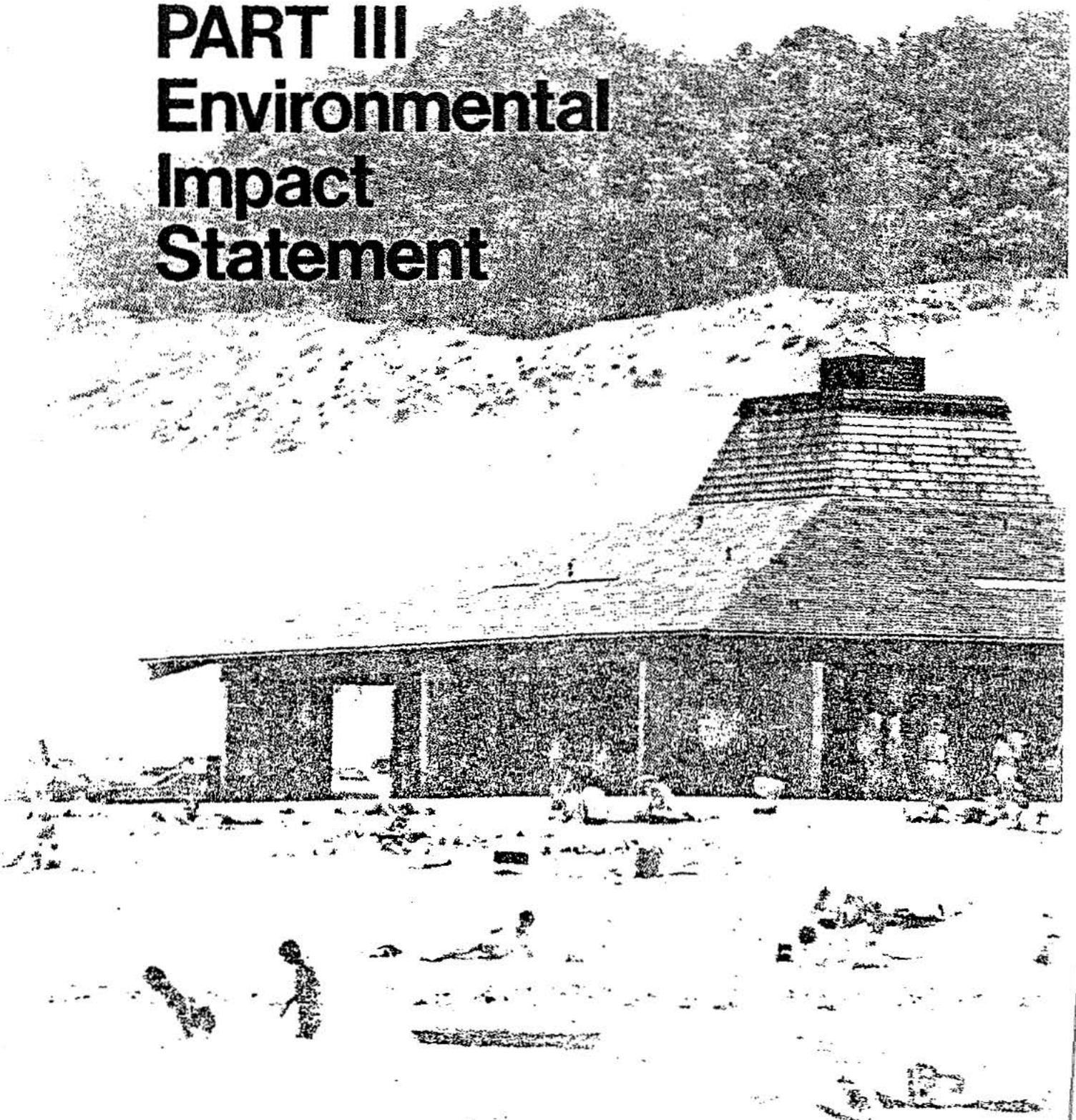


PART III Environmental Impact Statement



Chapter VII

Environmental Impact Statement

A. DESCRIPTION OF PROPOSED ACTION

This entire document is both a final environmental impact statement (FEIS) and the Michigan Coastal Management Program (the Program). The Office of Coastal Zone Management (OCZM) proposes that the Program meets the requirements of the Coastal Zone Management Act of 1972, as amended. Federal approval of the Program will enable the State of Michigan to receive Federal grant-in-aid assistance for program implementation and also will require that Federal actions in or affecting the Michigan coastal zone must be consistent with the Program. The Program is described in Part II of this document. Part III completes the requirements of the National Environmental Policy Act.

A brief summary of the proposed action and a table cross-referencing NEPA requirements and this document are provided in Part I.

B. DESCRIPTION OF THE ENVIRONMENT AFFECTED

Michigan has the longest freshwater coast in the world. More than 39,000 square miles of the Great Lakes and 3,200 miles of Great Lakes coastline are within Michigan's coastal boundaries.

Part II, Chapter II of this document describes the environment affected. Michigan's coastal land ownership, use, and geomorphic shore types are addressed here as are the major physical, cultural, economic and political characteristics of the ten coastal regions.

The State's inland boundary includes (1) lands abutting the ordinary high water mark of the Great Lakes and their connecting waterways; (2) lands abutting other water bodies which are directly affected by the Great Lakes water such as flood-plain or inland lakes; (3) transitional areas landward of the ordinary high water mark such as sand dunes, wetlands, etc., and (4) other lands which are sensitive to intensive use pressure related to coastal water such as recreation areas and urban areas. The lakeward coastal area in Michigan includes all submerged lands, waters, and islands of the Great Lakes and connecting waterways to the State or international boundary in

the middle of the lakes. The lakeward boundary is the jurisdictional border that Michigan shares with the Province of Ontario and the states of Minnesota, Wisconsin, Illinois, Indiana and Ohio.

