad powers for research, planning, and management of the waters, lands, and related other resources of the Chesapeake Bay. These broad powers could definitely include the power to control land and water use in accordance with a comprehensive plan. Obviously, such a Commission would require acceptance of and perhaps even initiation by the States of Maryland and Virginia.

Should be explored cautiously first. This language will inflame.

This Commission might have a Council made up of representatives of the counties and cities adjoining the Bay. This Council might be more than just an Advisory Group. It could have some adequate authority to influence the decisions of the Commission, beyond supplying recommendations and advice.

Vague

The Commission could also have a group composed of representatives of Pennsylvania, the District of Columbia, Delaware, New Jersey, and New York, who might, for example, sit with the Commission but not have votes. This might be needed, as suggested above, because all of these jurisdictions have an interest in the Chesapeake Bay, and their actions affect the Bay. Similarly, the charter of the Commission could establish a formal means of communication with the proposed Commission on the

?

ASMFC etc.?

Susquehanna River and the proposed Commission on the Potomac River so that there is an orderly flow of information in both directions.

Finally, the Commission could have one or several advisory groups to include representatives of several segments of private industry, including transportation and commercial fishing; a representative of the conservation interests; a representative of recreational boating interests; and the like.

The Chesapeake Bay Commission could have authority to correlate research being done on the Chesapeake Bay -- by Federal agencies, State agencies, and Virginia and Maryland State Universities. The Commission might avail itself of the Technical Center to be established in connection with the Bay hydraulic model for this purpose. In working out a plan for the Bay, the Commission could have a big initial advantage by having the report of the comprehensive study and the model study of the Corps of Engineers.

In summary, the time may be here for the three entities which have the biggest stake in Chesapeake Bay -- Maryland, Virginia, and the United States -- to organize together formally for a

joint attack on the problems of Chesapeake Bay so that the inefficiencies and waste of conflicting, overlapping, and inadequate management of the Bay can be eliminated.

Mention was made earlier of the Governor's Conference on Chesapeake Bay and the address for Governor Agnew given there by Congressman Morton. The following additional excerpts from that address are pertinent to the recommendations made here:

> More troublesome, we are dealing with a complex of political forces and realities which become snares and road-blocks to the orderly procedure of the scientific method, or even the implementation of the simplest common sense solutions. There is always the boiling pot of conflict among group interests, most of which become utterly superficial when examined in the light of the basic issue -- man's own survival.
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> * * *
>
> In the cold light of analysis, I think we can accurately and truthfully say the system we have employed thus far in managing the resource has been inadequate, and must be revised.
>
> * * *
>
> To what we already know and what we are already doing, we must add a system of management which will develop total involvement of all interests represented and all levels of government -- counties, cities, states and federal -- for the whole basin.
>
> * * *

> We do not have a comprehensive plan. We do not have an integrated organization.
>
> * * *
>
> Undoubtedly, it will be necessary to cross historical barriers and reach for new ideas in regional management and regional planning. Beyond the present basin pact concept, there has been relatively little hardline regional planning that will result in the disciplines required to preserve the Chesapeake.

Congressman Morton concluded with a call for a proposal for a "well-articulated demand for integrated management."

THE GREAT LAKES

Another unique and vital part of the Coastal Zone is the Great Lakes. The Marine Resources and Engineering Development Act, Sec. 8, specifies that the Great Lakes be included as part of the marine environment.

These impressive bodies of water are unmatched anywhere else in the world. They form an essential transportation link from the heartland of the continent to the St. Lawrence River and the Atlantic. They are a key element in the growing industrial capacity of the U.S. and Canada. They constitute an important source of water for increasing domestic and industrial uses -- the U.S. alone using about 12 billion gallons per day at present, with an estimated use per day of 95 billion gallons by 2000. The Lakes were bountifully supplied with fish and supported an important commercial and sport fishery. The serious decline of these fish stocks is now being reversed with the successful control of the sea lamprey. Water-oriented recreation centered around the Lakes is on the upswing, as the residents of the giant urban centers seek them out as a play ground.

But -- the Great Lakes also have problems -- pressing and difficult to solve. Undoubtedly, the single most important problem is that of deteriorating water quality. Long used as a dumping ground for

all manner of wastes, and a natural sink for urban and rural runoff, the Lakes are revealing the effects of this abuse. Lake Erie has been described as being in the throes of biological death, while Michigan exhibits alarming signs of ecological change.

A proliferation of agencies and institutions has put forth a huge effort in studying the Lakes and planning for their management. Results of a recent survey of these Great Lakes institutions, both in the U.S. and Canada, will soon be made available by the Committee on Multiple Use of the Coastal Zone.

Unlike the Chesapeake Bay, the Great Lakes have several principal coordinating groups. These include the Great Lakes Basin Commission, established under the Water Resources Planning Act; the Great Lakes Compact Commission, organized by the eight Lake states; the Upper Great Lakes Regional Commission, established pursuant to the Public Works and Economic Development Act, is concerned with increasing the economy of the northern tier of counties in Minnesota, Michigan, and Wisconsin; the Great Lakes Fishery Commission, a joint U.S. - Canadian body concerned with fisheries; and the International Joint Commission, established pursuant to the Boundary Waters Treaty of 1909, giving it

jurisdiction over uses of boundary waters, obstructions in these waters and the pollution of waters crossing the boundary.

The Great Lakes are unique among Coastal Zone waters in that they are international in character. Even Lake Michigan lying entirely within the U.S., is connected to the Great Lakes system and an integral part of it.