C. THE RELATIONSHIP OF THE PROPOSED ACTION TO LAND USE PLANS, POLICIES AND CONTROLS FOR THE AREA

Some of Michigan's coastal communities have developed, or are in the process of developing, land use plans. About 50 percent of the communities along the coast have enacted some form of zoning under provisions of State planning and zoning enabling statutes. County zoning ordinances are subject to review by the State's Department of Natural Resources, Division of Land Resource Programs. Michigan laws provide safeguards against exclusionary zoning and close cooperation during planning and zoning development helps to avoid conflict. Also, local governments are able to implement some of the State authorities that are part of the Program, including the erosion and flood hazard provisions of the Shorelands Management Act, and the Soil Erosion and Sedimentation Control Act.

Through agreements with regional planning and development commissions, local governmental units and their constituents have been involved in inventorying the coastal resources, identifying problems and opportunities, and recommending solutions. These activities have been carried out with regard for local plans and ordinances and with access to information about State and Federal agency plans and programs.

D. PROBABLE IMPACTS OF FEDERAL APPROVAL OF THE MICHIGAN COASTAL MANAGEMENT PROGRAM

1. Introduction

The Program is based upon existing laws, policies, and regulations. Federal approval will enhance the State's financial ability to carry out 27 existing management programs in accordance with the Program's policies.

The impact of Federal approval will be the acceleration of the State's on-going efforts to finance, regulate, enforce and monitor land and water uses to preserve, protect, restore and develop shoreland resources.

The impacts discussed herein are the impacts of Federal approval and Program implementation. Because the proposed action is the approval of a program and not the implementation of a project in a specific site, it is not practical to quantify net effects of the Program in terms of unit changes in incomes, taxes, acres, et.al. It is practical, however, to determine the direction and the duration of change that will result from the implementation of the Program. In this statement, the direction of change will be described as positive, negative or neutral with respect to particular affected parties.

The duration will be described as either short-term or long-term.

The impacts of the Federal approval will be discussed in terms of the Federal funds, Federal consistency, the National interest, and the environmental, socio-economic and institutional effects of the Program's implementation.

2. The Impacts of Federal Funds, Federal consistency and the National Interest.

Federal Funds.

Federal approval will permit the Office of Coastal Zone Management to award program administration grants as provided for under Section 306 of the Federal Coastal Zone Management Act (CZMA) to the State of Michigan. It will also maintain Michigan's continued eligibility for financial assistance under the coastal energy impact program and other CZMA authorizations for interstate coordination, beach access, island preservation, and research and training. The administrative grant will provide approximately \$1.5 million in Federal funds to the State per year. Upon Federal approval, Michigan will be eligible to receive approximately \$4.5 to \$5 million in Federal funds for program administration through fiscal year 1980. These administrative funds will allow the State to:

- Maintain a Coastal Unit staff within the Division of Land Resources Programs, Michigan Department of Natural Resources to administer the Program and coordinate permit, budget, Federal consistency and national interest matters affecting Michigan's coastal area.
- Increase the number of Division personnel in the Department's Central Office to accelerate the implementation of the Shorelands Protection and Management Act, the Sand Dune Protection and Management Act, the Great Lakes Submerged Lands Act and the Inland Lakes and Streams Act.
- Increase the number of Division personnel in the Department's District Offices to improve the Department's regulatory, monitoring and technical assistance capabilities in the coastal area.
- Complete and maintain a computerized information system designed to reduce permit processing time and coordinate information pertinent to permit review and decision making.
- Implement an energy facility planning process for the coastal area.
- Implement a shorefront access planning process for the coastal area.

- Implement an erosion/mitigation planning process for the coastal area.
- Provide financial assistance to regional agencies and local governments developing coastal management plans and ordinances to regulate uses, control development and resolve conflicts.
- Provide financial assistance to local governments to administer and enforce shoreland ordinances.
- Provide financial assistance to State and local governments and regional agencies to foster port development, waterfront renewal, major water dependent industrial and utility facility siting, public access for recreation, natural area and historic site preservation and restoration.
- Provide technical assistance to Federal, State and local government agencies, regional agencies, corporations, and private individuals conducting activities in the coastal area.

Positive fiscal impacts will result at the state level, and in local jurisdictions where Program funds are transferred to develop plans and ordinances, administer area management projects, and regulate, monitor and enforce pursuant to Program policies.

Federal Consistency

The approval of the Program will mean that all Federal agencies must follow the provisions of sections 307(c) and (d) of the CZMA. The provisions and the manner in which Michigan intends to implement these sections of the Act are described in Part II.

The Program has evolved with the considerable assistance and input of numerous Federal agencies with responsibility for activities in or affecting the coastal area. No activities of relevant Federal agencies are excluded from locating in the coastal area although these activities will have to meet environmentally protective policies to obtain coastal sites and/or be located outside the coastal zone if adverse environmental effects cannot be sufficiently mitigated.

When Federal agencies are undertaking activities including development projects directly affecting the State's coastal area, they must notify the State of the proposed action. The parties will then have an opportunity to consult with one another in order to ensure that the proposed action not only meets Federal requirements but is also consistent, to the maximum extent practicable, with the State's management program. In the event of a serious disagreement between the State and a Federal agency, either party may seek Secretarial mediation to assist in resolving the disagreement. These procedures will provide all parties with an opportunity to balance environmental concerns along with other national, State and local interest.

In cases where Michigan determines that applications for Federal licenses, permits, grants or loans are inconsistent with the State's coastal program, Federal agencies are required to deny the approval of the applications. State objections must be based upon the substantive requirements of the Program such as the protection of air and water quality, the prevention of shoreline erosion and flooding damages and the protection of valuable wetlands. State objections may cause Federally regulated and assisted projects to locate in alternative sites where development is encouraged because of favorable physical features, adequate local public works and services, and sufficient regional transportation, communication and financial networks.

The consistency requirements do place new legal requirements upon Federal agencies. To the extent that new procedural requirements to comply with the Federal consistency provisions cost time and money, applicants and Federal agencies will be impacted negatively. The long-term effect of the consistency procedures will be positive to the extent that they minimize the adverse impacts of Federal actions on the State's coastal environment.

National Interest

Federal approval of the Program is dependent in part on a finding that the State provides for adequate consideration of the national interest involved in the planning for and in the siting of facilities necessary to meet requirements which are other than local in nature. National interest considerations include but are not limited to national defense and aerospace, energy, recreation, water transportation, air and water quality, wetlands, hazard areas, and prime agricultural lands. The consideration of the national interest is discussed in detail in Part II.

The national interest requirement is intended to assure that national concerns over facility siting are expressed and dealt with in the development in implementation of State coastal management programs. The requirements should not be construed as compelling the states to propose a program which accommodates certain types of facilities, but rather to assure that national concerns are adequately considered in State decisions involving the use of coastal areas.

The national interest provision will insure that national interest considerations are brought forward and weighed in management decisions affecting coastal resources. In the long-term, the provision will effect a balancing of national interest in facilities development and resource protection. In the short-term it will cause increased consultation in decisions on facility siting in Michigan's Great Lakes shorelands.

An example of the interaction between the consideration of national interest and Federal consistency is the proposed siting of an energy related facility in the Michigan coastal region. The Program recognizes that the construction of coastal dependent energy facilities is in the national interest and in reviewing permit applications for facility siting, the State 306 agency will consider national energy plans, the East central Area Reliability Coordination Agreement, the comments of the State's Oil and Gas Advisory Board and additional new information on the national interest in energy facility siting as it becomes available. It will balance these energy related national interest statements with other national and State interests in coastal resource preservation, protection and development. Procedures for public meetings and

hearings, environmental impact statements, and the review of the National Resources Commission and the Michigan Environmental Review Board will insure open and informed decision-making. Michigan's Federal consistency provisions will be used to implement the State's decision to approve, condition, or deny the siting of the energy facility. If a disagreement develops between the State and one or more Federal agencies over the State decision to approve, condition or deny, the decision may be mediated by the U.S. Secretary of Commerce and/or reviewed by the courts.

3. The Environmental and Socio-Economic Impact

The environmental and socio-economic impacts are discussed here in relation to the Program policies described in Chapter III, i.e., overall Program policy, and policy for five areas (1) areas of natural hazard to development — including erosion and flood prone areas, (2) areas sensitive to alteration or disturbance — including wetlands, natural areas, sand dunes, and island; (3) areas fulfilling recreational or cultural needs — which include areas managed to recognize recreational, historic or archaeological values; (4) areas of natural economic potential — including water transportation, mineral and energy, prime industrial and agricultural areas; and (5) areas of intensive or conflicting use — which include coastal lakes, river mouths, bays and urban areas.

Environmental Impacts

The overriding policy in the Program is to protect coastal air, water and other natural resources from pollution, impairment and destruction. The Program will not permit coastal land and water uses or activities that are harmful to the environment, as long as a feasible and prudent alternative consistent with reasonable requirements of the public health, safety and welfare exists. Because of this overriding policy direction, the Program's long-term environmental impacts will be positive.

The State standards and criteria that will be used in regulatory decisions controlling coastal uses and activities emphasize considerations of direct, significant and cumulative impact, land capability, protection of public trust resources, the presence of geographic areas of particular concern and of sensitive areas, consistency with ongoing plans and programs, and compatibility with coastal related programs. The application of these State standards and criteria may have short-term positive and negative effects on the environment, depending upon the individual case circumstance.

Turning to the impacts of the management of the types of areas addressed by the Program, the hazard area management will result in positive long and short-term environmental impacts to the extent that this activity reduces the destruction of nutrient transport, water quality and wetland habitat. Indirect, negative short- and long-term environmental impacts may result from this activity when and where structural protection measures are employed.

The management of sensitive areas will have positive long- and short-term impacts to the extent that it results in improved fish and wildlife habitat, increased productivity and nutrient cycling, water purification, the preservation of rare and

endangered species and the protection of ground water recharge areas and sand dunes. Negative environmental impacts are not expected to result from this activity.

Positive short-term environmental impacts will result from recreational and cultural area management to the extent that coastal resources are preserved, protected and restored. Negative short-term environmental impacts may result where development activities cause some impairment (e.g., the construction of a marina causing shoaling and turbidity in a water channel), even though the activity is conducted in compliance with State standards and criteria. The long-term environmental impacts of recreational and cultural area management will be positive to the extent that recreation demands are satisfied by acquisition, construction and area management activities which minimize conflicts and environmental degradation.

The net long-term environmental impact of the management of areas of natural economic potential and areas of intensive or conflicting use will be positive due to the Program's policies, standards and criteria minimizing environmental damage. Individual activities may have long and short-term negative environmental impacts, however, even though they are conducted in compliance with state standards and criteria. For instance, some coastal resource degradation will occur (e.g., removal of vegetation, sedimentation, water quality degradation, loss of habitat) in areas where mineral and energy exploration and development, agriculture, industry, and water transportation activities are encouraged.

The impacts of the action program described in Chapter III will have positive long- and short-term environmental impacts to the extent that additional research, improved information systems, enhanced local government management capability and increased public awareness reduce the stresses on the coastal ecosystem. On the other hand, capital improvement projects planned for and assisted through the Coastal Management Program, the energy facility siting planning process, the shoreline erosion planning process, and the shorefront access planning process, may cause negative long- and short-term environmental impacts.

Socio-Economic Impacts

Hazard area management will bring about positive socio-economic impacts by reducing property damage and loss of investment in new development and shore protection. The Program will accelerate the delineation and regulation of flood and erosion areas, provide technical assistance to riparian owners, and promote financial relief for owners of destroyed property. Hazard area management may result in decreased property values and/or the voluntary relocation of existing structures. Thus, there are potential negative short- and long-term socio-economic impacts for some property owners.

Sensitive area management may result in decreased market values. Consequently, the potential for short-term negative socio-economic impacts for some property owners exists. On the other hand, properties adjacent to properly managed sensitive areas may increase in value and result in long-term benefits for individual property owners. The protection and development of the State's fish and wildlife and cultural heritage areas will result in long-term socio-economic benefits for present and future generations. Also, indirect short-term socio-economic benefits may result in the

form of increased revenues and profits from hunting, fishing, boating and tourism.