Canada is even more concerned about the Great Lakes than the U.S. Proportionally, a greater share of Canada's people and industry is to be found in the Great Lakes Basin. Failure to deal with Canada in connection with the Lakes can only have an adverse affect on U.S. - Canadian relations. Failure to bear Canadian interests in mind can only lead to an incomplete program for the Lakes. The U.S. cannot cleanse half a lake of its pollution or adjust half its water level.

There is need for more recognition of Canadian interests by the several Federal agencies, States, and other institutions engaged in research, planning and management. Unilateral action by the States or Federal agencies on any aspect of the Lakes and their resources, is viewed with concern and apprehension in Canada.

Pivotal in this area of joint consideration of Great Lakes problems and needs in the International Joint Commission (IJC).

The U.S. government and the State governments cannot deal solely with the principal Lakes' province -- Ontario -- since this would be taken as a derogation of both the U.S. and Canadian federal governments' responsibility for the conduct of international relations. To deal effectively with Canada we must deal with both the Federal and Provincial Governments. The IJC is charged with certain responsibility by the U.S. and Canadian Federal Governments in connection with boundary waters -- both governments officially recognize and have confidence in the IJC and both are equally represented. Commissioners (three from each country) are appointed at a high level of government. The Commission works with the States and provinces through technical and advisory boards, and it is the instrumentality chosen by Canada to handle the international aspects of the Lakes. Canadian policy has not favored ad hoc bilateral handling of Great Lakes' affairs outside the institutional framework of the IJC.

The IJC does, however, have problems. The U.S. Section of the IJC is almost devoid of professional staff, having only an executive secretary. The Canadian Section has a full time attorney, engineer, draftsman, executive secretary and clerical assistance. Given the obvious importance of the IJC mission, it is recommended that its

staff and associated resources should be greatly strengthened, as soon as possible, by the appropriation of $100,000 to supplement the $100,000 now in the State Department budget. This would be a modest investment in view of the stakes involved.

It is also recommended that the IJC be given the principal international coordinating responsibility in connection with Great Lakes programs and studies being carried on by U.S. and Canadian groups except programs and studies carried out under the auspices of the Great Lakes Fishery Commission. Since the Lakes are international in character the coordinating body for U.S. agencies must be international in scope and responsibility. Through one international body, in which both governments have confidence, can be channelled all information regarding studies and action programs for the Lakes. This will provide a welcomed and much needed forum for discussion between the two Federal governments and the States and provinces in an institutional setting conducive to cooperation. It is further recommended that a Presidential message supporting the coordinating role and efforts of the IJC, and directing and inviting regional bodies to cooperate, will do much to strengthen its position. A similar type message from the Canadian Prime Minister would further set the stage for effective international action and cooperation.

The Great Lakes Fishery Commission, operating with limited resources, has proven to be an effective international vehicle for coordinating studies and investigations. Its work in overseeing the control of the sea lamprey is indicative of its ability to represent U.S. - Canadian interests. It is recommended that this Commission and the IJC strengthen their lines of communication so that each can act in concert on matters of mutual concern and interest.

As previously mentioned, there are numerous planning and coordinating bodies on the U.S. side of the Great Lakes Basin. The pluralism represented by this plethora of institutions is not without its benefits and strengths. It does, however, present a confusing pattern of institutional relationships and functional jurisdiction. It is reportedly confusing to the Canadians who have recently moved to centralize their planning, research and management functions in a single Federal institution.

Because the Great Lakes represent an incalculable National asset exhibiting serious signs of deterioration, and because their ultimate fate lies in an international effort at rehabilitation and restoration, steps have already been taken through establishment of the Great Lakes Basin Commission to systematize planning research and

management activities on the U.S. side. One serious problem is the complex of domestic institutions working on Great Lakes problems. The Marine Sciences Council should urge the Great Lakes Basin Commission to give early attention to this pattern of domestic institutional relationships with a view to improving their collective contribution and their relationships with the International Joint Commission and the Great Lakes Fishery Commission. Perhaps combining these bodies and, in general, streamlining their structures, would be a useful step.

These recommendations should be considered as only a few among many needed to assure the well being of the Great Lakes. Others of less significance will be included in the forthcoming report of the Coastal Zone Committee.

The sooner all groups interested in the Great Lakes come together on both sides of the boundary the sooner will there be a resolution of pressing problems. Once all concerned in both countries recognize the number and severity of the problems and issues, gauge the resources available, and identify key agencies which can bring solutions and assure future management in the best interests of both countries -- then there will be a basis for ensuring that the Lakes do indeed remain "Great."

IN CLOSING

In the management of public affairs, there is always a decision which has to be made on whether to take action now or wait longer for more information and data.

The Coastal Zone has been studied and investigated by Federal agencies, State agencies, universities, foundations, corporations and others for a great many years. These studies and investigations will go on for a great many years in the future.

But studies and investigations, in and of themselves, cannot bring order where there is disorder or planned multiple use of the Coastal Zone where there are unplanned and irreversible changes taking place.

The Committee on Multiple Use of the Coastal Zone of the Marine Sciences Council believes that the time has arrived to say "Let us begin." The measures proposed in this report represent a beginning.

Clearly, as the Nation grows and makes more intensive use of all its resources, including the Coastal Zone, new ways will be found through science and technology to refine and improve the measures here proposed. New measures will emerge.

But time is catching up with the values of the Coastal Zone. Too long a delay in the initiation of an action program as here proposed may mean there will be nothing left to preserve and no point in establishing a system for planned multiple use of the Coastal Zone.

Approval by the National Council on Marine Resources and Engineering Development of the concepts and proposals in this report is earnestly recommended.

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