Sand dune management will cause negative short-term impacts for individual commercial and industrial operators to the extent that government regulation results in increased costs for doing business. The long-term socio-economic impact of sand dune management will be positive to the extent that the State's Great Lake sand dune areas are conserved and developed for mining and other uses in a manner which minimizes waste and damage.

Positive socio-economic impacts will result from the management of the Great Lakes islands to the extent that the preservation of historic and archaeological qualities, the control of water and solid waste and the provision of safe drinking water improves the quality of island life. Negative short-term socio-economic impacts may be experienced by individual property owners incurring increased costs for pollution control.

Recreational and cultural areas management may cause indirect negative short-term socio-economic impacts for local governments and individuals. Examples of such indirect impacts include a loss in a local tax base due to land acquisition, or an increase in local public services expenditures due to induced rapid growth and/or seasonal tourism. These negative impacts would be partially offset by State payments in lieu of taxes in the case of acquisition and by increases in property values and sales revenues in the instances of induced growth and tourism. Also, the balancing of interests in the Program will minimize negative socio-economic impacts. The socio-economic benefits of increased revenues and enjoyment will be generated by the Program's recreational and cultural area management activities. Hotel, motel, campground, marina, and fast food operators, and retailers of mobile homes, autos, boats, motors, sails, oil and gas are among the business interests likely to benefit financially. Social benefits will also accrue for the public at large.

The management of areas of natural economic potential will foster orderly economic development in Michigan's coastal area. The Program will identify coastal areas to accommodate the demand for new or expanded energy and coastal dependent industrial facilities. Also, it will promote the development of coastal agriculture and Great Lakes ports. To the extent that Program management activities result in indirect positive or negative socio-economic impacts for some private concerns and local jurisdictions.

Program management activities in areas of conflicting and intensive use will result in positive socio-economic impacts to the extent that they reduce conflicts, energy wastes, and costs associated with administrative delay. Individuals may experience indirect positive and negative socio-economic impacts from Program activities where financial or technical assistance to local governments for enforcement, zoning, waterfront development, public access site planning and maintenance, alters the potential market value of certain properties.

4. The Institutional Impacts

The institutional impacts are discussed in the categories of intergovernmental, State, local and regional, and the public.

Intergovernmental

The Program will support activities to develop, analyze and distribute information; to consult with affected government agencies on relevant Program actions; and to monitor and comment on proposed legislation, rule and regulation, and administrative procedures affecting the management of the shoreland of the Great Lakes. These activities should result in better intergovernmental coordination and improved decision-making in the State, the Great Lakes Region, and the nation. The governmental agencies involved in these kinds of Program activities include local, regional, State and Federal agencies, the Great Lakes Commission, the Great Lakes Basin Commission, and the International Joint Commission.

State

State level institutional impacts include the acceleration of State programs, the initiation of special projects, and the improvement of existing review procedures.

State programs: The main regulatory programs that will be accelerated by the Program are:

- Act No. 245 of the Public Acts of 1970, as amended, the Shorelands Protection and Management Act: The Program will provide funds to the Shorelands Management Unit to implement Act No. 245. It is expected that, in the 1978-79 fiscal year, about 75-100 miles of high risk erosion areas on Lake Huron will be designated with a minimum building setback. In anticipation of passage of the proposed rules in June 1978, it is expected that 30-50 miles will be designated as environmental areas on Lake St. Clair and regulated by management plan. In addition, the Coastal Management Program will provide funds to implement an inter-agency agreement between the Michigan Department of Labor which provides for coordinated review of applications for permit under Act No. 245 with those issued by local construction code enforcement agencies. It is anticipated that this inter-agency agreement will significantly enhance the Department's monitoring and permitting procedures in areas regulated by Act No. 245. In future years, additional high risk areas and environmental areas will be designated along the Lake Michigan and Lake Superior shorelines of the Upper Peninsula.
- Act No. 247 of the Public Acts of 1955, the Great Lakes Submerged Lands Act: The Coastal Management Program will provide financial assistance to: (1) reduce the time delay in reviewing applications for Great Lakes bottomlands leases by about 50 percent; and (2) computerize permit information to provide for greater consistency in permit decisions regulating activities on Great Lakes bottomlands. The time involved in

issuing the joint Department of Natural Resources-Corps of Engineers permits for dredge and fill activities in Great Lakes bottomlands should be 2-3 months, rather than 4-6 months before the joint permit processing and computerized review were instituted. Funds also will be provided to expedite processing the backlog of Great Lakes bottomlands leases, both for fills and marina operations.

- Act No. 222 of the Public Acts of 1976, the Sand Dune Protection and Management Act: The Coastal Management Program will provide funds to the Geological Survey Division to: (1) determine and designate sand dune areas; (2) review and evaluate sand mining permit applications, including mining and reclamation plans, environmental impact statements, 15-year mining plans and bonding requirements; (3) formulate administrative rules necessary to administer the program; and (4) monitor sand mining operations. This financial assistance has accelerated the implementation of this Act, and will continue to support its effective administration in the future.
- Zoning enforcement: Certain local governments along the coast will be provided funds by the Coastal Management Program to administer and enforce shorelands ordinances, in conformity with requirements of Act No. 245 of the Public Acts of 1970, as amended.

State Projects

The Program will be funded annually and funds will be used to provide technical and financial assistance to local governments and individual citizens. Michigan is planning on soliciting project requests from state, regional, local, and private agencies once a year. Examples of the kinds of projects that the Program may sponsor follow:

- Act No. 116 of the Public Acts of 1974, the Farmland and Open Space Preservation Act: Funds may be provided to survey coastal property owners in certain areas to determine reasons for non-participation in the Farmland and Open Space Program (e.g., Allegan, Berrien and Leelanau counties) and to determine measures for increasing enrollment. Funds may also be provided to determine development rights value and determine the feasibility of purchase of development rights in key agricultural coastal locations.
- State Parks: funds may be provided for low cost construction activities to preserve or restore certain areas in coastal state

parks, including sand dune revegetation, wetlands protection, and interpretive centers.

- Metro Urban Recreation Programs: Funds may be provided to conduct engineering design and feasibility studies for urban waterfront recreation in the City of Detroit to provide increased access and recreation opportunities.
- Coastal Transportation: Fund may be provided to define critical and sensitive resources impacted by transportation facilities, including commercial ports, within the coastal boundary.
- Special Assessment District for Erosion Control: A technical study will be conducted to identify procedures and costs associated with utilizing Act No. 148 of the Public Acts of 1976 which provides for the installation of certain public improvements by townships, including the construction, maintenance, repair, or improvement of erosion control structures or dikes. The Act provides that payment for such works can be made by issuance of bonds and by levying taxes to be assessed against the whole or a part of the public cost against the property benefitted.
- Mapping of Fish Spawning Sites: Funds will be provided to collect information relative to past spawning areas of fish in Michigan's coastal waters to assist in maintenance of sport and commercial fisheries.
- Historic Restoration: Funds will be provided for feasibility studies, site design and low-cost construction to restore certain historic sites such as the Beverhead Lighthouse, Grindstone City, and the Schoolcraft House.

State Review Procedures

The Program will use a number of review procedures to continually consult with other government agencies. For example, the Program will:

- Insure that State and Federal agency activities affecting Michigan's Great Lakes resources are consistent with the State's coastal management policies through the (i) Permit review procedures of the Division of Land Resources Program, Department of Natural Resources; (ii) Citizens Shoreland Advisory Council review of projects proposed for funding by the Coastal Management Program; (iii) Standing Committee on

Shorelands and Water review of proposed projects and geographic area of particular concern nominations for purposes of identifying sources of funds and establishing budget priorities; (iv) Standing Committee on Shorelands and Water evaluation of Federal and State activities for consistency with Program policies; (v) The Environmental Enforcement Division's review of large scale projects having potentially significant impacts on Michigan's coastal area; (vi) the Office of Policy Development's review of new and revised Departmental policy for consistency with the Coastal Management Program.

- Insure that the national interest is adequately considered in the siting of facilities that are greater than local in nature. In addition to the procedures and processes described above which allow for the consideration of national interest in large-scale facility siting provisions, the Chair of the Standing Committee on Shorelands and Water Coordination will request information on the national interest from relevant state agencies and cause the Committee to consider this information in making recommendations to the Department of Natural Resources Director, the Natural Resources Commission and the Michigan Environmental Review Board. Michigan specifically sees three types of facilities and four types of resources as being important to the State's responsibility to consider the national interest. These facility and resource types, the State agencies that will be asked to comment on the national interest, and the sources of information the agencies will be asked to consult are shown in the Table VI-D, Consideration of the National Interest in the Siting of Facilities than are greater than local in nature.

- Annually solicit proposals from regional planning commissions and local governments for projects in the coastal area.

- Incorporate the comments of regional commissions and local governments in making decisions on activities affecting the coastal area. Procedures that will be used to gather their comments include: (i) The OMB-Circular A-95 process; (ii) The Environmental Impact Statement process; (iii) The annual proposal solicitation process; (iv) The geographic area of particular concern nomination process; (v) The Division of Land Resource Programs Permit review process; (vi) Public meetings and public hearings attended by Division personnel.

Local and Regional

Local units of government, i.e., counties, townships, cities and villages will both impact on and be impacted by the State programs, projects and processes described immediately above. The Program will increase the level of interaction among local and state agencies with regard to coastal resource management. The Program will carry out monitoring, regulating and enforcement activities in all local units of government consistent with the appropriate State statutes and implementing regulations and procedures. The Program will provide financial and technical assistance to local units of government in accordance with the units' particular coastal resource management needs, adherence to Program policies, and overall participation and cooperation with the Program.

Regional agencies include the 10 coastal planning and development regions and agencies like the Watershed Steering Committees, Resource Conservation and Development, and intergovernmental compacts. Cooperation of the 10 coastal planning and development regions is anticipated during Program implementation. Like local units of government, these regional agencies will both impact on and be impacted by the Program. Their participation will include review and comment on environmental impact statements and A-95 projects in or affecting the coastal area, and the articulation of regional coastal goals, objectives, plans and project priorities. Also, they are eligible to be the recipients of financial and technical assistance.

Public

Public institutional impacts will result from the Program's providing full opportunity for public input and participation during implementation. Any individual or group may nominate an area of particular concern, assist in formulating local coastal management goals, serve on coastal management advisory bodies, review and comment on Program documents, attend public hearings, or bring suit.

Also, the Program is aided by the citizens Shorelands Advisory Council, a group of fifteen citizens from around the State. This Council reviews the Program's annual grant application before it is submitted to the Federal Office of Coastal Zone Management.

E. ALTERNATIVES TO THE PROPOSED ACTION.

Introduction

The alternatives to the proposed approval of the program are to delay or deny approval. In order to delay or deny approval, the Assistant Administrator must find that the Program fails to meet a requirement of the CZMA. Conversely, he must find that the Program satisfies all of the CZMA requirements before he approves the Program.

During the development of the Program, potential deficiencies were identified by the OCZM. These include (1) the failure of the Program to develop comprehensive policies; (2) the failure of the Program to develop specific policies (3) the failure of the

Program to demonstrate sufficient organizational arrangements and authorities to enforce policy and resolve conflicts; (4) the failure of the Program to assure that local land and water use regulations do not unreasonably restrict or exclude land and water uses or regional benefit; (5) the failure of the program to designate properly geographic areas of particular concern.

These five potential deficiencies were discussed in the Alternatives to the Proposed Action in the Draft Environmental Impact Statement (DEIS). DEIS reviewers commented primarily on numbers 2, 3 and 5 of the above and on 3 additional potential deficiencies: (1) the failure of the Program to have a firmly delineated boundary, (2) the failure of the Program to adequately consider the national interest, (3) the failure of the program to adequately describe the way in which Federal consistency will operate.

All of the potential deficiencies have now been addressed by Michigan and the Assistant Administrator's assessment is that Michigan meets all of the CZMA requirements for approval. In order to elicit public and agency comment and to assure that the Assistant Administrator's assessment is correct, this section identifies the remaining Program areas where DEIS reviewers thought that there may be deficiencies, and considers alternatives of delay or denial based upon each. Before examining the alternatives, the generalized impacts that would result from delay or denial are summarized.

The general impacts of delay or denial of approval of the Program, regardless of the basis, are:

LOSS OF FEDERAL FUNDS TO ADMINISTER THE PROGRAM. Under section 306, Michigan will receive approximately \$1.5 million annually. The State will use these funds to administer existing shoreland resource management program; to implement an energy facility siting planning process, a shorefront access planning process, and an erosion/mitigation planning process for the State's Great Lakes shoreland; to provide technical and financial assistance to regional commissions, local governments and private citizens.

LOSS OF FEDERAL CONSISTENCY. The Program policies are developed from State statutes and rules, Executive Orders of the governor and formal policies of the Natural Resources Commission. The delay or denial of approval will mean that activities requiring Federal licenses or permits and Federal grants and loans need not be conducted in a manner consistent with these Program policies.

LOSS OF ADEQUATE CONSIDERATION OF THE NATIONAL INTEREST IN THE SITING OF FACILITIES WHICH ARE OTHER THAN LOCAL IN NATURE. If approval is delayed or denied, the state is under no obligation to give adequate consideration to coastal resources and facilities that are of national interest. This would result in an overall public benefit loss to this and future generations.

Federal Alternatives

ALTERNATIVE 1 — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE POLICIES ARE NOT SPECIFIC ENOUGH TO DIRECT STATE AGENCIES MANAGING USES, AREAS AND ACTIVITIES IN THE COASTAL ZONE.

CZMA requirements call for Program policies which are specific in terms of what uses, areas, and activities are being managed, and the purpose for which they are being managed. In essence, the Program must provide direction to persons responsible for taking action(s) in the coastal area.

Michigan has derived the Program policies from its existing statutes, rules, executive orders, and Natural Resources Commission Statements. It presents general policies for activities being conducted in the coastal zone and specific policies for activities being conducted in the particular areas of:

- areas of natural hazard to development,
- sensitive areas,
- areas fulfilling recreational and cultural needs,
- areas of natural economic potential,
- areas of intensive or conflicting use.

The overall policies and the policies for specific areas are presented in Chapter III of Part II. They are presented in the context of Program goals, problems and concerns so that the reasons for the policies are recorded. Also, they are presented with program action programs so that the way to implement the Program policies is made clear.

Additional information on how the Program policies will be implemented is provided in Chapter V, Coastal Management Program Organization and Authorities, Part II. The organization structure and operating procedures of the Michigan Department of Natural Resources, (DNR), which are extremely important to the implementation of Program policies are described in this Chapter. The criteria that will trigger a Program permit review also are described here. Appendix C of "State of Michigan Coastal Management Program and Draft Environmental Impact Statement" provides a description of the scope, authority and administrative requirements of Michigan statutes authorizing the Program permit reviews.

The Assistant Administrator believes that the combination of the Program policies in Chapter III and the criteria triggering a Program review and the Program permit review procedures described in Chapter V provides sufficient information to find that the Program policies are specific and approvable. If the Assistant Administrator did not find the policies specific and approvable, the State would have these options:

- Accept the decision and do nothing to remedy the deficiency(s);
- Accept the decision and develop specific policy to remedy deficiencies through administrative rule-making;
- Accept the decision and develop specific policy to remedy the deficiencies through new legislation;
- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

Under the first and fourth options, the general impacts of delay or denial would result. Under the second and third options the State could receive Federal funds under Sections 305 and 305(d) of the CZMA.

Under the second option, the Program implementation would be delayed for one year at a minimum, and most of the state and local projects submitted to the DNR for funding in 1978 would be denied. The new administrative rules would provide more detailed information to DNR personnel and to citizens in written form. In addition, Federal agencies and persons interested in assuring that the Program adequately considers the national interest would have more specific Program administrative rules from which to evaluate consistency and national interest considerations.

Under the third option, the Program implementation would be delayed for two years at a minimum and most of the State and local projects submitted for funding in 1978 would be denied. If the State legislation passed and if the Congress re-authorized the CZMA, the option would result in more specific policies for DNR personnel making Program decisions, and the Federal agencies, local governments, persons concerned with the Program's consideration of the national interest, and private citizens in general sometime after 1980.

ALTERNATIVE II — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE ORGANIZATIONAL ARRANGEMENTS AND AUTHORITIES OF THE PROGRAM ARE NOT SUFFICIENT TO ENFORCE POLICY AND RESOLVE CONFLICTS.

A number of DEIS reviewers commented on what they perceived to be potential deficiencies in this area. Reviewers questioned (1) the authority of the Governor to designate a lead agency, to empower the lead agency to resolve conflicts and to require adequate consideration of the national interest; (2) the authority of the Michigan Environmental Review Board (MERB) to coordinate and resolve conflicts among State agencies; (3) the fact that the Program was not adopted in accordance with the Michigan Administrative Procedures Act as a "rule"; (4) the fact that the Program will not result in a change in State law and regulation as proposed for Federal approval; (5) the adequacy of the Program description of the organization structure and conflict resolution technique.

This last point has been addressed directly in Part II, Chapter V. The Natural Resources Commission formally adopted the Program. This Commission is the policymaking body of the DNR which administers directly or in conjunction with one or

more State agencies all twenty-seven regulatory programs that are incorporated as part of the Program. The DNR is represented on the Michigan Environmental Review Board, the Interdepartmental Review Committee and the Standing Committee on Shorelands and Water and is able to achieve State agency compliance with Program policies.

Concerning the fourth point, the organization structure provides a mechanism to focus State agency programs on coastal resource problems and to resolve conflicts where they arise. The Michigan legislature has enacted laws which address the significant problems and issues in the Michigan coastal area, including the Shoreland Management and Protection Act, the Floodway Encroachment Act, the Great Lakes Submerged Lands Act, the Soil Erosion and Sedimentation Act, the Sand Dunes Protection and Management Act, and others. Program implementation will enable Michigan to focus these regulatory programs and technical and financial assistance programs on the State's Great Lakes coastal resources.

There is no requirement to adopt the Program in accordance with the Administrative Procedures Act of Michigan as implied in the third point. The Program relies upon existing Statutory law and regulations adopted pursuant to that law for enforcement authority.

Concerning the authority of the MERB, this Board can coordinate and resolve conflicts in a manner consistent with its intended function in the Program as affirmed in the Executive Order creating MERB and MERB's own rules. This authority is confirmed in the Michigan Supreme Court's ruling, Highway Commission v. Vanderkloot, 392 Mich. 159 (1974).

The first point goes to the authority of the Governor in Michigan. The Governor's authority is provided in Article V Section 2 of the Michigan constitution and the Michigan Statutes. His designation of a lead agency by transmittal letter is pursuant to his broad constitutional and statutory authority and is normal State practice. His designation of the DNR as the lead agency also recognized that agency's lead authority to resolve conflicts as outlined in Part II, Chapter V.

The Assistant Administrator believes that the organizational arrangements and authorities of the Program described in Part II and in the DEIS Appendices are sufficient to enforce policy and resolve conflicts. If he did not find this so, the State would have these options:

- Accept the decision and do nothing to remedy the deficiency(s)
- Accept the decision and seek legislation to remedy the deficiency(s)
- Accept the decision and obtain an Executive Order to remedy the deficiency(s)
- Accept the decision and conduct administrative rule making to remedy the deficiency(s)

- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

Under the first and fourth options the general impact of delay or denial would result. Under the remaining option, 305 or 305(d) funds would be available to the State.

Under the second option, the Program would be delayed for two years at a minimum and most of the State and local projects submitted for funding in 1978 would be denied. If the State legislation passed and if the Congress reauthorized the CZMA the option could result in comprehensive legislative authority to resolve conflicts, consider the national interest, control wetlands and site energy facilities, in addition to the Program authority which exists already.

Under option three, the Program would be delayed for a minimum of one year and most of the 1978 proposed projects would be denied funding. The Executive Order could direct all State agencies to cooperate with the DNR as lead agency; adopt the Program as official State policy and direct all State agencies to comply; and direct the State agencies to consider the national interest, in addition to the Executive direction and delegation of authority which exists currently.

Under the fourth option, the 1978 proposed projects would not be funded at the anticipated \$1.5 million level and implementation would be postponed for one year, at a minimum. New administrative rule making conducted pursuant to the Michigan Administrative Procedures Act could complete the revision of the Shoreland regulation to include developed and platted areas; adopt all coastal policies as regulation; and establish criteria for the review of county rural zoning ordinances so as to preclude arbitrary or unreasonable restrictions or exclusions of uses of regional benefit.

ALTERNATIVE III — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE PROGRAM DOES NOT DESIGNATE PROPERLY GEOGRAPHIC AREAS OF PARTICULAR CONCERN.

In the DEIS comments, some questions were raised concerning what areas had actually been designated; who may nominate; and how private property rights are protected in this procedure?

The requirement for geographic areas of particular concern is that areas be inventoried and designated; that the nature of concern in the designated areas be described; that the Program contain a description on how it (the Program) addresses the management concerns in designated areas; and that the Program provide guidelines on priorities of uses in designated areas, including guidelines on uses of lowest priority.

The Assistant Administrator finds that the Program satisfies these requirements in Part II, Chapter IV. In response to the questions of DEIS reviewers, Chapter IV states that legislative areas of particular concern are *designated*, and that any individual, group or agency may *nominate*. With respect to private property rights, the expressed agreement of landowners is required in the public nomination process of areas of particular concern. In the legislative areas of particular concern, the normal legal requirement of public notice, public hearings and judicial review will be used.

If the Assistant Administrator did not find the area of particular concern requirement to be complete, the State could pursue these options:

- Accept the decision, and do nothing to remedy the deficiency(s)
- Accept the decision and designate nominated areas as areas of particular concern
- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

Under options one and three, the general impacts of delay or denial would result. Section 305 or 305(d) funds would be available to the State under option two. Under this second option, a 9-month minimum delay in Program implementation and a 1978 Program budget reduction would result. The Program would have designated geographic areas of particular concern that came up through the public nomination process in addition to the legislative geographic areas of particular concern designated already.

ALTERNATIVE IV — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE PROGRAM DOES NOT SATISFACTORILY DELINEATE AN INLAND BOUNDARY.

Some DEIS reviewers commented that the inland boundary should have been completed for inclusion and review in the DEIS, and that maps should be included in the FEIS. The inland boundary requirement is that said boundary is described in a manner which is clear and exact. The boundary may either be mapped or described in narrative form. The boundary requirement is met if the State can advise interested parties within 30 days concerning inquiries as to the placement of the inland boundary. In response to DEIS comments, a new single schematic boundary illustration and directions on how to purchase or inspect boundary maps have been added to Part II, Chapter II. The boundary criteria also have been clarified. Maps are not included in this FEIS because of the difficulty involved in mapping 3200 miles of shoreline at a consistently large enough scale and of the expense involved in reproducing same.

If the Assistant Administrator found the inland boundary description to be insufficient, the options left to the State would be:

- Accept the decision and do nothing to remedy the deficiency(s)
- Accept the decision and map and reproduce for distribution the entire inland boundary at scale of 1 inch equals 200 feet or the metric equivalent.
- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

The first and third option would result in the general impact of delay or denial. Under the second option, 305 and 305(d) funds would remain available to the State.

Option two would result in a 9-month delay at a minimum and some 1978 project requests would be denied. Large scale maps of the entire coast would be available to all for a price in 1979 in addition to the maps, technical assistance and 30-day response time for inquiries that exist presently through the DNR and the 10 coastal regional planning and development agencies.

ALTERNATIVE V — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE PROGRAM FAILS TO ADEQUATELY CONSIDER THE NATIONAL INTEREST.

The Program staff consulted with other State agencies, Federal agencies, public utility companies and the private sector concerning the national interest requirement during program development and the Program policies and action programs in Chapter III Part II incorporate national interest considerations. The specific national interest categories in the Program are National Defense and Aerospace, Recreation, Transportation, Air and Water Quality, Wetlands, Hazard Areas, Historic and Archeological Sites and Energy. The national interest in each of these areas and how it will continue to be considered is provided in Chapter VI.

It was over the requirement for a process to ensure continued adequate consideration of the national interest that the Assistant Administrator deliberated most intensively with the State. Michigan will meet this requirement through the established administrative procedures of the Natural Resources Commission and the Environmental Review Board. Both of these policy bodies have responsibilities requiring their broad review and consideration of all interests affected by the Program. In addition, the DNR Director has issued Director's Letter #17 Effective May 8, 1978 (Appendix B) directing the Department to continue the consideration of the national interest in facility siting and resource protection during Program administration in its participation on the Standing Committee on Shorelands and Water Coordination, the Interdepartmental Review Committee and the Michigan Environmental Review Board. (See Appendix I).

If the Assistant Administrator did not find the existing administrative procedures combined with the Director's Letter #17 to be sufficient, the options available to the State would be:

- Accept the decision and do nothing to remedy the deficiency;
- Accept the decision and take legislative action to assure adequate consideration of the national interest;
- Accept the decision and conduct rule making in the State agencies to assure adequate consideration of the national interest.
- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

Options one and four result in the general impacts of delay or denial. Under option two and three, 305 or 305(d) funds would be available to the State.

Option two would result in a two-year delay at a minimum and the majority of State and local projects submitted to the DNR for funding in 1978 would be denied. If the State passed legislation and if the Congress re-authorized the CZMA, the Program would have a statutory base to assure the adequate consideration of the national interest in addition to the administrative procedures which already exist.

Option three would result in a one-year delay at a minimum, and the majority of 1978 project requests would be denied. If the rule-making procedure was properly administered by the separate State agencies and approved by legislative committee, the Program could be approved in FY 79 and receive 306 funding in FY 79 and 80 under the existing CZMA. Under this option, the State would have rules and regulations to assure the adequate consideration of the national interest in addition to the administrative procedures which already exist.

ALTERNATIVE VI — THE ASSISTANT ADMINISTRATOR COULD DELAY OR DENY APPROVAL BECAUSE THE PROGRAM FAILS TO INCLUDE FEDERAL CONSISTENCY PROCEDURES.

Some DEIS reviewers thought that the Program did not adequately describe the Federal consistency procedures and raised in particular, questions on (1) the responsible agency; (2) the consistency criteria; (3) the flow diagrams in the Program.

The Assistant Administrator believes that Part II Chapter VI adequately describes the Federal consistency procedures. In response to DEIS reviewers, the diagrams have been revised, the consistency criteria clarified, and the responsibility of the Coastal Management Unit in the DNR vis-a-vis consistency certification is described in greater detail. (See Part II, Chapter VI).

If the Assistant Administrator did not find the Federal consistency requirement to be met, the State's options would be:

- Accept the decision and do nothing to correct the deficiency(s);
- Accept the decision and conduct rule-making to establish the Federal consistency procedures;
- Reject the decision and seek administrative or judicial review of the Assistant Administrator's decision.

Options one and three would result in the general impacts of delay or denial. Under option two, 305 or 305(d) funds would be available to the State.

Option two would result in a one-year delay, at a minimum. Also, the majority of State and local projects submitted for funding in 1978 would be denied. New administrative rules conducted pursuant to the Michigan Administrative Procedures Act and reviewed by legislative committee could clarify and perhaps simplify in written form the review criteria and procedures which the DNR uses currently to enforce the 27 regulatory programs which are part of the Program. While the Federal

agencies and applicants for Federal assistance may consult with and receive guidelines from the DNR and the ten coastal regional planning and development agencies concerning consistency certification, the new rules would provide additional guidance and certainty.

F. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

The Program contains conflict resolution procedures to reconcile, to the greatest possible degree, the competing demands for environmental protection and economic development. Long- and short-term negative impacts may occur from the implementation of policies controlling hazard areas, recreation areas, economic development areas, and areas of intensive or conflicting use. Some coastal development which require siting in the coastal area and/or are determined to be in the national interest may lead to long- and short-term negative impacts on aquatic and terrestrial ecosystems and detract from the visual appeal of the shoreline.

G. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The Program is not designed to induce short-term uses of the environment at the expense of long-term productivity. Its purpose is to enhance and maintain the long-term productivity of the coastal environment while meeting the current and future needs of the residents of Michigan, the Great Lakes Region, and the nation.

Some short-term uses will be prohibited or conditioned in hazard and sensitive areas. On the other hand, some short-term uses will be encouraged in economic development areas, recreational areas, and areas of intensive or conflicting use.

Complementing the Program is the work on the air and water quality in Michigan's coastal area. The Program incorporates the requirements of these two important statewide resource protection programs.

H. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The Program will allow the use of shoreline for economic development including mineral, energy, agricultural, prime industrial, and transportation development. Some of these will probably involve irreversible negative impacts on coastal resources. The basic rationale for allowing such resource commitments is economic necessity. However, irreversible commitments will be minimized by imposing conditions on development permits.

Financial and human resources also will be committed should the proposed action be implemented. Federal, State and local tax dollars and person power will be consumed by the Program.

I. CONSULTATION AND COORDINATION

Part II, Chapters V and VI, describe in part the coordination and consultation involved in developing the proposed action. Chapter VI also describes the Program's procedures for continued consultation and coordination. Appendices A, B, and E of the DEIS document government agency consultation and public comment. Appendix D and Attachment 1 of the FEIS documents further consideration of government agency and public comment in developing the proposed action.